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UNIVERSIDADE DE LISBOA

FACULDADE DE ARQUITETURA
UNIVERSIDADE DE LISBOA

VOLUME 1

CORE VALUES AND PRINCIPLES GENERATORS OF SIGNIFICANCE IN ARCHITECTURE, PAINTING AND SCULPTURE

DOUTORAMENTO EM ARQUITETURA: ESPECIALIDADE EM TEORIA E PRÁTICA

DOUTORANDA | M. Arch. Sarah Frances Dias

ORIENTADORES | Professora Doutora Maria João Durão e Professor Doutor Michel Toussaint

CONSTITUIÇÃO DO JÚRI

PRESIDENTE | Doutor Jorge Filipe Ganhão da Cruz Pinto, Professor Catedrático,
Faculdade de Arquitetura da Universidade de Lisboa.

VOGAIS | Doutor Fernando José Carneiro Moreira da Silva, Professor Catedrático,
Faculdade de Arquitetura da Universidade de Lisboa;

Doutor Michel Toussaint Alves Pereira, Professor Auxiliar Jubilado,
Faculdade de Arquitetura da Universidade de Lisboa;

Doutora Maria Raquel Nunes de Almeida e Casal Pelayo, Professora Auxiliar,
Faculdade de Arquitetura da Universidade do Porto;

Doutora Maria Alexandra Salgado Ai Quintas,Professora Auxiliar,
Faculdade de Arquitetura da Universidade de Lisboa;

Doutor Philip Cabau Esteves,Professor Adjunto,
Escola Superior de Artes e Design do Instituto Politécnico de Leiria.

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VOLUME 2

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To all of you…
My profound and humble THANK YOU.

EPIGRAPH

Though much is taken, much abides; and though
We are not now that strength which in old days
Moved earth and heaven, that which we are, we are;
One equal temper of heroic hearts,
Made weak by time and fate, but strong in will
To strive, to seek, to find, and not to yield.

Alfred Tennyson, Idylls of the King and a Selection of Poems

ABSTRACT

300 words

The present research is an understanding of the phenomena of significance, as that which defines the work of art, observed through three different types of art: architecture, painting and sculpture. Comprehending architecture as an art, the connections between the arts, and the new paradigms that are emerging as a new art (that sees no distinction between the three arts), is a way of critically understanding and qualifying the artistic creation. The overall problem is defined by a lack of awareness of the real role of art and the general lack of significance in the contemporary world of both architecture and plastic arts, which have created a gap between the observer and the arts in general, leaving the deeper needs of existence completely unaddressed. The underlying question of the research, 'What defines significance?' is deeply connected to the main objective of the research: to perceive the phenomenon of 'signification', through the different fields of creations in a comparative and cross-disciplinary research (using architecture, painting and sculpture, their interdependences, connections and specific contributions towards the phenomena of signification), in order to clarify common grounds and define a series of properties, values, qualifiers and principles that sustain the meaningful creation and ground human existence. As for the methodology applied, it consists of a mixed method research with a dominance of qualitative methods: using the case study methodology as one of the main cores of the research. Re-considering significance, from both within (design practices) and from without (meaning the observation from the outside of the observed perceptual phenomena) the artistic creation, philosophically, practically and aesthetically allows for new connections, new critical assessments, new perceptions, notions and new methods to come into being, that allow us to define significance (and the artistic object) in a new light. The aim of the research is thus to clarify what the significance of the artistic object is, which, as the work will show, develops consciousness (in both the creator and the observer) and is in fact at the core of the creation of a more sustainable world that helps humanity evolve into new realms of existence: psychologically, emotionally and spiritually.

KEY-WORDS

SIGNIFICANCE, ART, ARCHITECTURE, PRINCIPLES, VALUES, CREATION, CONSCIOUSNESS

RESUMO

300 palavras

A presente investigação é uma compreensão do fenómeno do significado e do sentido, que define o objecto artístico observado através de três artes: arquitetura, pintura e escultura. Compreendendo a arquitetura como uma arte, a ligação e a conexão entre as várias artes e os novos paradigmas emergentes, (que combinam as três artes) conduzem a uma nova forma de compreensão e classificação crítica da criação artística. A problemática é definida pela falta de sensibilização do verdadeiro papel da arte e da ausência geral de "significado" no mundo contemporâneo nos domínios da arquitetura, da pintura e da escultura, as quais criaram uma lacuna entre o observador e as artes em geral, deixando as necessidades fundamentais da existência humana, inabordadas. A questão subjacente do presente estudo, "o que define significado?" esta profundamente ligada ao objectivo central da investigação. Assim, através de diferentes campos de criação, num estudo comparativo, interdisciplinar e transversal percebeu-se o fenómeno "significado" na criação artística. Utilizou-se a arquitetura, pintura e escultura, as suas interdependências, conexões e contribuições especificas em relação ao fenómeno do "significado", no sentido de clarificar campos comuns e definir uma série de propriedades, valores qualificantes e princípios que sustentam a criação significante e a existência humana. No que respeita a metodologia aplicada, a mesma consiste na utilização de diferentes metodologias de investigação, com a predominância do qualitativo, utilizando como um dos eixos principais a metodologia do estudo de caso. Analisando o "significado" da criação artística nas vertentes interna (pratica do design) e externa (observação exterior do fenómeno da percepção), numa olhar filosófico, pratico e estético, permite o aparecimento de novas vertentes, avaliações críticas, percepções, noções e métodos, que nos conduzem a definir "significado" e o objecto artístico, numa nova perspectiva. O objectivo central deste trabalho é, assim, compreender e clarificar o "significado" do objecto artístico. Neste sentido, tal como o estudo demonstra, permite-se o desenvolvimento da consciência (quer no criador, quer no observador), que é sem dúvida um factor essencial para o incremento de um mundo mais sustentável e que induza a humanidade a evoluir no sentido de novas formas de existência: psicológica, emocional e espiritual.

PALAVRAS CHAVE

SIGNIFICADO, ARTE, ARQUITETURA, PRINCIPIOS, VALORES, CRIAÇÃO, CONSCIÊNCIA

RESUMO ALONGADO

1300 palavras

A presente investigação é uma compreensão do fenómeno do significado e do sentido, que define o objecto artístico observado através de três artes: arquitetura, pintura e escultura. Compreendendo a arquitetura como uma arte, a ligação e a conexão entre as várias artes e os novos paradigmas emergentes, (que combinam as três artes) conduzem a uma nova forma de compreensão e classificação crítica da criação artística. A questão subjacente do presente estudo, "o que define significado?" esta profundamente ligada ao objectivo central da investigação. Assim, através de diferentes campos de criação, num estudo comparativo, interdisciplinar e transversal percebeu-se o fenómeno "significado" na criação artística. Utilizou-se a arquitetura, pintura e escultura, as suas interdependências, conexões e contribuições especificas em relação ao fenómeno do "significado", no sentido de clarificar campos comuns e definir uma série de propriedades, valores qualificantes e princípios que sustentam a criação significante e a existência humana.

Desta forma, estruturou-se a investigação em quatro partes, a parte I, onde se apresenta a investigação, a parte II que integra a analise do enquadramento teórico, a parte III que compreende analise dos diferentes estudos de caso, e a parte IV onde se estabelece a comparação entre a teoria e a pratica e se apresentam os resultados. Segue-se uma breve descrição de cada uma das partes, apresentando os respectivos capítulos e conteúdos abordados.

A parte I, capitulo 1 do desenvolvimento da tese, incorpora a apresentação da investigação articulando a introdução, a hipótese, a metodologia utilizada e a estrutura da tese. Esclarece-se que o objectivo central deste trabalho é, assim, compreender e clarificar o "significado" do objecto artístico. No que respeita a metodologia aplicada, a mesma consiste na utilização de diferentes metodologias de investigação, com a predominância do qualitativo, utilizando como um dos eixos principais a metodologia do estudo de caso. E ainda se estabelece a hipótese da investigação que se relaciona com a seguinte afirmação: as artes da arquitetura, pintura e escultura, como significado incorporado *(embodied),* são um meio aberto (de criação e de interpretação) que utilizam valores e princípios e geram consciência *(the arts of architecture, painting and sculpture, as embodied significance are an open field (of creation and interpretation) that use values and principles, generating consciousness).*

O capitulo 2 descreve o estado da arte, a contextualização e a problematização, que deu origem ao estudo. Neste capitulo analisa-se o panorama arquitectónico e artístico atual, acentuando a ausência de significado das criações artísticas contemporâneas e compreendendo a sua causa. A problemática é, assim, definida pela falta de sensibilização do verdadeiro papel da arte e da ausência geral de "significado" no mundo contemporâneo nos domínios da arquitetura, da pintura e da escultura, as quais criaram uma lacuna entre o observador e as artes em geral, deixando as necessidades fundamentais da existência humana, inabordadas.

A parte II integra a análise do enquadramento teórico através do qual se compreendeu o significado da criação artística. Encontra-se organizado em três capítulos. O capitulo 3, define o significando como a principal característica do objecto artístico, compreendendo em primeiro lugar o que é a arte, identificando e analisando as artes de forma individual, a arquitetura, a pintura e a escultura, através das suas interdependências, conexões e contribuições especificas em relação ao fenómeno do "significado". Deste modo clarificam-se os campos comuns entre as artes, e define-se uma série de propriedades, valores qualificantes e princípios que sustentam a criação significante e a existência humana e o emergir de um novo paradigma de arte. Salienta-se que uma diferença marcante entre arquitetura e as outras artes em análise é a criação de um espaço habitável (*shelter*), enquanto que a pintura e a escultura se caracterizam por uma maior liberdade de criação. No capitulo 4 regista-se a criação e a experiencia do significado, analisando critérios essenciais para a sua criação, tais como as faculdades do instinto, intuição, imaginação e o principio da expressão. Simultaneamente no domínio da experiencia compreendeu-se a experiencia estética, identificou-se aspectos fenomenológicos e a qualidade de abertura (*the open work* de Umberto Eco) como aspetos predominantes. O capitulo 5, por fim, integra a continuação da compreensão do significado, sendo definidos aspectos que o definem e que o integram: o conceito de beleza, verdade, poesia, o papel da emoção e do símbolo entre outros.

A parte III da tese é composta pela análise dos diferentes estudos de caso distribuídos por três capítulos. No capitulo 6 encontra-se a análise dos estudos de caso arquitectónicos sendo estes: Andrea Palladio (1508 – 1580) com La Rotunda, Barragán (1902 – 1988) com a casa Barragán, Frank Lloyd Wright (1867 – 1959) e a Falling Water, Le Corbusier (1887- 1965) e La Ronchamp, Tadao Ando (1941 -) e as capelas *(chapel on the water and chapel of light),* Peter Zumthor (1943 -) e a Bruder Klaus Chapel e por fim John Pawson (1951 -) compreendido por vários projectos. No capitulo 7 os pintores e os escultores que são: William Turner's (1789 – 1862), Edward Hopper (1882 – 1967), Joseph Albers (1888 -1978), Mark Rothko (1903 – 1970), Anselm Kiefer's (1945 -), Donald Judd (1928 – 1994) e James Turrell (1943 -). No capitulo 8 é apresentada uma análise comparativa e o cruzamento *(cross analysis*) dos dois anteriores identificando princípios, conceitos e valores comuns, bem como os valores subjacentes que caracterizam cada estudo de caso. Pretendeu-se analisar através dos estudos de caso, o "significado" da criação artística nas vertentes interna (processo de criação) e externa (observação exterior do fenómeno como observador participante), numa olhar filosófico, prático e estético, permitindo o aparecimento de novas vertentes, avaliações críticas, percepções, noções e métodos, que nos conduzem a definir "significado" e o objecto artístico, numa nova perspectiva. Nesta análise, um dos aspectos que se mostrou ser fundamental foi a evolução da definição de valor por ser um critério operante do próprio conceito de significado. Este conceito de valor que pode ser identificado em diferentes componentes, nomeadamente, poéticas, emocionais, psicológicas, filosóficas, metafóricas, simbólicas e metafísicas. Apesar de cada estudo de caso desenvolveu e aplicou estes valores *(values)* de forma diferente, compreendeu-se que são estes valores, nas suas diferentes materializações, que quando são 'embodied' na/pela criação artística, definem e compõem o significado.

Na parte IV existe apenas um capitulo onde se estabelece a comparação entre a teoria e a pratica e, onde também se constrói a união entre todos os conceitos que surgem desta comparação.

Estabelece-se que é o significado e o sentido da criação artística que, não só permite o desenvolvimento da consciência (quer no criador, quer no observador), como é também um factor essencial para o incremento de um mundo mais sustentável que induza a humanidade a evoluir em novas formas de existência: psicológicas, emocionais e espirituais. Define-se, deste modo, os diferentes valores *(values)* que são incorporados *(embodied)* pelo criador na criação artística e que são compreendidos/absorvidos pelo observador. Este capitulo termina com alguns comentários e perspectivas para outras possíveis investigações futuras.

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UNIVERSIDADE DE LISBOA

VOLUME 2

CORE VALUES AND PRINCIPLES GENERATORS OF SIGNIFICANCE IN ARCHITECTURE, PAINTING AND SCULPTURE

DOUTORAMENTO EM ARQUITETURA: ESPECIALIDADE EM TEORIA E PRÁTICA

DOUTORANDA | M. Arch. Sarah Frances Dias

ORIENTADORES | Professora Doutora Maria João Durão e Professor Doutor Michel Toussaint

CONSTITUIÇÃO DO JÚRI

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Faculdade de Arquitetura da Universidade de Lisboa.

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Faculdade de Arquitetura da Universidade do Porto;

Doutora Maria Alexandra Salgado Ai Quintas,Professora Auxiliar,
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Escola Superior de Artes e Design do Instituto Politécnico de Leiria.

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PART I

Presentation of Research

Introduction note

Part I of the thesis is composed of two main chapters: the first chapter introduces the research clarifying it's aims, objectives, purposes, methodologies and specifying the hypothesis. It is where the questions: what, why, when and how are answered, aiming to clarify all the general aspects of the research. Chapter two describes the state of the art, meaning, the problematization that originated the research, and the contextualization in which it is immersed in.

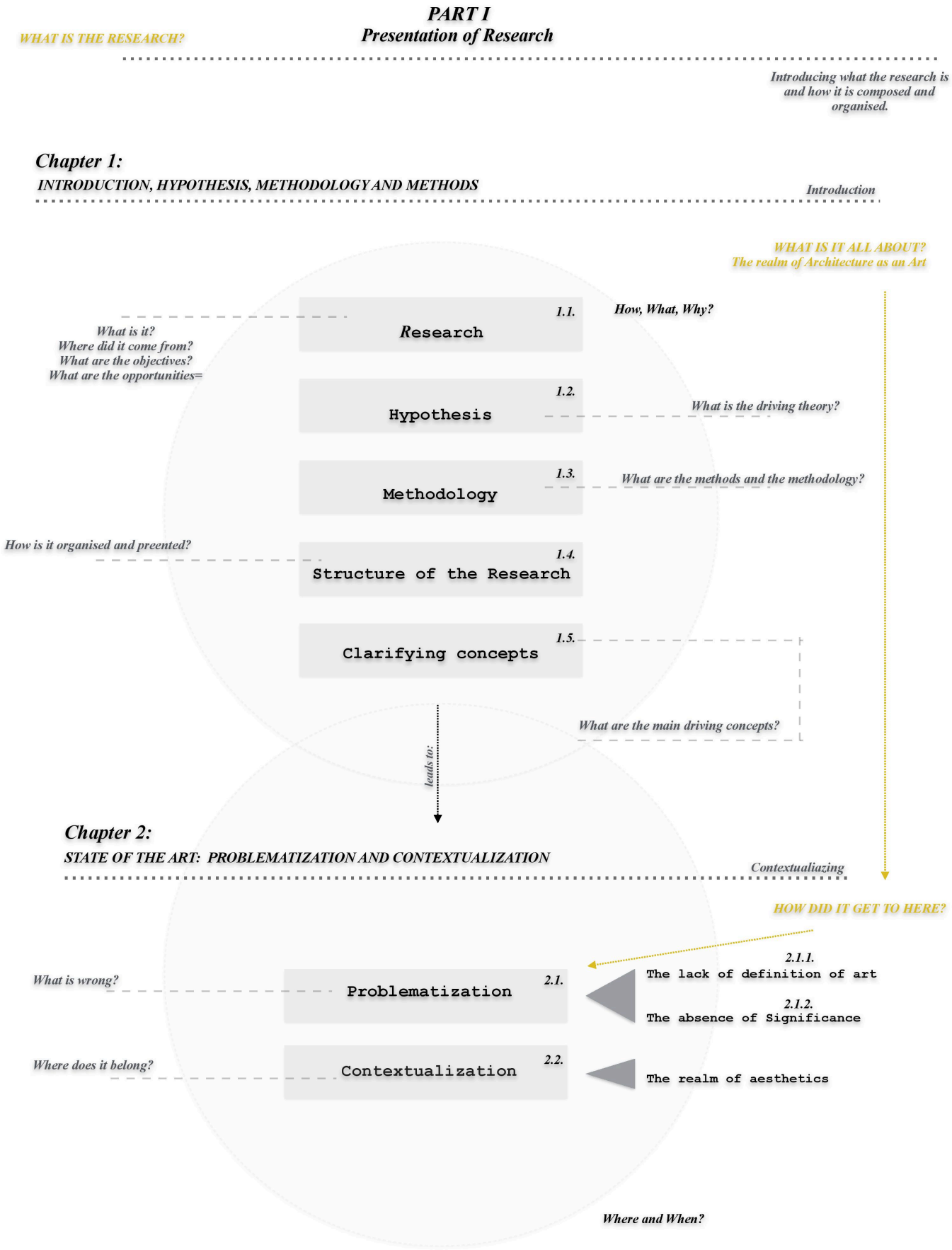


Figure 1: Diagram of Part I of the research.

CHAPTER 1

INTRODUCTION, HYPOTHESIS, METHODOLOGY AND METHODS

Introduction:

In the present chapter an introduction of the research is conducted: firstly the research is presented and introduced (field, object of study, conceptual framework), then the hypothesis is outlined, clarifying the driving theory that supports the research, followed by the methodology that was used in order to identify the methods and methodologies, how and why they were used. Lastly, a presentation of the structure of the thesis is outlined.

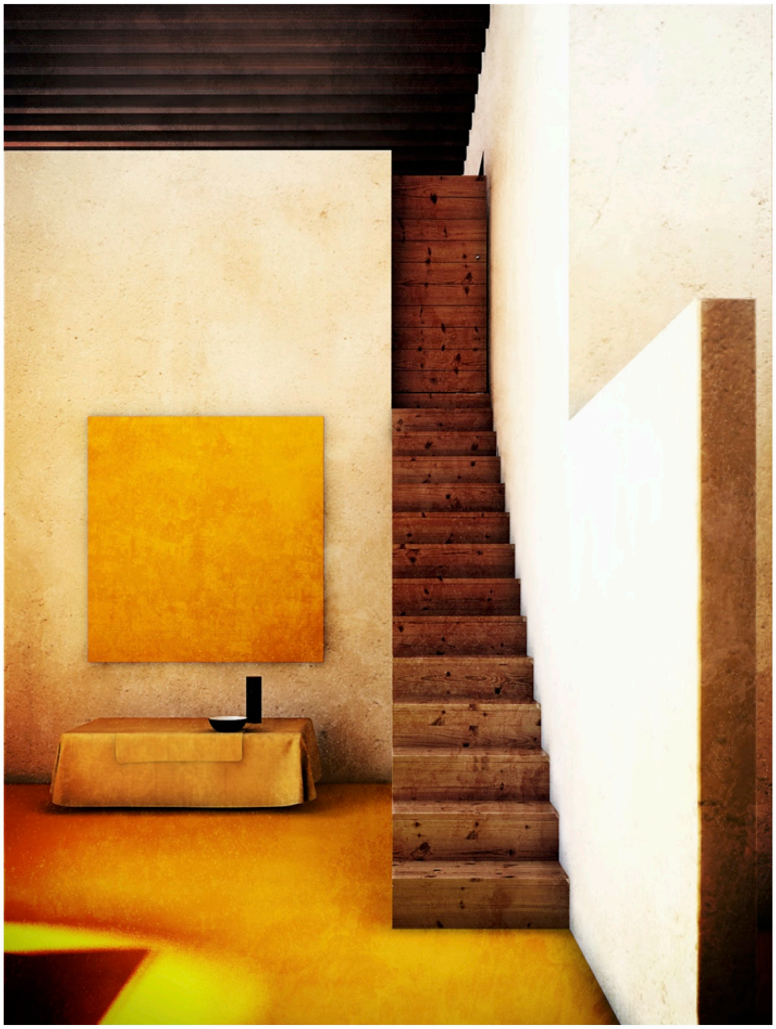


Photo: Barragán's House and Studio;
Source: http://archi-learner.blogspot.pt/2014/01/luis-barragan-house-and-studio-1947.html

PLATE 1: SIGNIFICANCE

1.1. THE RESEARCH

Brief introduction of the theme…

It was once thought that architecture and the arts belonged together; throughout history, in various points (from the classical understanding of the arts in ancient Greece to the eighteenth century Beaux-Arts school system), they were in reality intertwined, but nowadays, there has been a separation of the elements and art and architecture belong each to their own realm of existence. The invisible thread that linked them together in the past, used to be beauty, but beauty has long lost its claim in both fields. It was also once thought that all art, no matter which type (be it an architectural space or a painting) held a magical and hidden power within its realm of existence, (an idea that started with the first art making process carried out by the prehistoric man), but in recent times, art seems to have lost this mysterious strength. Before, this hidden strength was attributed partly to the divine; but presently, divinity has also lost its force in the world. And so we find that the art world has not only lost (partially) it's aura but also it's strength (further analysed in the following chapter).

The concept of Art, established deeply by aesthetics (a branch of philosophy, created in the end of the eighteenth century) is an evolving one; before that time, an aesthetic conscience simply existed in a general way; in architecture, following the Vitruvian tradition, architecture belonged to it's own special field. It was with the establishment of aesthetics (as the work will further explain), that art was established as a specific field, implying a separation between the arts, technique and science. Because architecture uses science and technique, it was placed in the middle: as a form of art, but one that is not completely free (dependent on technique, construction and program) that uses both art and science. However, with new technologies, new construction techniques and new ways of viewing and understanding architecture, new spatial conceptualizations have occurred that make it of the utmost importance to establish and understand the artistic dimension of architecture and the artistic creation as a whole in order to find what seems to have escaped our fast growing (and ever changing) world.

What if, somehow, we found a link that united all the arts together, once again, as creations?

What if, we understood that art's force hasn't disappeared but has simply been hidden away?

These questions arise from the idea that a link could be established between all artistic creation, in a holistic way, allowing for a new understanding to emerge and fill the missing piece in humanity's existence. What if this missing hidden factor was the understanding of Significance? And what if it is Significance that communicates to our consciousness, helping man grow and evolve psychologically, emotionally and spiritually? And lastly, what if this Significance, carried out through the work of art as consciousness is the only thing worth understanding and qualifying in the work of art, and is what unites all works of art that have ever been made?

This underlying vision, a possibility, sustains and defines the research. It might be utopian and platonic, but if we don't unite our visions with knowledge, then what remains to be done in the world?

1.1.1. RESEARCH FIELD AND OBJECT OF STUDY

What is the field of investigation?

Research Field…

The field of investigation in the present thesis is the artistic creation: more specifically in regards to the arts of architecture, painting and sculpture. In architecture, the artistic creation establishes one of the aspects that defines the whole field, therefore, all the rational methods that a design needs are not the focus of the present research. The research sustains (as the thesis will show in the following chapters) that it is the artistic aspects of architecture that allow it be an art; therefore it is these artistic means that will be analysed. (Architecture as an artistic creation, is something that will be further proven throughout the thesis, but as a primary point of departure this can be found in the definitions summarized by multiple authors in part 3.2.1. The Art of Architecture).

The more specific area of the research is then connected and restricted exclusively to signification. This thesis is, consequently, an attempt to crystalize a theory of significance: the one aspect that defines art in it's multiple materializations, and to understand significance, as a necessity for created existence rather than something extra that can be added in a posterior manner.

The significant creation, responds to the complexity of the human being, engaging both primary needs (such as functional ones like safety) and more complex ones such as psychological, emotional and spiritual needs. The theme of the research can therefore be announced, as being the significance of the artistic creation, understood through the interconnectivities of architecture, painting and sculpture, in order to understand the phenomena in it's complexity. As such, the research field of investigation can be defined as being connected to Art as significance, (being that Architecture is the main driving Art that is here observed) and can be generally understood as belonging to the field of Aesthetics. Appropriately, the title of the thesis is:

'' CORE VALUES AND PRINCIPLES GENERATORS OF SIGNIFICANCE IN ARCHITECTURE, PAINTING AND SCULPTURE ''

How?

For this end, a duality between Theory and Project (following the classic architectural tradition as defined since Vitruvius) was decided to be the best way to undergo this research, using, on the one hand, concrete examples (case studies) to explore specific materializations of significances, and on the other hand, theories, concepts and themes that define a theoretical line of investigation. In this way, combining these two spheres (practise and theory) a complete understanding of the phenomena of significance in the artistic creation can be achieved. The research will subsequently use both classical and contemporary examples and theories in a comparative critical way: creating interconnections between both artistic creations and the theories that sustain them.

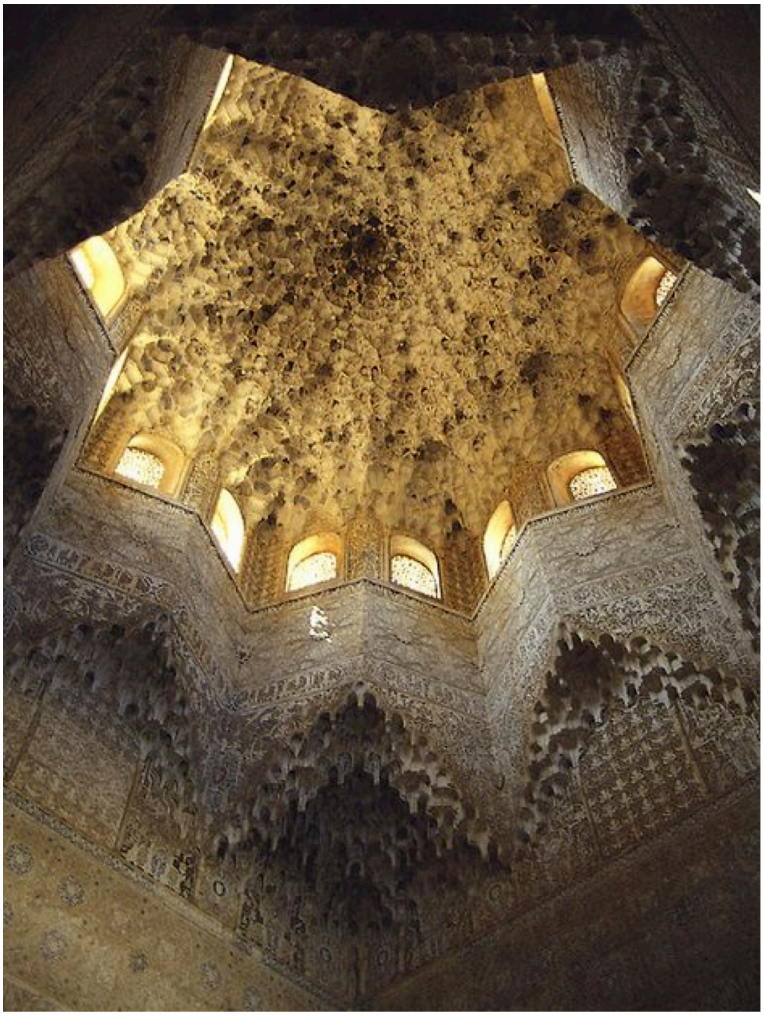


Photo 1: The golden sky, the Alhambra, Granada, Spain Souce: https://pt.pinterest.com/pin/251075747955026481/; Photo 2: Mathias Goeritz, Gold Leaf on Wood, 1959; Source: http://www.thecityreview.com/s08clat.html



PLATE 2: ART

Why?

Understanding the complexities and the subjectivities of the significant creation, is a way of characterizing a more sustainable environment; one that can create a foundation for human existence, allow for the growing and development of consciousness, and sustain psychological, emotional and spiritual values. Understanding significance is a way of not only, defining art, but also defining the human being, helping both art and humanity evolve into a broader, more complex and more sustainable ways of creation and existence.

As such, a more meaningful kind of creation can occur: that is towards life and the principles that sustain our existence; one that is fundamentally based in existence, one that creates from all spheres of knowledge and is aimed at the whole complex human being – one that is sustainable in every way.

What is the object of study?

Object of Study…

The object of the study can be understood in a three folded way.

Firstly, the observation and clarification of significance. Significance is considered to be what defines the artistic creation, and so, it is significance that holds the link between the various forms of artistic creations that will be analysed (architecture, painting and sculpture). All other type of creations, that are not significant or that are not considered to be artistic creations are excluded from the research, and will not be analysed (such as building or children's paintings). This selection of what is analysed is done by the relevance of the subject to the contribution towards the understanding of the phenomena of significance.

Secondly, the associations between artistic creations as significance: studying architecture, painting and sculpture, their interconnectivities and ways of creating their own significance (of becoming artistic objects), is a way of grasping and qualifying the aesthetic creation, and understanding its impactful outcomes in human life. So, the research is not focused on the things that separate the arts from each other, but instead it is focused on links that they all possess in common: as artistic creations. Architecture being an art, draws from the 'artistic' qualities and values of art in general. The inter-connectivity between the various fields of research aims at understanding the common grounds that define the phenomena of significance: properties, values and principles. In this way, as the research determines, the three arts possess shared visions, ideals, philosophies and in their ideal form, both aim at integrating their 'functions' at a primary level (beyond basic needs) and aim not only on satisfying the individual aspects of each art, but also, at responding to the psychological, emotional and spiritual needs. Thus, the clarification between the various fields of creation is a way of bridging links and creating connections that enrich each other. This does not mean, as the research will show, that each artistic field doesn't have it's own system and methods, it simply means that the three arts also have many things in common: such as principles and values.

The last object of study that can be defined, derives from the previous two, and is the understanding of what Art is, how and why it is created, why it is of value and how it is experienced. Underlying both significance and the various arts (architecture, painting and sculpture) is the understanding of the artistic phenomena. As the study points out, what defines art is precisely its significance which is its own specific nature: it perpetuates existence in time and space and communicates to growth of the spirit of man as consciousness.

Constructing knowledge…

This study is not only a continuation of existing work, but is in fact a search for new links and new threads that will aim at forming new 'patterns' of understanding and new ways of perceiving, comprehending and creating art (specially architecture). Northern Europe designer and researcher Kristina Borjesson (2006) for her PhD thesis, pointed out that '' Answers will be presented as *directions*, indicating a way to go, and not as truths, indicating the only way to go.'' (Borjesson, 2006, p. 9); likewise, in this exploratory research, this is precisely the inherent concern. It aims at uncovering connections and deepening comprehension, focusing on discovering a series of values and guiding principles that should be understood as directions.

Who is it directed to?

Created for…

Primarily, the investigation is directed to professionals in the various fields: either educators or researchers or practionners and 'creators'. But also, the thesis ought to be useful for students, architects, artists and thinkers that seek to clarify and understand the principles above stated. The research is thus aimed at being an addition to the artistic and architectural community (as well as the various fields of design interested in signification), enlarging knowledge and creating a new consciousness: one that demands quality and understands that there is in fact a difference between significant creations and non-significant ones, and is aware of both, what it entails and how to create it.

1.1.2. CONCEPTUAL FRAMEWORK AND CLARIFYING CONCEPTS

What is the conceptual framework?

At this point, it is of vital importance to clarify the driving concepts and the overall conceptual framework that sustains this thesis. To start, a brief summary is presented summarizing the overall conceptual structure of the research:

- SIGNIFICATION: values and principles that define the artistic creation.
- EXTERNALIZED IN: architecture, painting and sculpture.
- CONCEPTUALIZED IN: theories, concepts, doctrines, values and ideas.
- ANALYSED BY: philosophers, scientists, theorists, artists and architects.
- OBSERVED BY: philosophy, aesthetics, architectural theory and artistic theory.

Throughout the thesis (in both theory and practise) the phenomenon of signification will observe three distinct spheres of intervention, or three spheres of observation:

- THE INTERIOR PROCESS: which defines the process of 'making';
- THE EXTERNALIZED CREATION: which comprises the observation of the 'object' (a work of Art and of Architecture).
- THE EXPERIENCE: which defines the experience, the 'lived' aspects.

These three spheres of analysis construct the overall conceptual framework and lead to the development of the diagram that is shown in the next page, which is the resulting structure of the conceptual framework, as it evolved from the three analysed stages.

The diagram shows that: (1) the overall phenomena of Signification defines the central aspect of the research, which is derived from the observation of artistic creations (architecture, painting, and sculpture); (2) this main signification leads to four other concepts which are composed of: Creation (creation of significance) and Experience (apprehension of significance), defined by Values and Principles; (3) the phenomena of significance leads to the generation of consciousness (which can be generally understood as the development of the higher faculties of the self). The diagram corresponds to aspects analysed throughout the thesis, however it is important to clarify that these analyse only the phenomena of signification and the different components that were defined from different authors; therefore, certain aspects are excluded, for they are not mentioned or observed as creating or being part of significance. An example of this, is reason, which is a component of some creations processes, however it is not analysed as belonging to the creation of significance because it was not seen of importance to the various authors presented. Instead, as the research will show, it is the faculties of imagination, instinct, and intuition that are of vital importance. Another point of importance is the generation of consciousness, which will be analysed in full detail throughout the thesis.

At this introductory level it is also important to clarify three main aspects: the overall understanding of the arts (architecture and the connections to painting and sculpture), the overall idea of what is significance (with it's vocabulary connections and general understandings from which the thesis emerged from) and the overall definition of consciousness and its connections to art (which is also a central concept that will grow throughout the research, although a basic definition needs to be outlined). Both these concepts will also be explained in the last chapter of the research, where a much broader and complete definition will be announced as a consequence of the whole research. For introduction purposes these ideas are used as the basis of the thesis development.

What does architecture as an art mean?

The three Arts: architecture, painting and sculpture…

In the present research, as we have seen, architecture is assumed as an art, and it is described and understood with its interconnection to two other artistic forms of creation (painting and sculpture). It is important to note that the word art itself was and still is used with several meanings in different contexts; therefore a full analysis of the term and it's different fields and materializations (architecture, painting and sculpture) will be presented in chapter three. However, at this point a clarification of the selection, contextualization, and connections between the three art forms is of key importance.

Conceptual Framework / Synthesis :

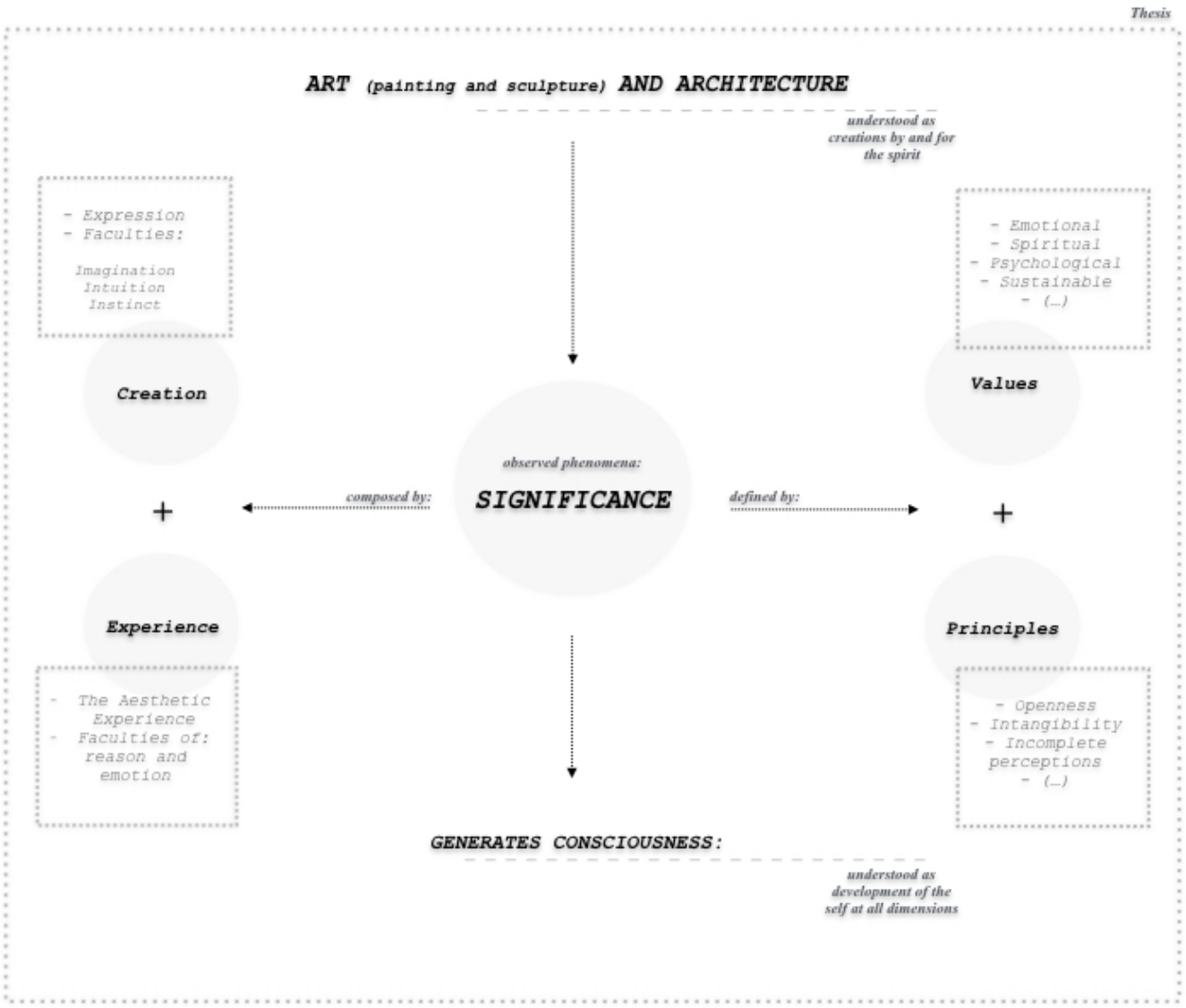


Figure 2: Conceptual Framework of the Research Thesis

Traditionally, the three arts of architecture, painting and sculpture composed a triad in the École des Beaux-Arts (School of Fine Arts) system that was defined in the nineteenth century in Paris, France. Joseph Rykwert, in his text for the book The Beaux-Arts and nineteenth century French architecture (1982), edited by Robin Middlenton, which is entitled The Ecole des Beaux-Arts and the classical tradition, explains that the Beaux-Arts school relied on both tradition and classicism. Julian Gaudet, in the magisterial inaugural lecture at the school in November 1894, sustained that the school offered a logic that was derived from studying the classics, ‘’ (…) as the remedy against all vagaries of unlicensed

imagination.'' (Middleton, 1982, p. 10); Gaudet continues, claiming that the Schools tradition and theory is based on a canonization of the works of art, that is beyond any place or time (it is self evident), and that is universally recognized. Rykwert (1982) claims that Gaudet's views, the chair of theory of the school, were absolute and tyrannical. The school, as just described, was based on rules, principles and norms that were derived from classical examples of architecture and art. The schools tradition unified the three arts of architecture painting and sculpture, sustaining that the three fields were based in the same principles and sets of rules of proportions and harmonies. David Van Zanten (1982) in his text in the same book entitled '*Architectural Polychromy'*: life in architecture, explains that the French architectural students at the Beaux-Arts school, were all trained to draw the Greek and Roman orders in detail (in monochrome ink), under the supervision of the artistic theory professor Quatremère de Quincy, which was a sculptor: '' As the student sculptor was to study the proportional modes and nuances of Greco-Roman statues, so the student architect was to study the ancient marble column with it's base and entablature.'' (Middleton, 1982, p. 197).

The school, thus, saw the three arts as using the same types of systems, of rules, of proportions, and techniques, sustaining that the classical examples were the only means of understanding value. However, in the present research, the underlying coherence between the various forms of artistic manifestation (architecture, painting and sculpture) is not classical examples, rules or laws, but something more intangible which is: the common thread of significance. It is significance that unites the three arts. The three Arts are understood as all possessing a shared significance at their cores; some of the problems concerning architecture today, such as the lack of significance, also concern art (analysed in chapter two); and in the same way, the ideas portrayed by art can be mirrored in architecture (analysed in chapter three and four).

Art, in this research, is used in an inclusive sense (referring to paintings, works of design, architecture and other crafts). Art, as significance, stands outside of contemporary life searching for the real essences of the world and of existence. Art, as described in this thesis, searches and communicates significance, although rooted in the today searching for something more intangible and universal that is, in some way, independent of what is going on in the world. (On the other hand, there is such a thing as popular culture: popular types of creations, such as commercial architecture and art, but, these are not the forms of art hereby being studied).

John Ruskin (1903) (see Glossary) explains that there are no laws that can define art, for it extends the whole of human capacity, however there are 'forms and operations' that belong to each of the arts, and those can be clarified and outlined; Ruskin defines two aphorisms that are necessary: '' We may always know what is right: but not always what is possible.'' (Ruskin, 1903, p. 20), referring to the necessity of clarifying what needs to be done and how it should be done, and '' All practical laws are the exponents of moral ones.'' (Ruskin, 1903, p. 23), meaning that the laws of art are merely a mirror of moral laws, that respond to one greater understanding and purpose, that of the pleasing of God. Therefore, he continues, in every action and creation there are two systems that can be observed and defined: '' (…) one based on representation of the expediency or inherent value of the work, which is often small, and always disputable; the other based on proofs of its relations to the higher orders of human virtue.'' (Ruskin, 1903, p. 23). Many other aesthetic theories show strong links between art and morality, however,

it is the search for value and significance (despite moral claims) that is of vital importance. Therefore, understanding the principles and values of art, apprehending the significance of the work of art caters to the second part, which is the focus of this study; and this is the reason why all three arts need to be analysed together, allowing each other to grow and expand from each other's values, existence and significance.

What does significance mean?

Defining Significance ….

Signification is generally perceived as the act of signifying something either by signs or by other symbolic ways. Signification, by the Merriam Webster dictionary can also be seen as '' (…) the meaning that a term, symbol, or character regularly conveys or is intended to convey.'' ("Signification," 2013); as a term, it is connected to other concepts such as the 'importance', 'meaning', the 'essence' or the 'nature' of something, thus accentuating the relevance of the term for characterizing something relevant, of 'consequence' or pertinence. Associated to the term significance is also the word meaning, which is generally understood, as defined by the Merriam Webster dictionary, as that which is conveyed or as '' (…) the idea that is expressed in a work of writing, art.'' ("Meaning," 2013); but can also be used to refer a significant quality, '' (…) especially implication of a hidden or special significance.'' ("Meaning," 2013).

Hence, significance relates to the act of signifying, whereas meaning defines that which is conveyed). More so, a significant work may possess multiple meanings, however it only possesses one significance (which incorporates multiple meanings). As a result, a hierarchical system of concepts is defined: where signification is the broad term and meaning a specific category that can be contained in the significance. Another clarification is also of importance: significance is generally understood as the innate property of a specific signifying thing; whereas meaning is that which can be perceived by the viewer; whereas the first belongs to the 'thing', the latter is exterior to it and is connected to the interpretation defined by the viewer – thus it is established 'outside' of it.

Paul Ricoeur (2003) (see Glossary) also clarifies this, in relation to linguistics: '' 'Relative to a word, meaning is what this word makes us understand, think, feel by means of its signification; and its signification is what it signifies, that is to say, that of which it is a sign, when it acts as a sign'. '' (Ricoeur, 2003, p. 56) Every sentence, continues Ricoeur, has various meanings, and they are all contained in the works significance: the first, objective meaning (provided by the theory of ideas), the second the literal meaning (direct, primitive or natural), the third the spiritual meaning (what the literal meaning causes to occur in the spirit[1]) and the intellectual meaning (associates to intellectual reasoning). However, as the research will prove, significance in relation to the artistic object is also associated to that which is embodied, rather than merely being signified. When we turn to art (in whichever form) we are searching for significance: we are looking for that intangible quality that can satisfy us and make us feel more alive, fuller and more in tune with the universe.

[1] The spiritual meaning, on the other hand: '' (…) is that which the literal meaning causes to be born in the spirit by means of the circumstances of the discourse, by tone of voice, or by means of expressed connections with unarticulated relationships.'' (Ricoeur, 2003, p. 57). The literal meaning gives rise to spiritual meaning in our minds.

Defining Consciousness ….

Consciousness, by the Merriam Webster dictionary, can be generally defined as the condition '' (…) of being aware of an external object or something within oneself.'' ("Consciousness," 2014). It is generally related to the 'ability to experience', 'to feel', and of having (and generating) a sense of 'self'. The nature of consciousness has been a focus of philosophical studies since René Descartes (1596-1650) and John Locke (1632-1704) (see Glossary), and in recent years, it has become a topic of research for psychology and neuroscience; the study of consciousness relates to issues such as 'perception' and 'altered states of consciousness'.

The modern notion of the word is derived from John Locke's study 'Essay concerning Human Understanding' (1690), where Locke '' (…) defined consciousness as "the perception of what passes in a man's own mind".'' ("Consciousness," 2014). Etymologically, the English word 'conscious' derives from the Latin '*conscious',* meaning: '*con' (*together) and '*scio'*, (to know), which meant to have a common knowledge with another. Associated to the concept derives the Latin term '*conscius sibi'*, which translates literally to 'knowing with oneself'[2], which connects to the common use of the word today: '' The Latin phrase '*conscius sibi'*, whose meaning was more closely related to the current concept of consciousness, was rendered in English as "conscious to oneself" or "conscious unto oneself".'' ("Consciousness," 2014).

Scientifically, António Damásio (2013), in his book 'O sentimento de si: Corpo, emoção e consciência' (Self Comes to Mind: Constructing the Conscious Brain) defines consciousness as that which allows us to know both basic and complex functions and emotions. He explains that consciousness can exist at a basic level (which corresponds to the basic aspects of existence such as hunger and primary emotions), or at a more complex level, which '' (…) helps us to develop an interest for other self's and to cultivate the art of living.'' (Damásio, 2013, p. 21)[3]; this corresponds to two types of consciousness: nuclear (basic) and broad (complex). It is consciousness that allows us to understand the self (creating a sense of personal identity and existence) and the world around us; it is a process that is intrinsically personal however it is always derived from external factors. The author adds that it is the complex and broad type of consciousness that allows fro creativity to grow and develop.

Philosophically, the term consciousness is used for four main topics or categories: knowledge, in general, intentionality, introspection and phenomenal experience; something in this sense, is understood as 'phenomenally conscience' when it resonates 'introspectively', as is the case with 'perceptual experiences', 'bodily-sensational experiences' or 'imaginative experiences' [4]. On this issue it is important to clarify the mind-body dualism that emerges within the notion of consciousness. For Descartes, consciousness resides in the 'realm of thought'*, 'res cogitans'*, contrasting to the material world, the world

[2] Further information: ''There were, however, many occurrences in Latin writings of the phrase *conscius sibi*, which translates literally as "knowing with oneself", or in other words "sharing knowledge with oneself about something". This phrase had the figurative meaning of "knowing that one knows", as the modern English word "conscious" does. In its earliest uses in the 1500s, the English word "conscious" retained the meaning of the Latin *conscius*.'' ("Consciousness," 2014).

[3] Free translation from: '' (…) ajuda-nos a desenvolver um interesse por outros si próprios e a cultivar a arte de viver.'' (Damásio, 2013, p. 21)[3]

[4] Reference to 'The *Routledge Encyclopedia of Philosophy'*, 1998: ''An experience or other mental entity is 'phenomenally conscious' just in case there is 'something it is like' for one to have it. The clearest examples are: perceptual experience, such as tastings and seeings; bodily-sensational experiences, such as those of pains, tickles and itches; imaginative experiences, such as those of one's own actions or perceptions; and streams of thought, as in the experience of thinking 'in words' or 'in images'.'' ("Consciousness," 2014).

of extension *'res extensa'* [5]. Today, theories that sustain this dualism between the world of consciousness and the world of matter, give different solutions as to how these worlds collaborate and co-operate with one another. However, most philosophers consider experience the essence of consciousness.

Consciousness, for philosophy, is also generally defined, as summarized by the author José Ferrater More for the Dictionary of philosophy (Dicionário de Filosofia) (1991), as: '' (1) the discovery or recognition of something, exterior, like an object, a quality, a situation, etc. or interior, like the changes suffered by the self. (2) the knowledge of what is good and bad.'' (Mora, 1991, p. 75) . Whereas the second definition relates to moral consciousness, it is the first idea that relates to the general use of the term. Consciousness, thus, in general, is associated or sub-divided into multiple forms or types: emotional and intellectual consciousness, direct or reflective, intentional or non-intentional consciousness. However, what all these distinctions have in common, is the founding idea that consciousness is a faculty with fixed characteristics. Kant made a distinction between empirical consciousness (psychological, which is connected to the phenomenon) and transcendental consciousness (connected to the possibility of all knowledge). Hegel, also accentuates this idea of transcendental consciousness as that which: '' (…) develops on itself, transcends itself, and continuously outdoing itself. '' (Mora, 1991, p. 77) .

In another Dictionary of philosophy (Dicionário prático da Filosofia) (1994) by Elisabeth Clément and other authors, another complementing idea is set forth. The authors claim that consciousness is '' Therefore, before being an instrument of knowledge, consciousness is the supplier of sense and significance, if that sense is what makes the self guide itself to something, somewhere in the future.'' (Clément et al., 1994, p. 70) . The authors are accentuating the guiding qualities of consciousness and it's connection to the construction of significance, as a primary level that precedes knowledge. The term consciousness is also associated to spirituality. Whereas for philosophers, consciousness relates to the connection between the 'mind' or the 'self' and the world, in spirituality, consciousness is regarded as a connection between the mind and the deeper truths (including God). If on the one hand consciousness is connected to the 'mind', as we have seen, it is also connected to all the other faculties of the human being; because it is connected to growth and expansion through experience, it implies a development of the whole human being as a whole, including the faculties of instinct, imagination and an emotional understanding of existence. Consciousness, thus, in the present research is a broad understanding that is responsible for the connection between man and the deeper truths of the universe: those might be primal, instinctive, or rational. As the work will make known, it is consciousness (as it connects to 'knowledge', 'intentionality', 'introspection' and 'phenomenal experience') that is derived from the aesthetic experience as significance.

In this preliminary explanation of consciousness, it is of reference the two connections between art and consciousness defined by the contemporary artist Alex Grey (2013): on the one hand, art derives from human consciousness and thus expands human consciousness when others are in contact with it; on the other hand, to analyse art is to understand the human evolution of consciousness.

[5] Reference quote: '' Descartes proposed that consciousness resides within an immaterial domain he called res cogitans (the realm of thought), in contrast to the domain of material things, which he called res extensa (the realm of extension).'' ''("Consciousness," 2014).



MAGICAL



MYTHICAL



RATIONAL



INTEGRAL



TRANSCENDENTAL

Photo 1: The Venus of Willendorf (25,000 BCE); Source: http://www.visual-arts-cork.com/prehistoric/venus-of-willendorf.htm; Photo 2: The Great Sphynx, Egypt; Source: http://emhotep.net/2009/10/24/locations/lower-egypt/giza-plateau-lower-egypt/the-great-sphinx-what-we-know-what-we-think-we-know-what-we-will-never-know/; Photo 3: The Vitruvian Man, Leonardo da Vinci; Source: http://www.allposters.com/-sp/Vitruvian-Man-Proportions-of-the-Human-Figure-Posters_i8922617_.htm; Photo 4: Planet earth; Source: http://www.greenbang.com/world-environment-day-theme-planet-needs-you_9940.html; Photo 5: The Cosmos; Source: http://redicecreations.com/article.php?id=13047

PLATE 3: THE STAGES OF ART (AND AESTHETICS) AS EVOLUTION OF HUMAN CONSCIOUSNESS

This explanation is part of his TED talk conference entitled *Cosmic Creativity: How Art Evolves Consciousness* (2013)[6], where it was also explained that it is possible to assess the evolution of humanity and of humanity's consciousness through art as categories: 'magical', 'mythical', 'rational', 'integral' and 'transcendental' (see Plate 3 and explanation in the following page).

Of reference of this categorizing for the thesis is the driving underlying idea that a new cycle of consciousness is defined in the contemporary age, which derives from human evolution and is reflected in art; and the fact that consciousness is not only embodied in art but that also is generated through the experience of art as significance, as the research will show.

So what are the connections between art and consciousness?

Although the connections between art and consciousness will become clearer throughout the development of the whole thesis, it is important to clarify some points. As we have seen, consciousness can be generally understood as a connection between the self and the deeper truths of the world; but consciousness itself is an ever evolving concept, just like the concept of art. At this stage, it is possible to claim, as summarized by author Alex Grey (2013) above, that art connects to consciousness in three ways: 1. art derives from the human consciousness of its creator, 2. it communicates to human consciousness as it is experienced, 3. art expands human consciousness once it has been experienced and lastly, 4. to study and understand the significance of art is to comprehend the evolution of human consciousness itself.

The diagram in the following page illustrates the five stages pointed out by Alex Grey (2013) that correspond to the evolution of humanity's consciousness through art; Grey, as we have seen, sustains that human consciousness evolves through art, and thus he believes that a new stage is being developed that corresponds to a new cycle of human consciousness. According to Grey human consciousness evolution can be generally characterized by an evolution from the physical, to the mental and rational, to the transcendental. This growth (that can be summarized by the five stages presented by the author) can help us understand the deep intricate connection between art and consciousness, and how art that possesses significance expands consciousness. Although the five stages were initially presented by Grey (2013) they will further be expanded by the present author.

The stages are: 1. the 'magical' stage, which corresponds to the traditional pre-historic understanding of the world, led by the primal idea of magic and guided by a magical understanding of life and existence; here art served magical purposes. 2. the 'mythical' stage, which corresponds to the stages of art growth and expansion of the classical civilizations: the Mayan, the Egyptian, the Persian and the Greek civilization to name a few; this mythical stage corresponds to a mythological understanding of life and art; 3. the 'rational' stage, corresponds to the architectural and artistic stages of the Renaissance, when turned to reason and to science, as the main driving forces that sustain both his existence and the world; although reason is a fundamental part of the human being in all eras, there is no doubt, that this stage saw an elevation of reason as the most vital faculty of human existence; 4. the 'integral' stage can be defined by an overall understanding of human existence that begun to be broader and more whole, trying to create a balance between the other faculties and dimensions of human existence; this can be seen in the

[6] Where he further explains that art is a form of healing, and that through art, the self grows; in his words: '' The artists hand holds a tool spiritual tool of evolutionary vision, and every creative act empowers every other creative act.'' (Grey, 2013)

developments of the late nineteenth and twentieth centuries in both the arts and in architecture that searched for a more spiritual and grounded type of creations and existence (examples: the works of Le Corbusier in architecture or Abstract Expressionism in painting); and lastly, the last stage, 5. the 'transcendental' stage, which corresponds to a new cycle of creation that is still emerging, manifest through the desire to create an art and architecture that understands human existence in a broader way, aiming to create links between our own lives and the transcendental awareness of our own immortal spirits.

Consciousness, thus, the arts and architecture, are in constant evolution. They belong to an endless cycle of new discoveries and new paradigms that aim to complete what has been missing from previous generations. Our time, even if represented by only a minority, has been witnessing a growth of consciousness once more, that desires a balanced existence, that is aware that our spirits have spiritual needs, and that is concerned with the overall transcendental place of humanity in the universe. This is becoming manifest through artistic and architectural creations, as the work will further show. As we have also seen, the links between art and consciousness are various; further sources will be presented throughout the thesis in order to further understand forms of consciousness that are communicated as principles and values through the significance of the creation.

Defining Values and Principles ….

One last concept clarification is in order, which is the general understanding of the words values and principles. These concetps, like the previous ones, are evolving ones, however, at this introductory level it is important to define them. Values are generally understood as beliefs or ideals that define what is important in life or in art; on defining value, Scruton claims it is the pursue of what is right and just, the outcome of though and education and that '' A value is characterized not by its strength but by its depth, by the extent to which it brings order to experience.'' (Scruton, 1979, p.32). In general, a value is something that defines the framework of existence for the human being. Principles, differently, are generally understood as a fundamental idea that serves as a foundation for being, or in the case of the present thesis, for the artistic creation. Both of these ideas are founding guiding motors for the actions, throughts and overall existence of man. These are general understandings, that will be further defined throughout the thesis *(see glossary for the full definition of values that will be developed throughout the thesis; values will further be developed in Chapter 4 and analysed again in the concluding Chapter 9)*.

1.1.3. RESEARCH QUESTIONS

What are the underlying research questions?

Now that the overall scheme of the research has been presented, and that the driving concepts have been clarified, at this point, it is vital to understand the driving research questions. It is possible to present the underlying research questions as:

- How can we define and understand art as the communication and embodiment of significance?

- Is this significance (that sustains art and human existence) a form of consciousness?

This main research question originates a few other questions:

- What is the field of Art?
- What is Art as significance?
- What are the connections between the multiple significant creations? And how do they influence each other?
- How does significance communicate consciousness and why?

These main and sub-questions define the core of the research; however it is still possible to enumerate even more driving research questions that result from these presented:

- What and how is at the core of the creation of significance?
- What defines a significant experience?
- What does it mean to experience a significant work of art?
- How does it develop my own existence as consciousness?
- And what is the value of creating significance for the world?

These questions, underline the thesis and are what the thesis as a whole aims to respond to.

1.1.4. OBJECTIVES, MOTIVATIONS, OPPORTUNITY AND BENEFITS

What are the underlying objectives?

The aims…

The main research objectives of the current research are:

- The achievement of a critical understanding and definition of principles and values that define **the significant artistic creation**: understanding the creation process, the methods, the tools, the language and the philosophical principles that sustain it to the end observed, apprehended and the perceived result.

- The comprehension that significant artistic creations speak in terms of consciousness, and fulfil the human beings in deeper levels than those initially apprehended, than those 'portrayed' and 'sustained' by the contemporary world.

As a more general and overall aim, Kristina Borjesson (2006) summarized her aim as follows: '' The aim is, in the first place, to raise awareness and enhance the understanding of the phenomenon: to create a platform, and secondly to inform on possible ways to consider timelessness in designing: to give directions.'' (Borjesson, 2006, p. 9) Likewise, this two-folded aim, will guide the thesis in all stages towards the phenomena of significance. As for the specific aims, these are the following:

- Describe and define in a rigorous way the **interconnections between the significances expressed in various arts: painting, sculpture and architecture**.
- Identify **the key principles and values** that define the significant artistic creations.
- Clarify the ways in which consciousness is generated.

What is the research specific objective?

The objectives…

It is possible to also define the driving objectives, that although are very closely related to the aims, they should also be clarified. The research's objectives can be summarized in a four folded way:

- To understand and define the ways by which the artistic being conceives and creates the world through Art as significance.

- To define more about the knowledge of the significant creation, the theory and understanding of the overall conception of Art.

- To make the relations and connections between the arts (architecture, painting and sculpture) more clear, having significance at its core, so as to create a solid theoretical and scientific ground to allow new possibilities to become clear in a qualified way.

- To raise awareness for a new type of understanding that can sustain both Architecture and Art, and that is, significance.

What is the drive behind the research?

Motivations…

The underlying motivation for the research can be identified as being a result of the contemporary world and life. This contemporary world, where everything propelled by technology and media seems to be valid and where creator's (more specifically architects and artists, but also designers, engineers or even scientists) face the need for a better clarification of what it is to construct and define art, and understand why is it that what they do (create significance) is so important. More than ever, a new analyses and systemization of a way of creation that is significant is vital. As such, to understand how art and architecture can respond to our existence, promote consciousness and communicate values and principles is the driving force/motivation that sustains the present Ph.D. thesis. Accompanying this driving motivation is the idea that a complex integrative system, with significance as a link, can indeed be created, which allows us to understand art as a whole and as something unique that generates consciousness and helps humanity evolve.

Peter Zumthor (1943 -) (see Glossary), an architect who also writes from his personal experience, in his book '*Thinking Architecture'* (2006) claims: '' There is a magical power in every completed, self-contained creation. **(…)** Emotions well-up. Something moves us. '' (Zumthor, 2006, p. 16). With this sentence, he both, contradicts the overall motivation of the thesis but also supports it: he contradicts it because as it will be shown, a 'completed' 'self-contained' creation possesses no significance at all; and he supports it because he is describing the quality of significance as a 'magical' mysterious power. The observation of this mysterious quality that is like an aura of the artworks (significance) is indeed another main motivation; observing this aura in artworks, being both a painter and an architect, has always been of the utter importance for both personal and professional life. This fascination finds forms in the present research.

What are the opportunities underlying the study?

Opportunities…

Studying the significance of art is a way of defining a more sustainable world: one that supports the complex human existence in all levels of existence. Although psychological and emotional factors are present in all human creations, as we have seen, the thesis aims to understand and define the most intense modes of creations that embody and possess at its core, thereby allowing for human growth and expansion. It is significance in Art, that allows humanity to grow, expand and re-define its own existence. It will be shown that, it is significance in Art that grants man his own place within himself, within the world, in the universe and within a spiritual framework that defines his complex existence. Thus, the work establishes infinite opportunities of growth, expansion and understanding of man's own consciousness.

What are the benefits of the research?

Benefits…

The benefits of the research are here presented in their ideal condition, as expected. They will be outlined in two spheres: the micro benefits that entail the personal benefits, and the macro benefits, which are the 'community' benefits that describe the overall benefits for the research community, the university community, the 'artistic' creative community, amongst other communities that are here considered is a broad universal way. As for the personal benefits, micro benefits, it is of reference:

- To be able to investigate contents and fields of research that are 'meaningful', and are deeply rooted into my existence.
- Without a doubt personal satisfaction from the achievement of the proposed aims, will greatly define another 'conquest' in my 'artistic' investigative spirit.
- The possibility of the vast new opportunities that will derive from the present research.
- The chance of creating something that will help and aid artists and creators is also a great motivation.

In regards to the macro benefits, or 'community benefits' it is of reference:

- The possibility of creating a system and a clarification of 'quality' (as significance and consciousness) could definitely contribute to the enrichment of both the academic and the professional world.
- The results of the present investigation aims at being a contribution to the vast fields of creation, and not exclusively to a specific field; this research aims at establishing grounds for values, potentially having great benefits for architects, designers and artists, but also in the fields of theory and criticism.

1.2. HYPOTHESIS

What is the hypothesis?

At this stage it is of value to present the hypothesis, derived from the above considerations. The hypothesis for the research is as follows:

1. ART IS EMBODIED SIGNIFICANCE
2. THE ARTS OF ARCHITECTURE, PAINTING AND SCULPTURE, AS EMBODIED SIGNIFICANCE ARE AN OPEN FIELD (OF CREATION AND INTERPRETATION) THAT USE VALUES AND PRINCIPLES, GENERATING CONSCIOUSNESS.

This hypothesis emerges from the understanding that all artistic creations (in regards to the three arts being observed), as significance, emerge from and communicate to cognitive, emotional and spiritual dimensions; in doing so, being created from consciousness they promote degrees of consciousness in the viewer through its experience. Thus, the hypothesis can be understood in a two dimensional way: firstly that the arts are significant creations, that are created and that generate consciousness and secondly, that the higher the degree of significance, the deeper the levels of consciousness that can be generated.

The hypothesis is further complemented with the diagram presented in the next page. It is an evolution (or deconstruction) of the main hypothesis, showing what exactly occurs when the main hypothesis is materialized. The diagram will hereby be clarified:

- The diagram shows the phenomenon of significance and consciousness as being the outward spheres (encompassing all other concepts) of the artistic creations.
- Secondly, it is important to clarify the three main nodes or concepts, which define the phenomena: those are signification (of values), representation (of principles) and interpretation (of the overall significance).
- Also, the phenomena is further subdivided into sub-concepts, which establish intermediate positions between the main concepts: which are meaning (between signification and interpretation), understanding (between representation and interpretation) and expression (between signification and representation).
- Each of these concepts relate to the idea of creation (the creator that creates) and the idea of observation (the viewer which absorbs); however it is important to clarify that both the artist as the creator, does both functions in an endless cycle.
- The Observer focuses on interpretation (of the overall significance), where as the Creator focuses on Representation (of principles), and somewhere in between both exists the phenomena of Signification (which is both active, creation, and interpretation). Both these functions are defined by the artist in the act of making and by the observer in the act of interpretation.
- Each note or concept connects to each other freely.
- And lastly, the cycle repeats itself openly, freely and in a never ending cycle that is always open to new understandings, new re-creations and new interpretations.

The diagram was constructed at a preliminary stage of the research, resulting from a gathering of information into a visual content; it was thus constantly transformed and optimized as the research grew and expanded in depth.

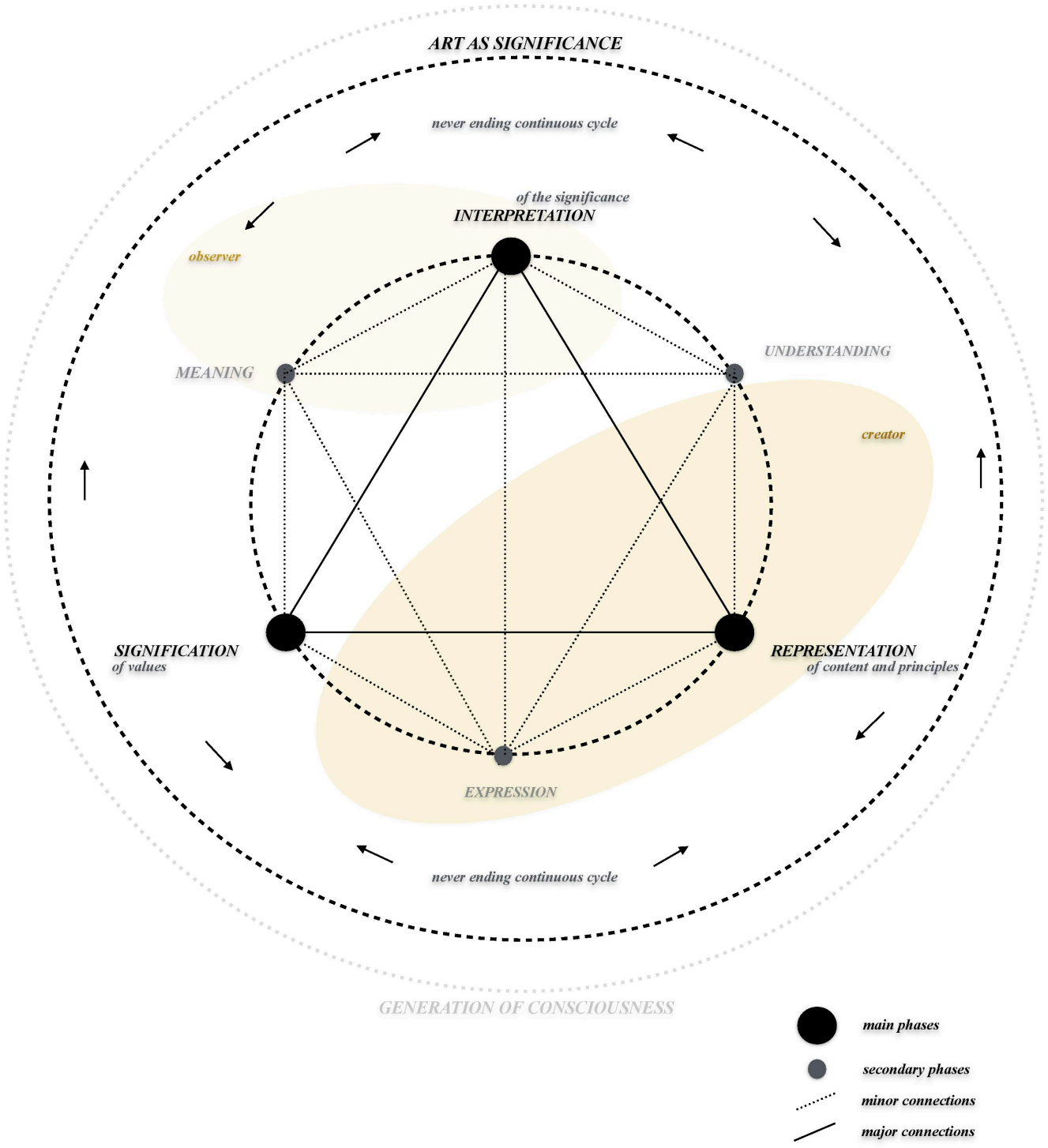


Figure 3: The hypothesis expressed by a diagram of connections.



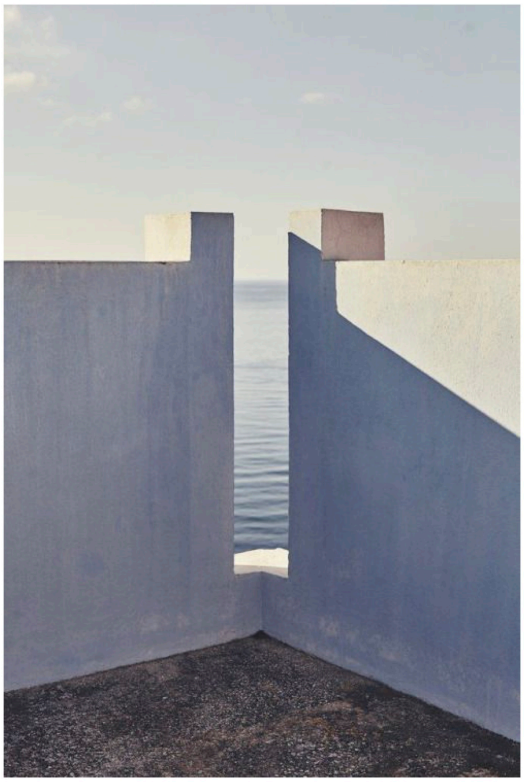


Photo 1 : William Turner, Sun setting over a Lake, 1840; Source: http://commons.wikimedia.org/wiki/File:William_Turner_-_Sun_Setting_over_a_Lake.JPG;
Photo 2: Ricardo Bofill's La Muralla Roja in Alicante; Source:https://pt.pinterest.com/pin/251075747954737533/

PLATE 4: THE HYPOTHESIS " THE HIGHER THE DEGREE OF SIGNIFICANCE, THE DEEPER THE 'EXPERIENCE' GENERATED, PERCEIVED AND ESTABLISHED, THE DEEPER CONSCIOUSNESS IS ESTABLISHED."

1.3. THE MIXED METHODOLOGY

How is the mixed-methodology used in the research?

Overall, the methodology and methods that are used embrace the complexity and intricacy of the problematic being analysed: that of a Research Methodology for Art and Architecture. Due to the nature of the problem and of the phenomenon being observed, it was defined that a mixed methodology would be the best approach, combining both qualitative and quantitative techniques, methods and approaches[7]. The qualitative component of the thesis (related to qualitative data[8]) which used induction, discovery, and exploration, corresponds to the 'how and why aspects' and aims at the creation of a theory. The qualitative methods used throughout the thesis are: the grounded theory method (an inductive research, rooted or 'grounded' in observations or data, using a variety of sources), phenomenology (that describes the 'subjective reality' of the phenomenon being observed), and reflection on field notes, texts, pictures, reflexive journals and other resources. The data collection was analysed through interpretive techniques (observed impression), coding (segments are selected and marked with a code), recursive abstraction (summarizations are continuously conducted) and other techniques that allowed for a continuous understanding and clarification of the phenomenon being observed. The strengths of these techniques and methods in the thesis can be identified as the ability to organize and summarize complex phenomenon and its main weakness is it's abstract nature.

Whereas the quantitative components of the thesis (related to qualitative data[9]), which used deduction, confirmation, testing and explanations, correspond to the 'what and when aspects' and aim at

[7] **The Mixed Methodology**: Conducting mixed methods research involves '' (…) analysing, and interpreting quantitative and qualitative data in a single study or in a series of studies that investigate the same underlying phenomenon.'' (Onwuegbuzie and Leech, 2006, p. 1). Furthermore, the mixed method, combines three kinds of thinking: induction, deduction and abduction, a point emphasized by Johnson and Onwuegbuzie (2004) when they identify the mixed methodology as: '' (…) a logic of inquiry includes the use of induction (or discovery of patterns), deduction (testing of theories and hypotheses), and abduction (uncovering and relying on the best of a set of explanations for understanding one's results)". (Almendra, 2010, p. 133)[7]; and Rita Almendra (2010) adds that it '' (…) suggests an eclectic approach to method selection and to the entire development and orientation of the research.'' (Almendra, 2010, p. 133). Rita Almendra (2010) defines a series of **strengths and weaknesses** for the method that will thus be summarized: as strengths, the mixed method can add insights and understandings that one method single could not, thus it creates a more complete knowledge that informs both practise and theory; further, a researcher can create and test a grounded theory and can answer a broader and more complete range of research questions; as weaknesses, it can be more expensive and more time consuming, can be difficult to be executed by one researcher alone and the researcher has to learn about multiple methods.

[8] **Defining the qualitative research:** The qualitative research is a method employed traditionally in social sciences and is closely linked to the analysis of human behaviour and to qualitative data; arising from the rejection of positivism (the view of an objective world and empirical verification), it is focused on the how and why (not exclusively on the what, when, and where) and is focused on generating theories. As summarized by Rita Almendra (2010): ''The major characteristics of traditional qualitative research are induction, discovery, exploration, theory/hypothesis generation, the researcher as the primary "instrument" of data collection, and qualitative analysis.'' (Almendra, 2010, p. 104). Qualitative methods for data collections include: grounded theory practice, interviews (semi-structured or structures), group discussions, focus groups, observation (participant or non-participant linked to reflexive learning), etc. The data is then collected into patterns, themes, or codes ("Qualitative research," 2013). Rita Almendra (2010) identifies a number of strengths and weaknesses that will here be simplified. As strengths it is of reference: usefulness for describing complex phenomena, and the allowing for an understanding of how a phenomenon occurs; as a main weakness, it that fact that it is difficult to define quantitative predictions and is more difficult to test hypothesis and theories. Of reference is also Byrne's (2001) synthesis, where he claims: '' Qualitative research methods reflect an inductive mode of analysis or a process of moving from specific observations to a general theory.'' (Byrne, 2001, p. 1).

[9] **The quantitative research:** The quantitative research is linked to a systematic investigation of quantitative data, such as mathematical or numerical data; it is focused on hypothesis testing and validating from a number of analytical data. Rita Almendra (2010) summarizes it as follows: '' The major characteristics of traditional quantitative research are a focus on deduction, confirmation, theory/hypothesis testing, explanation, prediction, standardized data collection, and statistical analysis.'' (Almendra, 2010, p. 104). As such, the researcher focuses on numerical data, converting it to statistics or creating hypothesis. It is made up of scientific methods, which include formulating models, theories, the development of methods, collecting empirical data, amongst other. For the formulation and analysing of data, statistics is commonly used ("Quantitative research," 2013). Rita Almendra (2010) identifies a number of strengths and weaknesses that will here be simplified. As strengths it is of reference the preciseness of the data, the testing and validating of already constructed theories, allow for predictions, the use of statistical software is less time

clarifying data specifically (such as identifying examples). The quantitative methods that were used throughout the thesis are: the creation of hypothesis and defining models of examples and means by which the phenomenon occurs. As a strength for the thesis it is possible to identify the fact that it allowed for a testing and validating of theories and as a weakness the fact that one example doesn't define the phenomenon.

Combining both methods allowed for a constant validation to occur moving from the overall phenomena to the specific examples, in an endless cycle. There wasn't a dominance of qualitative methods over quantitative ones, but a harmony and balance between both methods. Overall, the mixed methodology applied also used a combination of three types of thinking: that of induction (discovery of patterns), deduction (testing theories) and abduction (reaching new ideas) and this can be pointed out as one of its strengths, allowing for a much deeper and complete understanding of the phenomenon being observed. As a weakness, it is possibly to point out, the complexity of the analysis (drawing insights from both abstractions and theories and from concrete examples). As main challenges one can identify: the defining of the research question at an early stage (that should strive to be both qualitative and quantitative, 'open-ended' and 'non-directional'); the definition of the research mixing/rationale, how those would occur and what their purposes were[10]; and lastly, the following of the various stages (identified by Onwuegbuzie and Teddlie (2003)[11]) while at the same time allowing for a dynamic comprehension to emerge (as emphasized by Borjesson (2006)[12]).

It is also possible to understand the methods applied from both methodologies as both interventionists (active investigation) and the non-interventionist (passive investigation), however, there is a predominance of the latter.

The non-interventionist methods that were applied could be summarized as: the grounded theory method (and the analysis as coding), the deconstruction and construction techniques and the case studies analysis; as the interventionist methods, it is of relevance, the construction of diagrams, the creation of synthesis and principles (creation of new definitions) and the composing of the books. Each method will be summarized and clarified.

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consuming, useful for studying large number of people; as weaknesses it is to point out, the focus on hypothesis testing may lead to miss out occurring phenomena.

[10] **Aspects that should be considered in mixed methodology:** Onwuegbuzie and Leech (2006) identify five general purposes: triangulation (convergence and corroboration), complementarity (elaboration and enhancement), initiation (discovering paradoxes and contradictions), development (crossing information), and expansion (expanding the range of investigation). The mixed method is characterized by having one or more of the components. As for the nature of the research questions, Onwuegbuzie and Leech (2006) for mixed methods, emphasize the need for the mix of the two types of questions, quantitative and qualitative. A good quantitative question, they summarize, should identity both the population and the dependent variables. As for the qualitative questions, by contrast, they are 'open-ended', 'evolving' and 'non-directional'; they tend to describe experiences and obtain insights about 'social processes' and can take the form of sub-questions or generalized questions and take the form or 'what' or 'how' questions. (Onwuegbuzie and Leech, 2006, p. 10).

[11] **The seven stage model:** Onwuegbuzie and Teddlie (2003), define a mixed method framework that researchers follow within seven stages: (1). Data reduction: reduction of the qualitative data. (2) Data display: describing pictorially the qualitative data (charts, graphs, Venn diagrams, etc.) and the quantitative data (tables and graphs). (3) Data transformations: where quantitative data is transformed into narratives that can then be transformed into qualitative data, or qualitative into quantitative numerical data. (4) Data correlation: both kinds of data are 'correlated' and connected between each other. (5) Data consolidation: where both data is combined to form new variables and data sets. (6) Data comparison: comparing both the data. (7) Data integration: end part, where both the quantitative and qualitative data are integrated to form a coherent whole or two separates parts.

[12] **Dynamic research:** Borjesson (2006) also emphasizes the importance of a dynamic research mixed method: '' The most apparent option for the design researcher will be to critically review existing methodologies; to study typified and established qualitative methods of inquiry and quantitative methods of research together with more customised approaches.'' (Borjesson, 2006, p. 21).

1.3.1. THE NON-INTERVENTIONIST METHODS

The non-interventionist methods that were applied are: the grounded theory method (and the analysis as coding), the deconstruction and construction techniques and the case studies analysis. All of which allowed for the phenomenon of significance in the arts to be critically understood and defined.

Firstly, **the sources used to collect data** (literature review) were varied but they can be organized in three types: (1) theories (aesthetics, artistic and architectural), (2) sources that allowed a direct contact from the artists/architect themselves (interviews and their writings), (3) descriptions, theories and third party analysis[13]. Secondly, the **deconstruction method** aims to create a 'theory' without subjective interference (by analysing as many dimensions as possible), by reaching the 'real' meaning of the of the phenomenon being observed. Following Kristina Borjesson's (2006) approach, the deconstruction process for the thesis focused on understanding three perspectives: the physical (the object), the affective (human emotion) and the philosophical (abstract criteria related to the subject) [14], in order to uncover the phenomenon of significance in the artistic phenomenon.

The **constructivist method**, in opposition, allowed for the ''(…) creation of conceptual categories with well-defined properties.'' (Borjesson, 2006, p. 28). Once the phenomenon has been deconstructed, it was possible to identify these categories or principles, in an unbiased and objective way. The **grounded theory method**, (a comparative method that employs both inductive and deductive thinking [15]), was constantly applied (to avoid staying within 'predetermined' theories or existing framework) in order to define the 'core variables' and to arrive at a new theory. Therefore, throughout the thesis multiple coding systems were applied to the analysis being conductued (specifically selective coding and memoings, establishing connections between them) and finally the closures, systematic

[13] About this type of data collection, Joseph F. Wong (2010) explains it '' *(...) is significant because it is a primary source of data that provide first-hand insights on the intentions of architects, the strategies of what they have done, the constraints that they have considered, etc.*'' (Wong, 2010, p. 6). It is important to clarify, as explained by Wong (2010) the difference between 'first-hand experience' or secondary sources, which defines the Data Type B. Data type B, comprises every other source of data collecting that is not directly put forth by the artist, but that is an analysis or explanation from a third party: these entail everything form case study analysis, theory definition, conceptual exploration, etc.

[14] **Deconstruction:** searches '' *(...) for meanings, which are taken for granted (...).''* (Borjesson, 2006, p. 23), in order to arrive at the 'true meaning' of the phenomenon and thus define a theory. On this issue Borjesson (2006) also clarifies, that it is a way by which the true meaning of the phenomenon can arise. Kristina Borjesson (2006) for her thesis research on Timelessness, structured her deconstruction process according to three perspectives: the physical (the object), the affective (human emotion) and the philosophical (abstract criteria related to the subject). These perspectives were then analysed in three dimensions: « *(i) the material - the dimension of sustaining, (ii) the cognitive – the dimension of intellectual understanding and (iii) the cultural – the dimension of relative understanding*.» (Borjesson, 2006, p. 34) She explains the perspectives are continuously applied and analysed throughout the thesis; however, the dimensions, are analysed simultaneously according the field being addressed; for example, aesthetics belongs to both the cognitive and to the cultural dimension, whereas perception belongs exclusively to the cognitive.

[15] **Grounded Theory Method (GTM):** is a comparative method that employs both inductive and deductive thinking (a system that sustains the mixed methodology approach). GTM has as one of its goals, the generation of hypothesis and the development of a theory. The Grounded Theory Institute (2011) clarifies: *'' It is the systematic generation of theory from systematic research. It is a set of rigorous research procedures leading to the emergence of conceptual categories.''* (Simmons, 2011). With it's origin being traced to Barney Glaser and Anselm Strauss (1967), Michele Byrne (2001) explains that GTM's foundations are: '' (…) embedded in symbolic interactionism, which assumes that one's communications and actions express meaning.'' (Byrne, 2001, p. 1). Kristina Borjesson (2006) further clarifies, it is a very specific technique that uses '' (…) rigorous and advanced procedures developed to generate new and substantive theory of social phenomena.'' (Borjesson, 2006, p. 27). Michele Byrne (2001) explains, it is termed 'the constant comparative method', for during the data collection, data is analysed and the researcher searches for a 'core variable' which '' (…) will serve as the foundation for theory generation.'' (Byrne, 2001, p. 1).

closures of themes, ideas and subjects which were defined as synthesis and summaries. It was the coding systems that allowed for the creation of principles and of diagrams[16].

> **Coding processes and Closures:** Rita Almendra (2010) *(see Glossary)* explains that: '' Coding data is a data reduction method that as previously said helps to manage information and to keep focus on the relevant issues that should be scrutinized critically.'' (Almendra, 2010, p. 147). Odis Simmons (2011) *(see Glossary)* explains that various types of coding: first the use of 'substantive coding' where '' (…) substantive codes summarize empirical substance.'' (Simmons, 2011); secondly, 'open coding' where three general questions should be outlined in order to define a 'core variable' that becomes the focus of the study; thirdly, 'selective coding', occurs when core variables and main dimensions and properties have been established; fourthly, 'closed coding', where limiting action is conducted; and lastly 'theoretical coding' that '' (…) conceptualize how the substantive codes may relate to each other as hypotheses to be integrated into the theory.'' (Simmons, 2011). Fourth stage is 'Memoing': '' Memos are the theorizing write-up of ideas about codes and their relationships. Data collection, analysis and memoing are ongoing, and overlap.'' (Simmons, 2011); memoing is the writing stage of what is 'emerging' from the data and the analysis, they are constantly growing and being modified. The fifth stage 'Sorting and Theoretical Outline' where there is a conceptual sorting of the memos into an emergent theory, where the relationships between concepts are clarified. Lastly the sixth stage, 'writing' where the completed outline constitutes the first 'draft' of the theory. In order for a valid synthesised 'Grounded Theory Methodology' the use of 'Closures' are also advisable. Coding can be also done by three stages of analytical activity: 'open coding, axial coding, and selective coding' as identified and explained by Wong (2010); where each stage is a more in-depth system of coding. The first, Open Coding, '' (…) engages the data to 'compose a set of categories and related properties that form the conceptual elements of our in-process theory' (Locke, 2001: 51).'' (Wong, 2010, p. 7). The data in this stage has to be converted into a conceptual level; making a reference to Strauss (1991), Wong clarifies, that '' (…) it is important to categorise them under more abstract explanatory terms both to add analytical power to the process and reduce the number of working units for the re-searcher.'' (Wong, 2010, p. 7). The second stage, Axial Coding, focuses on developing and organizing the conceptual categories generate in stage one: ''These are organised in the form of hierarchical diagrams to highlight the inter-relationship between the various extracted data.'' (Wong, 2010, p. 8). The last stage, Selective Coding, ''(…) the emphasis further shifts onto coding around one or more central categories.'' (Wong, 2010, p. 8). This method of 'Creating Closures' was used by Kristina Borjesson (2006) in her thesis. She explains that the 'creating closures' theme was initially described by Murray (2002); the main closure is on the theme, the second closure is on the order in which theories are presented and elaborated, a third kind of closure to be used is the recurrent summary's and the summarising comments throughout the thesis; and lastly the 'in-text closures' that '' (…) allow a review and an eventual revision of the built up body of knowledge in a steady rolling process.'' (Borjesson, 2006, p. 26).

Two **semi-structured interviews** were conducted ('Annex 8: Interview to contemporary artist José de Guimarães' and 'Annex 9: Interview to contemporary artist Pedro Cabrita Reis'); however after an analysis of the interviews, it became clear that the interview methodology was not the best approach to understand the underlying significance (as well as the creative process and principles). The artists, spoke freely about the subjects, however the core of the matter seemed to always be undefined or unaddressed. Either because it is difficult to describe one's own quest in artistic values and aesthetic appreciation or because the difficulties of language to express artistic values created a gap between what was being said and what was being perceived, the real core or essence that was being searched for, seemed to still remain elusive and non defined. Although the interviews reveal themselves as possessing real qualitative value in

[16] **Diagrams for the arts:** Although using diagrams for design purposes is not new, there are various types of diagrams. For example, making a reference to Kokoyovich's (2008) preference, Joseph F. Wong (2010), explains the Network Structure, as a diagrammatic system that is the most complex of all diagrammatic systems, because it connects multiple issues in one single system: « The non-hierarchical nature of the network structure is the most complex of the concept mapping structure types and therefore 'is the richest in terms of assisting the designer in developing an understanding of the problem space and the dynamic interrelationships among the design issues' (Kokotovich, 2008: 57–58).» (Wong, 2010, p. 9); Both '*inter-level'* and '*Intra-level'* relationships are expressed and linked, as well as other types of relationships between concepts and levels (illustrated by different line weights, arrows, etc.).

understanding the creative state of mind, the answers did not respond to the main driving quest and research question underlying the thesis. As such, the semi-structured interviews became a methodology that lost its primary interest in the research, and other means of understanding the direct creative process and ideals underlying the artists creative energy, were defined as the case studies. A more valuable way to understand the phenomenon seemed to be through the case studies which allowed for the analysis of multiple interviews and descriptions (in multiple stages of life and in different occasions) from the artist/architect in question.

1.3.1.1. THE CASE STUDY METHOD

This being, **the case study method** allowed a much broader and deeper understanding into the complex phenomenon being observed[17]. The selection of the case studies followed both an intuitive and a scientific approach: the aim was to select the most relevant and prominent examples in relation to the overall theme of the thesis or to a specific area/subject/category of the research work; the selection, although intuitive, is also corroborated by critics, theorists, artistic/architectural theory and/or contemporary criticism. In order to achieve the final selection, a series of other artists and architects were considered and then dismissed for others that manifested the overall significance of the work in a clearer way. It is important to accentuate that the research had no desire to restrict the case studies to contemporary creations only. Thereby, selecting two case studies that establish a connection to a more classical means of creation of significance: these are Andrea Palladio , that is an example of the classical type of creation in architecture, and William Turner that was based in a classical approach to creation in painting, and abandoned it (or re-defined it) in order to begin a journey towards abstraction. A small synthesis of the most prominent aspects that influenced the decision process of the case studies selected is presented in the following page.

The case studies were then organized according to their artistic/architectural practises, establishing, as a consequence two main categories: (A) Architecture and (B) Painting and Sculpture. After this selection stage (and during it), an analytical grid was systemized that enumerated the main subjects of analysis; this grid was continuously optimized, as the research progressed (presented in the following page). For each case study an analysis of both textual elements (interviews, project descriptions, critical analysis of the work, exhibition descriptions, etc.) and a more formal analysis (that used direct observation techniques: field notes, photography, etc.) was conducted, following the analytical grid. Once the overall textual elements were produced, the main driving core ideas were synthesized. Lastly, an overall analysis was carried out: comparing and drawing common ideas between all the case studies, discovering patterns and driving themes that relate each of them to the overall research.

[17] **Case Study Method:** According to Yin (2003) the case study research method is preferred when '' (…) (1) the main research questions are 'how' or 'why' questions; (…) (3) the focus of the study is a contemporary (as opposed to entirely historical) phenomenon.'' (Yin, 2013, p. 2). Yin (2013) points out that one of the reasons for such an extensive and wide use of the case study as a methodology in multiple areas is it's ability to deal with 'complex phenomena'; further, the strength of the case study methodology is in its ability to examine a " (…) full variety of evidence – documents, artefacts, interview, and observations. " (Yin, 2013, p. 8). Yin (2003) further defines the case study as:'' (…) an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident...[It also] copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result relies on multiple courses of evidence, with data needing to converge in a triangulating fashion, and as another result benefits from the prior development of theoretical proposition to guide data collection and analysis.'' (Yin, 2013, pp. 13, 14).

One of the methods used for this case study cross analysis was the **Social Network Analysis.** Overall, Social Network Analysis is a methodology that allows for the establishment of specified ties or relationships between entities[18], and applied to the research, allowed for an objective analysis (computer generated) of connections and relationships to occur. This was the main advantage of this method, however it is of value to point out, that one of the disadvantages of the analysis is that it doesn't construct knowledge, it merely creates a 'diagram' of connections (a visual representation of the research). Some of the key aspects used in the analysis of the SNA diagrams generated were: the idea of 'betweenness' (the extent to which a node lies between other nodes in the network), 'Centrality' (how well a node interacts with the overall network) and the concept of 'Degree' (which is the count of the number of ties to other actors in the network).

Case Studies Analytical grid:

1. ***(1) Artistic/Architectural evolution and context:*** *Description of the artists/architect creative evolution and the clarification of the artistic, architectural, historical, philosophical or any other context.*
2. ***(2) Creative process and methodology:*** *A synthesis and analysis of the artists/architect creative process and methodologies that sustain each individual creation and define the artists method.*
3. ***(3) Inspiration and influences:*** *Analysis of the artists/architect inspiration and influences, such as clear values or concepts that sustain the artistic practise.*
4. ***(4) Underlying theories and ideas:*** *Definition of the artists/architects underlying theory and overall ideals within the artistic creation.*
5. ***(5) Methods and Techniques/Specific work analysis:*** *For the architects, the work analysis one specific architectural example (the most relevant, most significant in the architect's life); For the painters and sculptures, the work focuses on multiple examples.*
6. ***(6) Key principles, concepts and values:*** *The definition of key principles, concepts, values and properties that define and sustain the overall work and ideals of the artist in analysis.*

The Architectural Case Studies:

- ***Andrea Palladio (1508 – 1580):*** *universal principles of classical architecture, and the according types of rules of beauty and proportions, La Villa Rotunda being his most representative project.*
- ***Barragán (1902 – 1988):*** *emphasizes on his colour, emotion, symbology, space enclosed gardens and art; The Barragan House is analysed as the project that most clarifies his artistic/architectural views.*
- ***Frank Lloyd Wright (1867 – 1959):*** *connection to nature, to organic architecture and to spirituality; The Falling Water was considered the work that best represents his organic architecture principles.*

[18] **Social Analysis Network:** Carter T. Butts in his article *Social network analysis: A methodological introduction* (2008), summarizes that '' The social network field is an interdisciplinary research programme which seeks to predict the structure of relationships among social entities, as well as the impact of said structure on other social phenomena.'' (Butts, 2008, p. 1). These techniques, although initially applied to sociological data are applicable to multiple fields and subjective data such as the analysis of concepts. The methodology allows psychologists, for example to understand the networks of relationships that sustain a specific event or specific analysis. Overall, '' A social network, as we shall here use the term, consists of a set of 'entities', together with a 'relation' on those entities.'' (Butts, 2008, p. 2) which are represented as graphs: '' A graph is a relational structure consisting of two elements: a set of entities (called vertices or nodes), and a set of entity pairs indicating ties (called edges).'' (Butts, 2008, p. 2). Graphs can then be of different varieties, depending on the type of relationships they represent: they can be dyadic or pairwise relations '' (…) which are intrinsically symmetric (i.e. no distinction can be drawn between the 'sender' and the 'receiver' of the relation) are said to be undirected (or non-directed), (…)." (Butts, 2008, p. 3). By contrast, there are the other types of graphs that represent the 'sender' and the 'receiver', and are relations that are not inherently symmetric. Authors Hanneman and Riddle in their online book *Introduction to Social Network Methods* (2005), point out '' The major difference between conventional and network data is that conventional data focuses on actors and attributes; network data focus on actors and relations.'' (Hanneman and Riddle, 2005, p. 3). Overall, the graphic representation of these relationships are defined by lines (or edges), and the nodes or points represent the 'actors', nodes are the individual actors within the networks, and ties are the relationships between the actors; as such, the resulting graph-based structures are often complex.

- ***Le Corbusier (1887- 1965):*** *use of colour and form (both in painting and in architecture), theoretical views on the synthesis of the arts, studies of proportions, geometries, ideas of creation as a spiritual understanding, and others; La Ronchamp as the space that best summarizes Corbusier's vision and artistic beliefs.*
- ***Tadao Ando (1941 -):*** *focus on the spirituality element infused into his spaces, use of forms and metaphors, the combination of tradition and modernity; the Chapel on the Water and the Chapel of Light, were selected for most better clarifying his vision.*
- ***Peter Zumthor (1943 -):*** *the notion of 'atmosphere' in creations, connection to the site, overall phenomenological understanding, focus on materials and on human perception; The Bruder Chapel is the project that most summarizes his views and ideals.*
- ***John Pawson (1951 -) :*** *minimalist approach, simplicity and light; multiple projects were analysed.*

The Painting and Sculpture Case Studies:

- ***William Turner's (1789 – 1862)****: 'abstraction' qualities, specific use of colour, form, content and values.*
- ***Edward Hopper (1882 – 1967)****: emotionally and mistery charged atmospheres through his use of composition and colour.*
- ***Joseph Albers (1888 -1978)****: use of colour and geometry as a search for archetypal connections through art.*
- ***Mark Rothko (1903 – 1970):*** *use of colour, emotional references and the desire to transform art into an emotive and spiritual force through simplicity and reduction of elements.*
- ***Anselm Kiefer's (1945 -):*** *complex system of art creation as meaning, materiality, symbolic and metaphorical references and the creation of 'atmospheres' as art.*
- ***Donald Judd (1928 – 1994):*** *artistic/architectural expression of meaning through archetypal forms, colours and materials.*
- ***James Turrell (1943 -):*** *conceptual view of art as architecture, blending artistic realms through colour, space and light.*

1.3.1.2. OTHER METHODS

Other methods that were used include: the construction of diagrams and the creation of synthesis and principles (creation of new definitions. Firstly, the construction of **visual synthesis such as diagrams,** that aims to summarize the complex data in a more visual way; these are defined as concluding summary notes. Secondly, the **creation of synthesis and principles** (creation of new definitions), that defines part 7 of the research; this is a constructive approach that defines new definitions and identifies the principles analysed. They aim to create a more synthesised view and understanding of the principles and values being analysed.

1.3. THE STRUCTURE OF THE THESIS

What is the structure of the thesis?

The overall thesis is organized in four parts:

PART I is the ***Presentation of the research*** *and is composed of two chapters:*

- ***CHAPTER 1. INTRODUCTION, HYPOTHESIS, METHODOLOGY AND METHODS:*** *where the field of investigation is outlined, the problem contextualization is defined, the research questions, aims, overall concepts, hypothesis and*

methodologies (in-depth view of the methodologies and methods of the research) are presented and clarified; and lastly, the structure is constructed.

- ***CHAPTER 2. STATE OF THE ART: PROBLEMATIZATION AND CONTEXTUALIZATION:*** *where a contextualization and problematization is outlined, explaining the problematic of which the thesis emerges from and contextualizing the field of study of aesthetics of the thesis. Part one is concluded with an explanatory bridge linking to part two.*

PART II is a ***Theoretical framework*** *on Signification as a complex phenomenon is observed; notions and concepts are clarified and the problematic is presented. The aim in this part is to arrive at a theoretical ground about the different properties and qualifiers that compose and define significance, extracting principles and categories that allow for a clarification and definition of the phenomena. It is composed of three chapters:*

- ***CHAPTER 3: UNDERSTANDING THE ARTISTIC OBJECT AS SIGNIFICANCE****: where the understanding of the artistic object is outlined, defining art and the types of art, understanding the individual arts of architecture, painting and sculpture, and understanding their connections, similarities and differences.*
- ***CHAPTER 4: THE CREATION AND EXPERIENCE OF SIGNIFICANCE:*** *where the requirements for the existence of significance are analysed: how significance is made (creation focusing on the artistic process and the faculties that are necessary) and how it is experienced (experience and the understanding of the aesthetic experience, as well as some particularities that define it).*
- ***CHAPTER 5: SIGNIFICANCE IS EMBODIED, APPREHENDED AND UNDERSTOOD AS….*** *: where the significance as that which defines the aesthetic phenomena is understood in it's multiple essences: as truth, as beauty, as poetry, and others. Part two is concluded with an explanatory bridge linking to part three.*

PART III are the Case studies analysis *and is also defined by three chapters:*

- ***CHAPTER 6: ARCHITECTURAL CASE STUDIES:*** *presenting and analysing the architectural case studies.*
- ***CHAPTER 7: PAINTINGS AND SCULPTURE CASE STUDIES:*** *presenting and analysing the painting and sculpture case studies*
- ***CHAPTER 8: COMPARATIVE ANALYSIS BETWEEN THE CASE STUDIES****: where a cross analysis between the case studies is conducted. Part three is concluded with an explanatory bridge linking to part four.*

PART IV are the Findings *and is composed of one chapter:*

- ***CHAPTER 9: FINDINGS AND CONCLUSIONS:*** *where a comparison between theory and practise was conducted, between part II and part III and a diagram entitled 'diagram of creation' was defined, outlined and explained. Overall, it is where the findings are clarified and summarised into categories and summaries. In this chapter, the contribution towards knowledge is analysed, and also a series of indications for future researches were outlined.*

To accompany the description, by parts and chapters, a diagrammatic scheme has also been devised and is presented in the following page (figure 4).

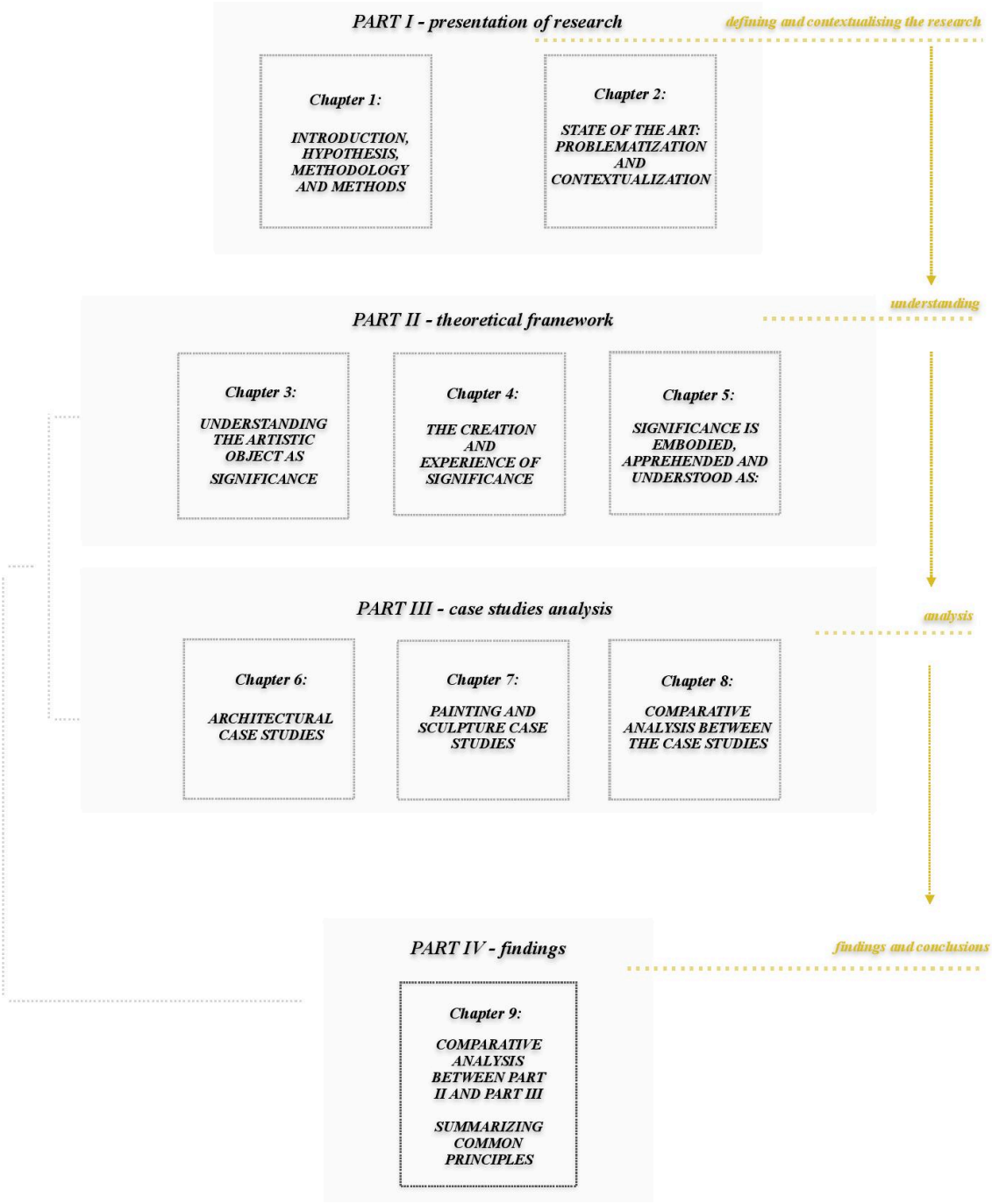


Figure 4: Structure of the Research thesis.

1.4.1. RESEARCH CONCEPTUAL SCHEME

In regards to the structure of the thesis it is also important to designate the conceptual scheme. It clarifies which concepts and ideas are analysed in which part of the thesis, by chapters and presents an overview of the research as concepts. This conceptual scheme is presented in the following page (figure 5).

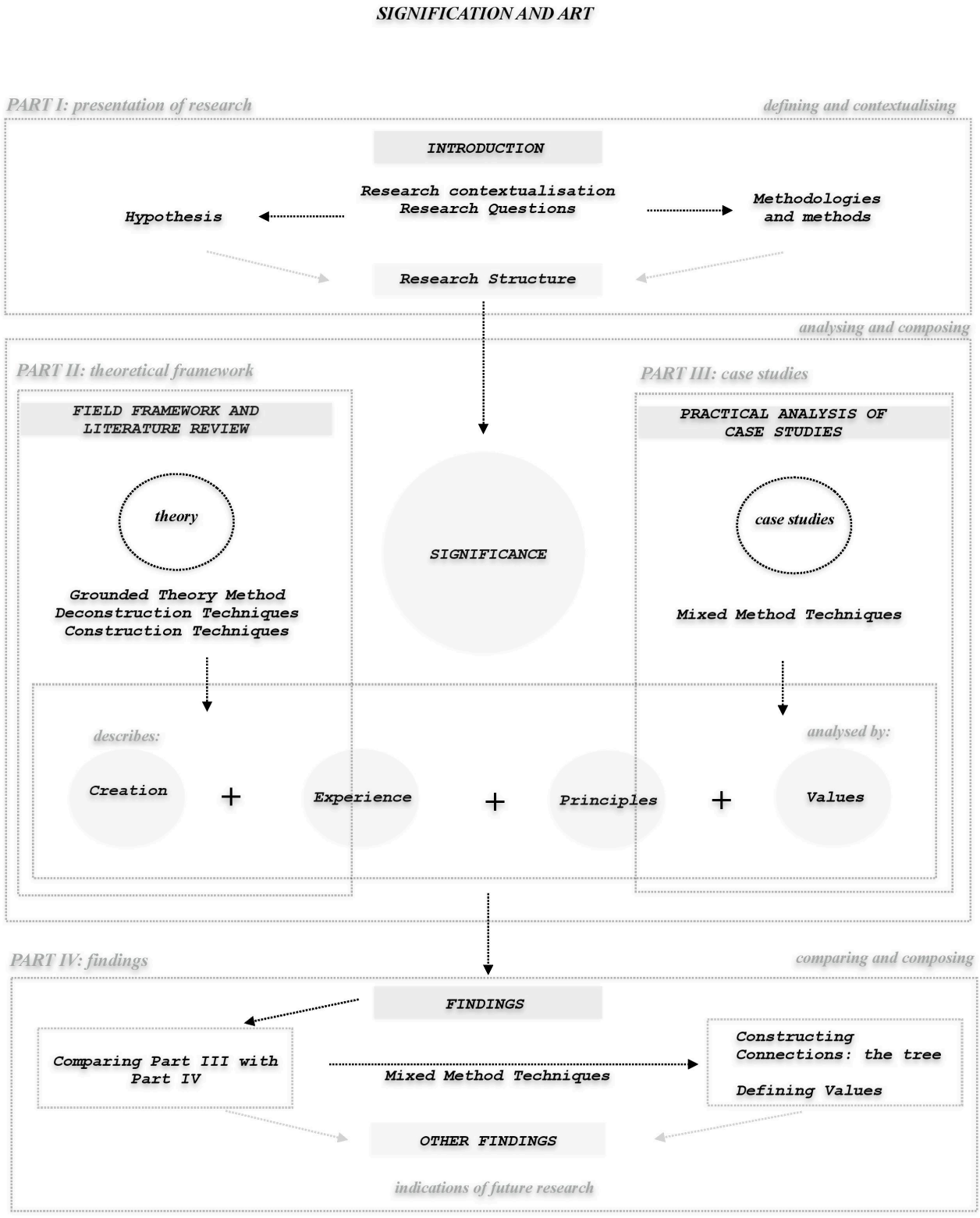


Figure 5: The Research Process



Photo 1:Nancy Holt, Sun Tunnels, 1973; Source: https://pt.pinterest.com/pin/251075747955033993/;

PLATE 5: ART, SIGNIFICANCE AND CONSCIOUSNESS

Summary Chapter 1:

In the present Chapter 1, an introduction of the thesis was outlined, focusing on the different aspects that clarify the overall themes of the thesis. Firstly, the research objectives and the research aims were looked at, as well as the clarification of the opportunity of the study; secondly, the underlying motivation of the thesis was revealed, as being a subject that is intricate and very much a part of the researchers life; in a third phase, the object of study, the field of investigation (art in a broad term, and more specifically the fields of architecture and painting) and also the focus of the research as an exploration of the 'significance' of artistic creations. As a continuation, a clarification of the concepts that entail and surround these core concepts was formulated. This introduction also analysed the hypothesis, and the methodologies used: 'Mixed Method Methodology' mixing both quantitative and qualitative elements and methods; most of those methods are 'non-interventionists: such as the coding of the literature review, the deconstruction and construction techniques, the grounded-theory method and the case studies methodology, which also uses the SNA analysis to derive connections as one of the cross analysis methods used; however the thesis also applied 'Interventionists' methods, like the creation of the visual book, the construction of diagrams, the creation of synthesis and principles (creation of new definitions). To conclude the chapter, a synthesis of the structure of the thesis was presented.

BIBLIOGRAPHIC REFERENCES: Chapter 1

Almendra, R.A. (2010). *Making in the conceptual phase of design processes: a descriptive study contributing for the strategic adequacy an overall quality of design outcomes*. PhD Thesis. Faculty of Architecture of the Technical University of Lisbon. Available at: http://www.repository.utl.pt/handle/10400.5/3320 [Accessed 19 Oct. 2013].

Borjesson, K.I.B. (2006). *The affective sustainability of objects : a search for causal connections : studies of theory, processes and practice related to timelessness as a phenomenon*. PhD Thesis. University of the Arts London. Available at: http://ualresearchonline.arts.ac.uk/5219/ [Accessed 20 Dec. 2013].

Butts, C.T. (2008). Social network analysis: A methodological introduction. *Asian Journal of Social Psychology* 11, pp. 13 – 41. doi:10.1111/j.1467-839X.2007.00241.x. Available at: http://courses.washington.edu/ir2010/readings/butts.pdf [Accessed 20 Nov. 2015].

Byrne, M. (2001). Grounded theory as a qualitative research methodology. AORN Journal, 73, pp. 1155–1156. doi:10.1016/S0001-2092(06)61841-3. Available at: http://www.sciencedirect.com/science/article/pii/S0001209206618413 [Accessed 7 Jan. 2014].

Clément, E., Demonque, C., Hansen-Love, L., Kahn, P. (1994). *Dicionário Prático de Filosofia*. Lisbon: Terramar.

Consciousness (2014). *Wikipedia, the free encyclopedi*a. Available at: http://en.wikipedia.org/w/index.php?title=Consciousness&oldid=610534760 [Accessed 31 May 2014].

Damásio, A. (2013). *O sentimento de si: Corpo, emoção e consciência*. Lisbon: Temas e Debates Circulo dos Leitores.

Grey, A. (2013). *Cosmic creativity: how art evolves consciousness*. Video recording, TED talks. Maui, Hawai. Available at: http://www.youtube.com/watch?v=0_YJToyOp_4&feature=youtube_gdata_player [Accessed 06 Jun. 2014].

Hanneman, R.A., Riddle, M. (2005). *Introduction to Social Network Methods*. Riverside, California: University of California. Available at: http://www.analytictech.com/networks.pdf [Accessed 20 Nov. 2015].

Meaning (2013). In: *Merriam Webster* [online]. Springfield: Merriam-Webster, Inc. Available at: http://www.merriam-webster.com/dictionary/meaning [Accessed 27 Dec. 2013].

Middleton, R. (1982). *The Beaux-Arts and Nineteenth-Century French Architecture*. Cambridge, Mass.: The MIT Press.

Mora, J.F. (1991). *Dicionário de Filosofia*. Lisbon: Publicações Don Quixote.

Onwuegbuzie, A.J., Leech, N.L. (2006). Linking Research Questions to Mixed Methods Data Analysis Procedures. *The Qualitative Report*, 11 (3), pp. 474 - 498. Available at: http://www.nova.edu/ssss/QR/QR11-3/onwuegbuzie.pdf [Accessed 15 Jan. 2014].

Qualitative research (2013). *Wikipedia, the free encyclopedi*a. Available at: http://en.wikipedia.org/w/index.php?title=Qualitative_research&oldid=585593100 [Accessed 15 May 2014].

Quantitative research, 2013. *Wikipedia, the free encyclopedi*a. Available at: http://en.wikipedia.org/w/index.php?title=Quantitative_research&oldid=586706846 [Accessed 15 May 2014].

Ricoeur, P. (2003). *The Rule of Metaphor: The Creation of Meaning in Language*. London and New York: Routledge.

Ruskin, J. (1903). *The Seven Lamps of Architecture*, in: *The Works of John Ruskin*. London and New York: Longman, Greene and Co.

Scruton, R. (1979). *The Aesthetics of Architecture*. Princeton, New Jersey: Princeton University Press.

Signification (2013). In: *Merriam Webster* [online]. Springfield: Merriam-Webster, Inc. Available at: http://www.merriam-webster.com/dictionary/signification?ref=office [Accessed 27 Dec. 2013].

Simmons, O.E. (2011). *The Grounded Theory Methodology of Barney G. Glaser* [online]. Grounded Theory Institute. Available at: http://www.groundedtheory.com/what-is-gt.aspx [Accessed 1 July 2014].

Wong, J.F. (2010). The text of free-form architecture: qualitative study of the discourse of four architects. *Design Studies,* 31 (3), pp. 237–267. doi:10.1016/j.destud.2009.11.002. Available at: http://www.sciencedirect.com/science/article/pii/S0142694X09000945 [Accessed 23 Dec. 2013].

Yin, R.K. (2013). *Case Study Research: Design and Methods*. Los Angeles: SAGE Publications.

Zumthor, P. (2006). *Thinking architecture.* Basel, Swizterland: Birkhäuser.

CHAPTER 2

STATE OF THE ART: PROBLEMATIZATION AND CONTEXTUALIZATION

Introduction

The contextualization and overall problem clarification for the present research thesis can be understood in a two part way: firstly ***the lack of understanding of what art is*** *in it's multiple fields of creation such as painting, architecture and sculpture (the arts being observed in the present research, which as we have seen, derived it's union from the Beaux-Arts system) but also in other arts (music, dance, design, and others), it's role and value for society and for the overall well being of humanity; secondly****, the general lack of significance in life and in the arts*** *(which can also be understood as the overall desire to always achieve better and greater ways of living and in defining creations). Following is a clarification of both these 'problems' that define our culture, and that in a certain way have always defined the history of art and architecture, for man is always striving to achieve better and greater things, and also, an analysis on why they are emerging even more in the contemporary world.*

2.1. THE PROBLEMATIZATION

What is the issue? What is the problem?

The research problem arises from the lack of clarity relating the work of art: firstly the lack of understanding of what it means for a work of art (be it in painting, in a sculpture, or in the physical spaces of architecture) to be significant, secondly, the overall definition of those significant tools for both observation purposes and for creation principles. This overall question can be understood as being derived from various problems that result from contemporary life. On the one hand one has the creation of works that are devoid of significance, and that are not works of art, that flood our existence in all spheres of life, and on the other (maybe as a result of the first) one has a lack of definition and understanding of what art is and what it is really supposed to do. Both these facts will be analysed in the following sub-chapter.

2.1.1. THE LACK OF DEFINITION OF ART AND THE ABSENCE OF SIGNIFICANCE

In the first place, it is important to clarify that the lack of definition of art is a problem that is general to all cultures and to all civilizations, across time, because it is part of our evolution as human beings. It has possessed different meanings since it's creation and continues to evolve constantly even in our time. As humans, we evolve and change, and therefore our art also evolves and changes in order to better define our needs and aspirations. Defining art, understanding what it is and how it should be created has occupied great thinkers (philosophers, artists, architects, and even poets) throughout time, in most cultures and civilizations; thus this constant new re-definition of what art is, is deeply rooted in humanity's evolution and in man's own evolution as a complex multi-faceted and multi-dimensional human being.

On the lack of understanding of what art is in the contemporary world, two philosophers elaborate and explain. Authors Alain de Botton (2013) and Louis Armstrong (2013) *(see Glossary)* in their book '*Art as Therapy'* explain that although Art, in the modern world, has a very elevated regard and is understood as something very important and ''(…) close to the meaning of life.'' (De Botton and Armstrong, 2013, p. 4) (This elevated regard of the arts is evident by the opening of museums, academic emphasis, government resources, and by the overall desire to protect art), is characterized by a confusion in regards to what art actually is. There is, the authors continue, derived from this lack of understanding of what art is[19], a further lack of clarity on the 'value' and 'meaning' of art itself and on how our 'encounters' with the works of art should emerge. As such, although there is the overall understanding that art is indeed meaningful, the real issues of 'why' and 'how', remain hidden and misunderstood.

But what are the reasons for this?

[19] Reference to: '' Since the beginning of the twentieth century, our relationship with art has been weakened by a profound institutional reluctance to address the question of what art is.'' (De Botton and Armstrong, 2013, p. 4).

This overall lack of understanding of what art is, in the contemporary world, has taken on a new layer of existence, never before has the world seen such a large of number of productions in all spheres of life, which goes hand in hand with consumerisms and the idea of mass production, and leads to the overall loss of values and to the overall lack of significance in creations. This flooding of products has merged with the spheres of art, using art's values and principles and therefore leaving the viewer confused on the significance of each of those spheres of creation: publicity uses beauty, construction uses novelty, design uses geometry and low art forms use high art forms ideas. But besides this fact, it is also of reference the fact that objects of art are copied, reproduced and used as market values, decontextualizing the work of art, and making the real artistic object be devalued. Another main idea that has led to this new lack of understanding of what art is, is the fact that contemporary art has stretched the realms of artistic fields, in what was a search for new values and new significances, however, this expansion into new ideas, new values and new goals, has left the observer confused about what in fact defines art and what doesn't.

Our contemporary world…

Before understanding the second problem, the overall lack of significance in life and in art, we need to understand our contemporary life and world a little better (meaning, understanding the circumstances and ideas of the present age). Post modern world was characterized by Gilles Lipovetsky (1989) *(see Glossary)* as a world devoid of values, filled with numbness, apathy and a general loss of faith (Lipovetsky, 1989). Although this still holds true to our contemporary world, simultaneously, there is an on-going search for values that emerged partly from that disinterestedness that accompanies the expansions and advances being done mainly by the technological and scientific fields. It is a world where everything seems to be possible: filled with consumption, marketing, publicity, economic values, advances in design, fashion, and of course architecture and the other arts. New materials emerge, new textures, colours, new ideas of forms and shapes, new structural capabilities and new programs that need to be satisfied. Architecture and the other arts have responded to this exponential boom of creation with novelty, tying to incorporate those new dimensions into creation. However, this rapid process of adaptation has led to the second problem which can be identified as the overall lack of significance in creations.

The absence of significance…

Owing to these facts, it is possible to understand that the absence of meaning, sense and overall significance is predominant in the current era in all fields of creation, in the contemporary world of architecture, painting and sculpture. There are exceptions, however, overall this is what defines most of the contemporary creations and characterizes the abundance of creations that flood our world everyday. However, it is important to note, that this idea that creations lack significance, just like the search for what art is, can also be found across time and cultures, and can also be considered as part of a condition of evolution, so, we will analyse the lack of signification in the contemporary world, and how it is described and understood.

Various authors such as Rudolf Arnheim (1966), Kandinsky (1997) and Eliel Saarinen (1948), *(see Glossary)* associate the lack of significance in artistic creations with the lack of culture, with an

insignificant type of life and absence of personal development. Rudolf Arnheim (1966) for example, claims that our age is characterized by an 'insignificant type of living'[20] that has permeated the realms of the artistic world too. For Eliel Saarinen (1948), in his book 'The Search for Form in Art and Architecture', in the same way, 'quality of art' means 'quality of culture', so the loss of artistic impulse and creativity, the absence of significance and meaning, echoes the corresponding cultural condition, an epoch that has lost the 'stamina' essential for its own existence[21]. For Kandinsky (1997), in the same way, he pointed out: ''Art has lost her soul.'' (Kandinsky, 1977, p. 8) as a result of an absence of a significant type of living. Lack of signification in creations, for Kandinsky, are a reflexion of the creators themselves that are characterized by materialism, unbelief, lack of purpose, ideals and constant doubt, that, driven away from spiritual and higher purposes create art that cater to lower needs and to material ends. This type of non-signification, for Kandinsky (1977) was described in his book '*Concerning the Spiritual in Art'*, it relies on revivals and imitations, seeks in 'reality' instead of aspiring for nobler principles and issues, relies on 'method' alone and in driven by artists that seek for notoriety and focus on material issues. In this manner: '' Art ministers to lower need, and is used for material ends.'' (Kandinsky, 1977, p. 8). It is an art that is a 'child of its age', is 'still-born' (dead art) and is a 'barren art' (that has no power in the future, is 'transitory' and as such is very short lived) and as consequence '' Art has lost her soul.'' (Kandinsky, 1977, p. 8) [22].

The problematic here defined is a transversal problem; rooted within culture, it is part of the various spheres that define human existence. Kandinsky, goes even further and talks about the loss of the 'spiritual', of the 'spirit' and of 'life' in all of the artistic creations of his time; this 'dead art' he is describing is materialistic and detached from spirituality: it is a product of man that does not seek higher development, but that caters for the today.

Lack of significance in contemporary creations: painting, sculpture and architecture…

Various authors define the overall lack of significance as different ideas, such as Saarinen (1948), Pallasmaa (2010), Handa (1999), Freeland (2002), Steiner (1992) and Arnheim (1977) *(see Glossary)*. For these authors, the lack of significance in contemporary creation is driven by different specific things, however, they do not annul the above understanding (lack of cultural and spiritual development), but instead define more specific ways in which that lack of cultural and spiritual development is materialized.

[20] Reference to: '' I am convinced that André Gide is not objecting here to abstract art but to what I earlier called 'insignificant living'. '' (Arnheim, 1966, p. 14)

[21] Reference to: '' In other words, quality of art is the infallible barometer of quality of culture. Consequently then, if art has lost its creative vitality and has declined into doctrinal sterility, this only shows that the corresponding cultural epoch has become tired, indolent, and lacking in that stamina which is so essential for its existence.'' (Saarinen, 1948, p. 96)

[22] Thus, he further explains, the darkness '' (…) divided our souls sharply from that of the primitives.'' (Kandinsky, 1977, p. 2) He further explains this condition by claiming that '' art for art's sake'' (Kandinsky, 1977, p. 3) is a condition of vulgarity and of constant neglect of the 'inner meaning'; thus, this kind of non-signification in art, he explains, is just a vain use of artistic power, that leads ''hungry souls, to go hungry away.'' (Kandinsky, 1977, p. 3).

BLINDNESS



CONDUSION





VISUAL CHAOS



ISOLATION

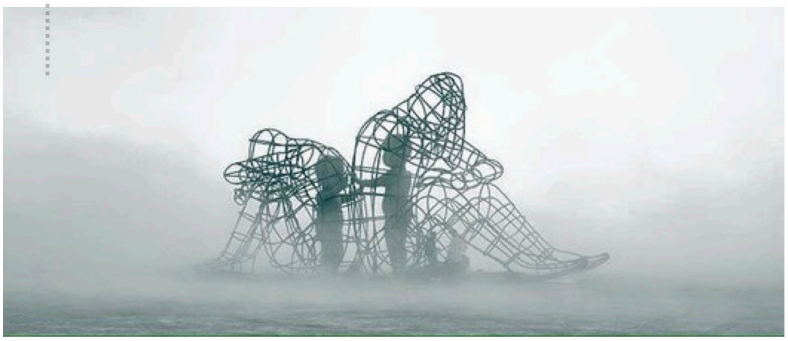


Photo 1: The Society of the spectacle; Source: http://unit607.com/Society-of-the-Spectacle;; Photo 2: Media World; Source:http://bookpublicityservices.com/pitching-book-media-who-what-where-when-how/; Photo 3: Situationisits poster; Source: http://lfeffortposts.wordpress.com/2011/02/18/situationist/; Photo 4: New York City; Source:http://www.travelandtourworld.com/news/article/new-york-goes-live-instagram-enhance-reach-publicity/; Photo 5; Love sculpture, by Ukrainian artist Alexandre Milov, 2015; Source:http://theawesomedaily.com/glowing-figures-of-children-confined-within-the-large-wire-frame-sculpture-of-adult-bodies/

PLATE 6: THE PROFUSION OF THE IMAGE, THE SOCIETY OF THE SPECTACLE AND THE PROBLEMATIC OF THE NON-SIGNIFICATION

Eliel Saarinen (1948) identifies three main categories that create a 'soulless and superficial' form or that define types of non-signification: '' (…) ''superficially decorative'', ''realistically imitative'' or ''druly practical''.'' (Saarinen, 1948, p. 11). The first, the ''superficially decorative'' category is identified as a miscellaneous of styles accumulated from an abundance of previous epochs; it is defined by revivals or from other types of form adoptions and can also be connected to ornament, which defined the problem of style in Architecture. Saarinen defines it as an '' (…) empty, vapid and sterile encrustation of superficial decoration.'' (Saarinen, 1948, p. 12). The 'realistically imitative' refers to cases where the creation re-creates an idea of something that already exists '' (…) without infusing creative quality – creative essence – into the product.'' (Saarinen, 1948, pp. 12, 13). Lastly, the 'druly practical', where there is not a 'sincere' search for form; explaining that, for example, the: ''(…) quality of function must not mean practical function only. It must also mean spiritual function.'' (Saarinen, 1948, p. 14). Saarinen (1948) further explains that these three types must be dismissed in order for a progress in all artistic fields of culture, for they are what prevents real artistic creations (endowed with signification) to emerge.

For Pallasmaa (2010) the architectural and painting creations that resulted from the modern movement time, characterized by a geometric abstraction and immaterial and a-temporal forms of expression, echoe a 'moral' whiteness (being strictly formal and conceptual) and neglecting the emotional fields. With its preference for a reduced aesthetics and simplistic abstractions they reflect a loss of the 'material' presence and an overall lack of an 'embodied' significance. Pallasmaa (2010) analyses a stylistic and formal perspective; although it was not always the case, such as the architecture of Alvar Aalto (see Glossary) it is a perspective that raises interesting points.

Rumiko Handa (1999), identifies as part of contemporary art and architecture lack of significance, the idea of 'fake authenticity' which in her opinion is transversal to all creations of the contemporary world. For Handa (1999), both art and architecture use vocabulary, methods, forms and systems that are not derived from an intrinsic means of creation, but that are 'borrowed' or 'copied' from other creations; art, design objects and architecture make use of compositional elements, materials and shapes that are not derived from its own intrinsic meaning; thereby promoting a false sense of authenticity that creates a sense of 'falseness', of lack of content and is overall of any type of significance. Handa (1999) is echoing the same ideas pointed out by Saarinen (1948) above.

For author Cynthia Freeland (2002), (that mirrors Handa's idea of fake authenticity) the problem with contemporary art and architecture is that it uses symbols out of its context, defining an art devoid of significance. For example, the use of blood, out of context, does not create the same symbolic value and the audience is not involved in the ritual, and so '' (…) lacks the background reinforcement of pervasive community belief that provides meaning in terms of catharsis, sacrifice, or initiation.'' (Freeland, 2002, p. 4). The result of these misapplied symbols, derived from previous art forms, is a promotion of entertainment and profit rather than aesthetic associations through symbolic values. As such, these types of art enter the public sphere '' (…) without the context of either well-understood ritual significance or artistic redemption through beauty.'' (Freeland, 2002, p. 7); they do not possess significance and do not generate an adequate aesthetic experience.

For Steiner (1992) what defines non-signification in the arts, what leads to a kind of 'dead art', is

the fact that art is connected to scientific concepts that leads to allegories and formals symbolisms[23] and is associated with reproduction and understanding, a type of understanding that can never produce art. The author concludes: '' Art will arise anew when man learns how to enter into elemental life with its innermost soul.'' (Steiner, 1992, p.74).

And lastly, Rudolf Arnheim (1977) in the introduction to his book 'Art and visual perception' explains that although art may seem to be in danger of being drowned by talk, and we are tempted to assume that art is unsure in our time because we talk too much about it, such a diagnosis is superficial. However, the state of affairs in regards to art, is indeed unsatisfactory to almost everyone. This is a result, of our cultural situation, and of an encouragement to think about art in a wrong kind of way: we neglect what our senses tell us, the ideas are common but not deep, concept is split from percept, thought moves in the fields of abstraction, and lastly: '' Our eyes are being reduced to instruments by which to measure and identify – hence a dearth of ideas that can be expressed in images and an incapacity to discover meaning in what we see. '' (Arnheim, 1964, p. v). This leads to search for meaning in ways and means that are not correct. There has to be an understanding of the artistic object as a whole, as an integrated structure.

… in architecture:

Specifically in regards to Architecture, multiple authors also explain architectural non-signification in the contemporary world. Authors like Alain De Botton (2008), Perez-Gomes (1994), Juhanni Pallasmaa and Peter Zumthor (2006) *(see glossary),* all agree that most architecture is indeed insignificant, and 'meaningless' however they accentuate different aspects as to why it is so.

For Alain De Botton (2008) it is the focus on symbols and languages that distances architecture from it's real significance; he explains that symbols and languages (such as those defined by the Modern Movement , using the Villa Savoye, by Le Corbusier as an example[24]), doesn't define significance, they merely creates codes within a language. What De Botton (2008) is referring to is when architecture creates a visual language for it's own sake, devoid of an intrinsic logic that generates it, and thereby, being devoid of significance. It is the same problem pointed out by both Handa (1999) and Saarinen (1948) above: a lack of authenticity.

For Perez-Gomes (1994), architecture's insignificance is partly because it has lost its cosmological reference[25]; and thus, he emphasizes the urgent need for a shift and redefinition of architecture, towards a 'cosmological' one, containing innate qualities and values. Pérez-Gómez (2008) also sustains, in his book *Built upon Love*, that '' (…) materialistic and technological alternatives for architecture (…) do not answer satisfactorily to the complex desire that defines humanity.'' (Pérez-Gómez, 2008, p. 4)**;** he claims that computer generated architecture is unable to respond to cultural needs

[23] Steiner claims: '' Art will never arise out of scientific concepts nor out of abstract theosophical concepts, at least nothing but empty allegory and formal symbolism.'' (Steiner, 1992, p.67).

[24] He claims: ''They wanted their houses to speak of the future, with its promise of speed and technology, democracy and science.'' (De Botton, 2008, p. 62). For this they used exclusively 'industrial' language; from the environment of Villa Savoye, it is possible to define a series of principles which are not taken into consideration: the absence of any decoration, the renouncement of colour, the lack of natural materials, restricted use of furniture, no art work of any kind and no pieces of design. It is also of reference: the exclusive presence of right angles, artificial non decorative light (always suspended from above), flat non-decorative and white surfaces only and a language drawn from industrial mechanics.

[25] According to him, we live in the cultural epoch defined by Heidegger as '' (…) too late for the gods, too early for Being…'' (Holl et al., 1994, p. 11) . He qualifies as significant the work of Leque, Gaudi, Le Corbusier, Lewerentz, and Aalto.

and development. Overall, the problem of the lack of significance, is defined as a lack of embodiment of beauty within architecture, creating a remote spectator and a lack of understanding of erotic space.

For both authors above, architecture's lack of significance is derived firstly from a lack of authenticity (that leads to using 'copied' systems, technological alternatives and new materials in order to create 'interest' and 'novelty'), and secondly, from the fact that there has been a loss of cosmological references and overall understanding of 'erotic space' (explained further in the chapters that follow). Significance and meaning of architecture, thus, we can so far understand is linked, in a large way, to tradition, to authenticity and to an overall understanding of the construction techniques and materials that should be understood as something inherent to the architectural process rather than something applied or used from other references.

For Juhanni Pallasmaa (refering to author Ehrenzwieg[26]), it is the absence of a connection to the 'unconscious' that creates an 'intellectualized' work, a simple 'visual decoration', and the image becomes 'flat', devoid of significance and life. The significance in art, continues Pallasmaa, involves a connection with the 'living world' and a sense of 'integrity'. As an example of this, Pallasmaa uses the High Tech Architecture, or the Minimalism Architecture that can easily fall into a 'forced superficial image', devoid of life. Another problem identified by Pallasmaa (1996) that contributes to non signification in architecture is the fact that it is devoid of plasticity and is '' (…) visually and conceptually dominated.'' (Pallasmaa, 1996, p. 16); he explains that whereas traditional architecture is more connected to the wisdom of the body, and a harmony between all the senses, in contemporary life, only one or two of the senses are emphasized, leaving the others to be neglected (modernity accentuates vision as the only sense of importance). This creates a sense of isolation, detachment and an inability to be 'centred in the world' and in the self, which is also a reflection of the loss of an interior world.

Mark Foster Gage (2011) also claims that architecture is loosing value and it's significance. He continues: '' Architecture and design can no longer be culturally relevant in a world defined only by bottom-line efficiencies, simplistic natural metaphors, or strict adherence to performance guidelines, sustainable or otherwise.'' (Gage, 2011, p. 18). This creates a system where architecture is judged not by what it is, but by what it can do or what it can refer to. This lack of substance and value is the result, the author claims, of '' (…) having surrendered the willingness to engage in aesthetic discussions'' (Gage, 2011, p. 18). Gage (2011) is pointing out, not that architecture shouldn't also contain usefulness (it's usefulness is part of it's condition) but that the works of architecture shouldn't be judge on usefulness alone; architecture shouldn't also be understood by it's 'sustainable' performances or by 'simple metaphors'. Architecture's significance is much more than that, because architecture has a complex nature at its core; and the fact that the contemporary world focuses on those aspects alone, has conducted to a loss of value and significance of architecture in general.

For Norberg-Schulz (1985) the lack of significance in architecture is derived from a loss of architectural language. He explains that the loss of the built form and the spatial figure in the contemporary world '' (…) is not a result of a weakened understanding of the nature of form and space but first of all of the abolishment of the language of architecture.'' (Norberg-Schulz, 1985, p. 133). This

[26] Pallasmaa is citing and referencing Anton Ehrenzweig from his book *The hidden order of art*, University of California Press, p.129. (Ehrenzweig, 1971).

loss of architectural language originates from the general tendency towards abstraction, which deeply characterizes our epoch: a reduction of reality to what is measurable and a transformation of a concrete place into an abstract space. The faculty of imagination has been killed, he continues, and with it the ability to understand the world in terms of figures and images. As a result, he adds, '' (…) the daily life world fades away, and man becomes a foreigner among things.'' (Norberg-Schulz, 1985, p. 133). Lastly, for Peter Zumthor (2006) insignificant architecture is devoid of a capacity to create a 'real' connection with the viewer; when this doesn't occur: '' (…) our curiosity dies, and all that is left is the question of the building's practical usefulness.'' (Zumthor, 2006, p. 12). Zumthor (2006) is appealing for a kind of 'art' that is not related to 'media', to 'standing for something else' or to 'portraying something', but instead is appealing for a return to the 'real' and 'substantial' things. He is appealing to something beyond popular culture (that diminishes the senses and enhances visual entertainment); he is appealing to a return to what is true and real, deeply rooted in who we are as human beings.

This is also echoed by Norberg-Schulz (1985) when he claims that in order to find and regain architectural significance there needs to be a 'return to the real'; he claims that Husserl emphasized the need to return to 'the things themselves', a return to what is concrete; this aim was also echoed by Heidegger, Merleau-Ponty, Bachelard and Bollnow. Besides this return to the real, Norberg-Schulz (1985) also emphasizes the development of our poetical understanding of things, an understanding of our being-in-the-world and an understanding of the world in terms of qualities rather than quantities; phenomenology is one of the main tools that grants man this type of understanding. However: '' (…) we can only rescue the things if we first have taken them into our hearts. When that happens, we dwell, in the true sense of the word.'' (Norberg-Schulz, 1985, p. 135).

> *'' Consumption and possession prevail as the bastard aims of desire. (...) We forget that love and death, pleasure and pain are inextricably linked through our embodied consciousness. We go further and tend to deny the very existence of love (as technology might wish to deny the existence of death).''* (Pérez-Gómez, 2008, p. 5)

Synthesis: *Various authors define the overall lack of significance as different ideas, such as Saarinen (1948) who proposed a lack of infused creativity, Pallasmaa (2010), who sustained a lack of emotional content, Handa (1999) that sustains the problem as 'fake authenticity', Freeland (2002) for whom non-signification is the lack of truth, and Steiner (1992) who claims productions are associated with reproduction and understanding as the lack of connections to the soul. In architecture the same is found: the lack of significance is echoed by authors Alain De Botton (2008), Perez-Gomes (1994), Juhanni Pallasmaa and Peter Zumthor (2006) who all agree that most architecture is indeed insignificant, and 'meaningless' and is devoid of a capacity to create a 'real' connection with the viewer; it is lacking, love, cosmology, life, values and truth.*

2.1.2. DERIVED FROM CONTEMPORARY CULTURE

But where does it come from?

As we previously saw, humanity has witnessed the contemporary world change at a very fast pace, and with those changes, came the need to adapt to new circumstances. However, at this point, it is important to identify exactly what problems and phenomena's that characterize our contemporary society can be understood as the cause for both the lack of understanding of what art is and the lack of meaning in the world. In other words, what occurs from contemporary culture that creates a lack of significance? The answer to this question will be thus summarized.

(1) The detachment and fragmentation of the 'human being':

According to Juhanni Pallasma (1996) it is derived from the predominance of visual imagery that isolates the sense of sight, forsakes the other senses, isolates emotional involvement and identification, and generates a lack of participation, '' (…) reinforcing a sense of detachment and alienation.'' (Pallasmaa, 1996, p. 26). The imagery world not only separates and isolates the being but also detaches him from spatial experiences. The problem comes precisely from the isolation of the only sense of sight, and thus treating it as the ultimate entity, forsaking the other senses. The suppression of the other senses, a result of the world of the visual image, leads to the observer that's detached from a corporeal relation with the object and the environment. Images are flat and turn the viewer into a spectator instead of living it from the inside, instead of being rooted in plastic and spatial experience, with the detachment, they leave little power over time; even if in the future images become three dimensional, the aspect of tactility and spatial experience might still be absent (along with significance). He says: '' The gradually growing hegemony of the eye seems to be parallel with the development of Western ego-consciousness and the increasing separation of the self from the world.'' (Pallasmaa, 1996, p. 15).

(2) The constant search for the 'novelty factor' and 'worlds of fictions'

This constant search for the novelty factor is materialized in multiple ways, in the multiple artistic fields: by 'dramatic' forms, by materials, technological endeavours or even 'shocking' themes or elements), in order to allure and appeal, seduce or repel; it is connected to the main stream media that dominates all spheres of 'existence' in the contemporary world, generating 'money' based production. Pallasmaa (2011) also emphasizes that today architecture and its 'excessive' instantaneous imagery seem to **create a 'world of fictions'** (detached from the 'real' world) that is autonomous and neglects altogether the foundation of architecture itself as well as its existential roots. This is a 'commercial architecture'. He explains, that by creating an architecture that is devoid of a 'real sense of life', without gravity and without materiality, without 'tact and compassion'; as a result of this, the existential qualities remain unaddressed. Architecture, explains Pallasmaa, has followed the 'trend' of creating fictional spaces, instead of strengthening our own experience of the real through experience and perception. On this, he

further explains, that architecture's role should be to '' (…) defend the authenticity and the autonomy of the human experience.'' (Pallasmaa, 2011, p. 23)[27].

(3) The *mass media* culture and the profusion of the image.

Authors Dillon (1999) and Juhanni Pallasmaa (2011) *(see Glossary)* accentuate these two criteria as the main causes for the lack of signification and absence of aesthetic understanding (that should be an immersive experience connected to all human beings). According to Dillon (1999), one of the is the abundance of 'styles' and profusion of the 'image' in virtual environments, propelled by the and 'mass media' that seize and use codes and signs (that are significant in historical contexts) in order to implement certain messages and specific content in their 'announcements' and communicational systems. Juhanni Pallasmaa in *The Embodied Image* (2011) also emphasizes the mass media culture: the mass production, globalization and accelerated communication makes the human being be constantly bombarded by 'visual images' that make his existence numb at various levels. The profusion of the image conducts to a sensation of oppression of excess. Through *mass media*, mass consumption and mass culture there is a control of masses. He further explains, that this is what Italo Calvino refers to as the ''infinite rain of images'', Richard Kearny as '' image addiction'' and Roland Barthes summarizes it as '' civilization of the image''[28] *(see Glossary)*. This 'Hegemony of the Image', where the image is manipulated and used *'ad infinitum'* for entertainment, information, education, commercial uses, political, etc. has created an 'industry of the image', has led to an experience of the world that is fragmented and characterized by its discontinuity, where the images communicate by their instantaneous impact and without effort implied from the reader.

(4) The abundance and proliferation of languages, schools of thought, and ideals.

The abundance and proliferation of languages, schools of thought, and ideals which is prevailing in today's world and the abundance of the technological world that allows for infinite possibilities (structure, materials, colours, etc.) to be taken into account derived from the above idea (3), where the multiple authors announce the 'Hegemony of the Image'.

(5) The loss of criteria for excellence.

This loss of criteria for excellence is sustained by Elizabeth Trott (2002), when she explains that the problematic of 'non-signification' or the absence of meaning, is derived from a loss of criteria for quality and excellence. This loss of critical language, includes also a 'fading' of the aesthetic compositional vocabulary too.[29] Thus, she further explains the problematic, explaining that without a shared language, there is nothing to grasp the critical understanding: '' The challenge to create meaning without recognised symbols, classical forms, and the architectural language that the public could read is considerable. (…) But with no common language, the critics, and the public (…) have only their intuitions

[27] Translation from: '' (...) o dever da arquitetura responsável é defender a autenticidade e a autonomia da experiencia humana. Em um mundo de simulacros, simulação e virtualidade, a tarefa ética dos arquitetos é providenciar a pedra de toque do real.'' (Pallasmaa, 2011, p. 23)

[28] Reference to: '' Italo Calvino calls this experimental condition the ''infinite rain of images'', while Richard Kearny uses the term '' image addiction''. For Roland Barthes, the whole culture of post-industrial mass media and postmodern civilization is the '' civilization of the image".'' (Pallasmaa, 2011, p. 10)

[29] Reference to: '' The loss of critical language forms for expressing meaning includes a fading of the aesthetic vocabulary as well.'' (Trott, 2002, p. 10)

to help them grasp whether the above conceptual oppositions have been successfully wedded in architectural art. ‘’ (Trott, 2002, p. 8). This problem, pointed out by Trott (2002), can be understood as a problem derived from the differences between high culture, popular culture and the *mass media* culture, that have somehow, in the contemporary world been blurred together.

(6) The disappearance of the Imagination.

Pallasmaa (2011) emphasizes this as a direct consequence of the ‘fragmentary information’, ‘short-attention spam’, enhanced speed of communication and overall simplification of the world. Imagination, as an autonomous mental faculty, seems to be ‘replaced’ instead of being enhanced or stimulated, by the perfused ‘external excess’ that surrounds our everyday existence. With the profusion of the image neglected the role of the imagination in the human existence and way of life, and, as a result of this, reality has become centred in an intellectual and rational way of life.

Another main cause of the lack of signification in the word is pointed out for the **general post-modern type of life**, by Peter Zumthor (2006) where he explains that it creates an insignificant, detached and ‘arbitrary’ life. For Zumthor, it is the post-modern life that is ‘devoid of significance, and can be described as a condition where everything beyond our own self is vague and ‘unreal’, where signs and information fill the world with things that ‘stand for other things’, and where ‘’ (…) the real thing remains hidden.’’ (Zumthor, 2006, p. 16). Zumthor (2006) is summarizing a world filled with the different issues pointed above, and although it is a particular view of the world described as ‘post-modern’, it raises the same points and calls attention to the same overall lack of significance.

> ‘’ ‘’Anything goes’’ say the doers. ‘’Main Street is almost alright’’, says Venturi, the architect. ‘’Nothing works anymore’’, say those who suffer from the hostility of our day to day. These statements stand for living contradictory opinions, if not for contradictory facts. We get used to living with contradictions and there are several reasons for this: traditions crumble, and with them cultural identities. (…) Everything merges into everything else, and mass communication creates an artificial world of signs. Arbitrariness prevails.’’ (Zumthor, 2006, p. 16)

Synthesis: *In the contemporary world, we can understand these types of creations (devoid of significance) as media driven productions, or simply as creations that are devoid of artistic values and principles. These creations are derived from two main criteria: the lack of understanding of what art is and the lack of significance in life and in art. These problems that define the contemporary world are derived from multiple factors that define our societies such as the profusion of the image, mass media culture, general post-modern life and the disappearance of the imagination, to name a few examples analysed above. However, this general understanding of society and need for a more significant type of art and life allows for a new understanding of art to emerge.*

2.1.3. MOVING TOWARDS SIGNIFICANCE

So now what?

As we have seen, the observation of the lack of significance in artistic creation (both plastic arts and architectural) is not new, however it has become more prominent in the contemporary world. Artistic creations that lack significance, that belong to the sphere of the non-significant (for a great part of humanity), do not reflect any of the concerns that should be innate to artistic expressions: they are a sort of 'dead art', devoid of substance, quality, connections, interactions, and values that should be innate to the artistic expression – to the aesthetic creation. With this understanding of the lack of definition for art and absence of significance, emerges a necessity to re-define and clarify what art is and the role art plays in society: how, why and what it should be and do for the individual and for the world.

It might be that man has grown tired of creating 'new' things, and now is searching for something more deeper in value and meaning; or it might be that because the world is so populated by 'images of frugality' and 'transient' things, man is turning to architecture and to art for something more deep in content and substance. Whichever the case, this thesis sustains the principle that there is indeed another type of art, that is significant at all levels of existence and that man is searching for a deeper and more sustainable way of existence that is also manifested through this significant art: in all artistic fields (architecture, painting and sculpture, as observed in the present thesis).

This other type of art that can be created, that is significant in multiple aspects was defined by multiple authors and created my multiple artists and architects. It will be analysed in the chapters that follow. However, Kandinsky's (1977) definition of art as signification is of value: he explains that in opposition to the 'still-born' art, the non-significant creations, there is another art that is indeed capable of 'educating the future'; it springs from contemporary feeling too but '' (…) is at the same time not only an echo and mirror of it, but also has a deep and powerful prophetic strength.'' (Kandinsky, 1977, p. 4).

In order for a work to possess this type of significance and to be significant in itself, then, it is possible to understand that it needs to possess multiple values and principles. Saarinen (1948), that also sustains art as signification, and that as we have seen defined dead art as the opposite of it, poses these simple yet valid questions:

> '' Can the mind of the present age become ripe enough for a new ''world-belief'' before the sun of our epoch has sunk? '' (Saarinen, 1948, p. 99) and '' After the present crisis is over, does humanity have enough sincerity of heart and creative vitality to raise its form-development onto a level of truly cultural significance?'' (Saarinen, 1948, p. 102).

As one shall see, the thesis sustains that it indeed can.







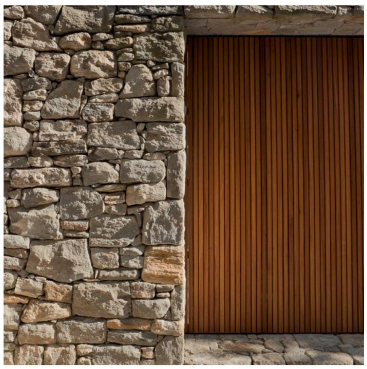


Photo 1:Oscar Niemeyer Brasilia; Source: https://pt.pinterest.com/pin/251075747955043027/; Photo 2: Double Negative Pyramid, by Sol LeWitt; Source:https://pt.pinterest.com/pin/251075747955043029/; Photo 3: Jean Novel project, 2008; Source: https://pt.pinterest.com/pin/251075747955026459/; Photo 4: House 6 by Marcio Kogan in Sao Paulo, Brazil with date 2010; Source:https://pt.pinterest.com/pin/251075747955042951

PLATE 7: MOVING TOWARDS SIGNIFICANCE

2.2. CONTEXTUALIZATION

The realm of significance in the artistic creation belongs to the field of aesthetics. It is the field of aesthetics that understands the artistic object in it's complexity.

2.2.1. THE REALM OF SIGNIFICANCE: AESTHETICS

What does 'aesthetics' mean?

Defining Aesthetics…

Aesthetics is the branch of philosophy that is concerned with art, beauty, the experience of the beautiful, the understanding of what art is, and many other issues; aesthetics is also the quality of artistic object that relates to beauty, however, overall, more simply, aesthetics is generally understood as the philosophy of the arts.

In general terms, according to the contemporary philosopher Shelley in her article for the Stanford Encyclopedia of Philosophy, on the theme *The Concept of the Aesthetic* (2013), the word aesthetics '' (…) has come to be used to designate, among other things, a kind of object, a kind of judgment, a kind of attitude, a kind of experience, and a kind of value.'' (Shelley, 2013). Aesthetics is concerned with both the particulars and generalizations related to the artistic creation (be it an artistic object or painting or an enclosed architectural space): the basis of aesthetic judgments, the relations between aesthetic value and aesthetic experience, and many other questions relating to both the artistic object and the aesthetic experience.

The word aesthetic derives from Greek *aisthetikos* meaning 'sensitive' or 'perceptive' or 'sense perceptive' coming from the word *aisthanesthai* that meant 'to perceive', either by the senses or by the mind, or 'to feel'[30] and from the word *aisthanomai,* that means 'perception by means of the senses'. The subject of aesthetics can further be understood in a three fold way: '' (…) the philosophy of art, and the philosophy of the aesthetic experience and character of objects or phenomena that are not art.'' (Budd, 2014, p. 1). Non-art objects are understood as artifacts that can be susceptible of aesthetic judgment. As such, in general terms, an aesthetic judgment can relate to any object that involves aesthetic appreciation, where as an artistic judgment refers only to art. The present thesis will focus only on the aesthetic judgments that are related only to art.

Umberto Eco (1989) explains that: '' In the context of Italian philosophical terminology, "aesthetics" refers to the investigation of art in general, to the human act that generates it, and to the overall characteristics of its objects.'' (Eco, 1989, p. 105). Therefore, from Eco's definition (1989), it is possible to understand that aesthetics defines all artistic creations and the qualities that compose it; architecture for example, includes aesthetic qualities.

In regards to the aesthetics as a quality of the artistic creation, it relates to the definition of what is and what is not art. In general terms: '' Artists create works of art, which reflect the skills, knowledge and personalities of their makers, and succeed or fail in realizing their aims.'' (Budd, 2014, p. 1). In the

[30] As explained in Dictionay entry: ("Aesthetic," 2015)

field of aesthetics, there is the general consideration, Budd (2014) continues, that although there are many values that art can possess, its real value is in being art; as such, the better the work of art, the greater its value as a work of art, equals a higher degree of 'realization' of itself as art. Although Budd's (2014) definition turns on itself, it is a valid point for the understanding of aesthetics as a discipline that understands the artistic creation in itself and that also defines it's qualities.

When did it emerge and why?

The earliest aesthetical considerations were defined by Plato and Aristotle *(see Glossary)* in Ancient Greece as a way to understand both beauty and the world. However, only in the mid 18th century did Western aesthetics become defined as a field of study in itself, defining an idea of art as something different from craft, that possessed its own properties and values and that belonged to a special type of man made creations.

Alexander Gottlieb Baumgarten *(see Glossary)* introduced the term 'aesthetics' into the philosophical realm in 1750, with the publication of his book *'Aesthetica'*. He uses the classical Greek understanding of the word, defining a study of aesthetics or a study of sense perception. In the eighteenth century, philosophers of art called themselves '' (…) 'aesthetics', after the Greek *aisthesis*, sensation.'' (Scruton, 2009, p. 23), sustaining that aesthetics related to sensations and the understanding of those perceptions.

Elio Franzini his book about the aesthetics of the eighteenth century (*A estética do Século XVIII* (1999)), contextualizes the beginning of the aesthetic thought and the emerging of aesthetics as a philosophical field and discipline. He explains that in the seventeenth century, philosophy searched for a common factor that was capable of explaining the new paradigms (the discovery of method, the century of science, and the ideas of an infinite universe) and established a metaphysics that was deeply rooted in the knowledge of science, mathematics, exactitude and a quantitative approach to understanding the universe and the world. Simultaneously, English empiricism establishes itself, searching for connections between the subject and the experience of the world. It is also of reference the work of the Descartes, Locke, Leibniz and Francis Bacon, that shape the world of thought from which aesthetics emerges. One of the main characteristics of the years prior to those new ways of thinking, is the fact that it refers: '' (…) the perception of art, or it's production, to a don't-know-what or to a 'sixth sense', (…).'' (Franzini, 1999, p. 28)[31]. Although it is the eighteenth century that emerges as the century of the birth of aesthetics, all the philosophical and scientific discoveries of the previous century announced above, deeply influenced it.

Elio Franzini (1999) further explains that with Baumgarten, aesthetics is a kind of science, situated between philosophy, poetics and rhetoric. He adds that the use and invention of the term created a polemical dispute in regards to its logic, its limits and its overall general understanding; however with the use of the term by Kant in *Critique of Pure Reason*, the word aesthetics is established as a term that possesses ambiguity in it's essence. Franzini (1999) adds that it is possible to understand that Baumgarten merely coined a term for an overall philosophical and scientific understanding that had been emerging.

[31] Translation from: '' Uma das principais características do pensamento seiscentista é o facto de remeter a percepção da arte, ou a sua produção, para um não-sei-quê ou para um 'sexto sentido', ao qual se atribuem os nomes mais díspares.'' (Franzini, 1999, p. 28)

Simultaneously to Baumgarten, Giambattista Vico also establishes founding ideas in regards to aesthetics, and is later considered by Croce as the real founder that '' (…) penetrated the true nature of poetry and art.'' (Franzini, 1999, p. 149). [32]

During the XVIII century, aesthetics, Franzini (1999) continues, is an open subject, that corresponds to an overall theoretical attitude that analyses specific thematic horizons; it is an experimental attitude that reveals itself as a dialogical nature between reason and passionality, the animalistic and the spiritual[33]. It searches, continues the author between the objective dimension of art and its platonic idealism.

The philosophers that followed Baumgarten's understanding of aesthetics, grouped the arts together into higher and lower arts, focusing on the understanding of the art's proper or fine arts. These theories emphasized beauty as the main component of art and of the aesthetic experience. They considered that although beauty might possess cognitive faculties and properties it was not defined by them, but instead, by emotion and feeling that is always attached to the aesthetic judgment.

Scrutton (2009) explains that only during the course of the nineteenth century, after Hegel's' publications, did the focus of aesthetics shift from natural beauty to artistic beauty *(see Glossary on Hegel)*. This change resulted with the Romantic Movement that placed feelings in the center of life, and the emotions of wandering more important than those of belonging.

What is the place of aesthetics today?

In the twentieth century, the word aesthetic began to be used in common language referring to the object rather than the subject and begun to be independent from the ideas of beauty that had originated it. Roger Scrutton (2009) in the preface to his book *'Beauty'* (2009), introduces the problematic associated to beauty and aesthetics, explaining that they have been wrongly dismissed as 'subjective', under the theory that taste cannot be argued. This point of view has questioned the traditional disciplines of the studies of arts and humanities, and led to the current absence of standards and crisis in aesthetics. His views on beauty are the opposite of that subjectivity: beauty, a universal value, can take on many different forms and emotions, affecting in unlimited ways those who do perceive it with attention[34]. He summarizes: '' Beauty is a real and universal value, one anchored in our rational nature, and the sense of beauty has an indispensable part to play in shaping the human world.'' (Scruton, 2009, p. x). For Scruton (2009) beauty is something rational rather than emotional, but as the thesis will show, it is also emotional.

In the contemporary world of art and architecture, aesthetics sometimes is denied completely; underlying this denial is firstly the doubt that there is such a thing as art, and even if so, that it does not correspond to a universal criteria but instead to a particular, individual and subjective experience. These

[32] Translation from: '' (…) '' penetrou a verdadeira natureza da poesia e da arte.''.'' (Franzini, 1999, p. 149). (Franzini cites from B. Croce, Estética, pp. 276.)

[33] Translation from: '' (…) attitude experimental que se define nos limites da natureza e do sujeito, sem nunca pretender resumi-la de modo abstracto, a estética revela-se no século XVIII como possibilidade dialógica, na qual a razão dialoga com a passionalidade, o animal com o espiritual, (…) '' (Franzini, 1999, p. 28)

[34] Reference to: To perceive beauty demands attention, thus those who do note perceive it are indifferent to it: '' (…) beauty demands to be noticed. (…) If there are people who are indifferent to beauty, then it is surely because they do not perceive it. '' (Scruton, 2009, p. ix).

claims, however, are vague, unclear, and not only devoid of any foundation, but imply the denial of centuries of advances in aesthetics, the philosophy of art.

On this idea of the loss of aesthetics in the contemporary world, is of value, the explanation carried out by the author Mark Foster Gage *(see Glossary)*, in the preface of his book '*Aesthetic Theory Essential Texts for Architects and Designers*' (2011). Firstly he explains that aesthetic theory, as a branch of philosophy, is '' (…) lacking a clear and well-defined trajectory and its contemporary reach is difficult to outline. '' (Gage, 2011, p. 7). Secondly, that today, it has evolved into many branches, including not only issues of beauty and taste, but also collective ideas such as nationhood or global economics. Both these facts have led aesthetics to become an 'essentially formless' discipline that is 'out of reach' '' (…) from those who would most benefit from its study – ironically, the various curricula of architecture and design schools today that rarely, if ever, address the subject. '' (Gage, 2011, p. 7). Despite the fact that some universities might still consider the subject of aesthetics, what Gage (2011) is explaining is that there has been a distancing between the field of aesthetics and architecture, as a subject that is vital and of the essence for all contemporary creations.

In a similar manner, Scrutton (2009) echoes his views. He claims that in the contemporary world of art there is a flight from beauty and from all aesthetical considerations. Beauty is seen as some kind of a 'retreat' from the real 'ugliness' of the world, to which the artistic creation should devote itself for[35]. Implied in these art forms, is, continues Scrutton, a rejection of beauty itself, affirming that peace, love and truth, are lies and as such, art needs to devote itself to the pursuit of what is real. This finds echo in contemporary life, where the value of art is it's 'shock-value', clarifies Scrutton. At a deeper level, this is what Scrutton understands as a dialectic between the sacred and the profane: our contemporary life uses profanation and desecration to destroy that which is sacred and to create a larger space for the profane. Desecration of the sacred is a way to escape the judgment and destroy its source. It is also a denial of love, of wholeness. Further: '' It is an attempt to remake a world as though love were no longer a part of it. And that, surely, is what is the most important characteristic of the postmodern culture (…) it is a loveless culture, which is afraid of beauty because it is disturbed by love.'' (Scruton, 2009, p. 178).

Simultaneously to this 'loss of aesthetics' is also an idea of aesthetics that has evolved greatly. Scrutton (2009) explains that one of the main issues related to contemporary aesthetics is that it involves both sensations and cognition, and has drifted apart from the more traditional views of aesthetics where beauty is a 'sensory' delight alone, rather than an intellectual one. This idea is followed and emphasized by Immanuel Kant ('' (…) the beautiful is that which pleases immediately, and without concepts.'' (Scruton, 2009, p. 23).) and by Thomas Aquinas, however both were '' (…) less concerned with the sensory impact of the beautiful than with its intellectual significance.'' (Scruton, 2009, p. 23). It was John Ruskin, he claims, that called our attention to both aspects of aesthetics: the sensory and the 'theory' to which it relates[36]. *Aesthesis*, today is commonly associated not only to the sensuous aspects but also to

[35] Reference to: '' More recent art cultivates a posture of transgression, matching the ugliness of the things it portrays with an ugliness of its own. Beauty is downgraded as something too sweet, too escapist and too far from realities to deserve our undeceived attention. Qualities that previously denoted aesthetic failure are now cited as marks of success; while the pursuit of beauty is often regarded as a retreat from the real task of artistic creation.'' (Scruton, 2009, p. 168).

[36] He continues: '' Ruskin, in a famous passage of Modern Painters, distinguished merely sensuous interest, which he called *aesthesis*, from the *true* interest in art, which he called *theoria*, after the Greek for contemplation. '' (Scruton, 2009, p. 23).

intellectual ones[37]. These interests are all framed by aesthetic interests, in contemporary aesthetics. *(see Glossary on the authors mentioned)*

2.2.1.1. AESTHETICS DUALISM: IDEALISM (PLATO) AND MATTTER (ARISTOTLE)

There is one important dualism that defines all aesthetic theories and that should be clarified. It is the duality of Ideals (content) and Forms (matter). This view is derived from the first aesthetic theories that can be defined, which are the views of Plato and Aristotle in Ancient Greece which deeply influenced (and still do) the world (and the world of aesthetics) at all levels of existence.

Their philosophies (life and metaphysics) define two opposing views that also permeate their views on art (*ars*, as technique) and aesthetics. In the painting *The School of Athens* by Raphael (1511) *(see Glossary)*, Plato points to the heavens, symbolizing his Metaphysical Idealism and Aristotle to the earth, symbolizing his Metaphysical views more grounded in nature and in reality. These two distinct approaches that will be thus analysed, clarify the two distinct views of aesthetics: theories that believe the significance of art is in the ideas (the intangible nature and the work of the pure spirit) – this view also relates to the theories that sustain the content - and those theories that sustain that art is in its form (it's matter, its relationships, proportions, etc.).

Plato's Idealism…

Plato's views are generally defined by an idealistic metaphysics, or a metaphysical idealism *(see Glossary on Plato)*. Mark Foster Gage in his book '*Aesthetic theory: Essential texts for architects and Designers'* (2011) explains that through Plato, the understanding of creation as both an enlightened act on the individual and a participation in the universal forms of beauty, still echoes in aesthetic theory today[38]. Plato in both his books 'The Republic' (1937) and 'Timaeus' (1888), deeply emphasizes the duality between two worlds: the world of the physical matter and common life, and the world of the eternal souls (the world of 'forms') which contains truth, knowledge and beauty, in it's most perfect conditions. Plato uses the allegory of the cave (book VII of the Republic (page 514 to 517)), to exemplify and clarify his views: men sit in a fire-lit cave observing shadows, where ''Some light, of course, is allowed them, namely from a fire that casts its glow toward them from behind them, being above and at some distance. '' (Plato, 1937, p. 514); outside the cave is the intensity of light and sunlight, where truth is. Plato is trying to explain that there is indeed a world of light that exists simultaneously to our world, which is portrayed by the shadows; the allegory of the cave is an allegory for life itself.

Plato sustained that there are two separate worlds or realms: the realms of matter and objects, reality and the visible world, and the realm of Forms or Ideas, the intelligible world. The world of physical things is characterized by matter, objects and their images that are transient and always changing according to their reality; we understand this world empirically by our senses and intellect. The other

[37] Scrutton summarizes: '' (…) we can draw a tentative conclusion, which is that we call something beautiful when we gain pleasure from contemplating it as an individual object, for its own sake, and in its presented form.'' (Scruton, 2009, p. 26).
[38] As explained by the author: (Gage, 2011, p. 7).

world, the intelligible world of Forms and Ideas is an unchanging and eternal world, understood by our soul, guided by the sense of what is good, true and beautiful. It is a non-physical world, non-spatial and non-temporal. Everything in the physical world is a kind of shadow or reflexion of the world of the Forms or Ideas – the perfect world of the eternal.

As such, the world of creations is, like all other physical objects, a reflexion of that intangible world. For Plato, creations should be 'imitative' and thereby he introduced the concept of 'mimesis'. For Plato, the ultimate 'art' form is that which better 'imitates' the Ideas or Forms, better referring to the intangible world of eternal and absolute existence, where the ultimate ideas of beauty, goodness and justice really do exist. Because nature and the universe do this perfectly, all other created art forms should be a 'mimesis' of the world in some way or another. Hofstadter and Kuhns (1976) also summarize this, when they explain that art, (despite being inferior to the 'intelligible world of ideas') in order to be of value needs to express 'imitation' and 'mimesis' mirroring the world of Ideas through the examples of the world of nature. They also add that imitative art (when different from merely technique or *techné*, when it does manage to access intangible ideas), is commanded by something other that the human being, which is what Plato defines as 'madness' or 'poetic inspiration', being through 'madness' that the artist is elevated from the world of forms to the world of ideas, and thus able to access the universal truths. They summarize: '' Such madness relates men to the gods and to the beauty of the eternal realm we inhabit.'' (Hofstadter and Kuhns, 1976, p. 4)[39].

Albert Hofstadter and Richard Kuhns *(*1976) add another key idea in Plato's aesthetics, that of art possessing the principle of 'measure' (the means by which the principles of goodness and beauty can be materialized), without which there would be no art at all, and beauty which is the link between the world of physical forms and the world of abstract concepts[40]. Thus, art, as an imitative art, inspired by 'madness', guided by 'measure' and commanded by love, materializes that ideal beauty and thus creates a bridge between those two worlds.

Love as this guiding force for beauty in art is explained by Scrutton (2009). He claims that Plato believed that Eros (a form of love) was the origin of both sexual desire and the love for beauty[41]. This love, can either be a love for a material kind of reproduction (an imprisonment) or be a higher form of love manifested in a desire for an eternal type of reproduction (a striving for immortality) where the object of the love is not possessed but contemplated and where the process of 'copying' doesn't occur in particulars but in abstract ideas, the realm of abstract 'forms'. By contemplating beauty, through love, the soul rises itself from mere concrete things ascending to a higher sphere, where it is not the object but the idea of beauty itself that is observed, entering the soul. Scrutton (2009) emphasizes: '' The love of beauty is really a signal to free ourselves from that sensory attachment, and to begin the ascent of the soul towards the world of ideas, there to participate in the divine version of reproduction, which is the

[39] They further explain that, according to Plato there exist four types of madness, each one related to its own specific art form: '' (…) prophetic, initiatory, poetic and erotic. (…).'' (Hofstadter and Kuhns, 1976, p. 4). Erotic madness, is the form of madness that is 'used' by the artists and that creates beauty.

[40] Mark Foster Gage (2011) summarizes the importance of 'beauty': '' (…) beauty can simultaneously operate between the world of physical forms and the world of abstract concepts, and in some scenarios functions as a bridge that leads a viewer from understanding the former to understanding the later. '' (Gage, 2011, p. 29).

[41] Reference to: '' He identified *Eros* as the origin of both sexual desire and the love of beauty. *Eros* is a form of love which seeks to unite with its object, and to make copies of it—as men and women make copies of themselves through sexual reproduction.'' (Scruton, 2009, p. 40).

understanding and the passing on of eternal truths.'' (Scruton, 2009, p. 41). In Plato, this is the truest kind of art.

Lastly, it is important to understand Plato's views on forms and creation itself. In 'Timaeus' (1888) Plato clarifies the means by which the universe itself is constructed. He claims: '' God accordingly set air and water betwixt fire and earth, and making them as far as possible exactly proportional, so that fire is to air as air is to water, (…) thus he compacted and constructed a universe visible and tangible. '' (Plato, 1888, p. 99). The four elements define the body of the universe, which are in concord with proportion. From these four elements, as pure essences, forms were defined in order to grant them a physical manifestation; thus, Plato goes on to identify the five platonic solids, associating to each of them their own element: the pyramid (which has its foundation in the triangle[42], has four equilateral triangles and corresponds to the element of fire), the octahedron (eight equilateral triangular sides and six angles bounded by four planes), the icosahedron (which has twenty sides, all of the same shape) and the dodecahedron (twenty sides, defining an equilateral pentagon).

Although deeply rooted in universal ideals, Plato claims that it is through the senses that the world of forms can be understood: '' Sight, according to my judgment, has been the cause of the greatest blessing to us, inasmuch as of out present discourse concerning the universe not one word would have been uttered had we never seen the stars and the sun and the heavens.'' (Plato, 1888, p. 163).

Aristotle's Materialism, Nature and Art…

Aristotle in Metaphysics (1801) unites Plato's theory of forms with the view of the world derived by common sense and the natural sciences. In doing so, Aristotle claims that of equal importance to the world of forms, is the world of matter, that possesses the essences and substances of all the things; these essences are that which guide the growth of a plant for example. As such, everything in the physical world is composed of two different things: form (the ideal absolute) and matter (the material entity that possesses the essence of the thing). This radical difference in overall views devised a difference in views in regards to aesthetics, art and beauty. Aristotle's ideas on aesthetics and art are derived from his book '*Poetics'*. Aristotle's views, because they are grounded more on the physical aspects of the world, differ from Plato's 'world of forms', focusing on the more 'real' aspects of beauty and of art. In relation to creations, Aristotle used the terms Poiesis, Mimesis and Katharsis. Poiesis, the subjective that is created by the artist in the production, Mimesis the expression of the artwork itself, and Katharsis, the effect on the recipient, how it is perceived and received by the audience.

Aristotle, in his book 'De Anima' (2002) aims to understand and describe the nature of the soul connecting it deeply to nature itself and to the body. In book I, He claims: '' It appears that in most cases the soul is not affected nor does it act apart from the body, (…) .'' (Aristotle, 2002, p. 3); thus, the affections of the soul involve the body itself such as passion, gentleness, or fear. It is clear, then, continues Aristotle, that the affections of the soul are principles that involve the body: '' And for these reasons an inquiry concerning the soul, either every soul or this kind of soul, is at ounce province of the student of

[42] Reference to: '' We will begin with the form which is the simplest and smallest in its construction. It's element is the triangle, (…).'' (Plato, 1888, p. 195). The triangle is the foundation of the pyramid.

nature.'' (Aristotle, 2002, p. 4). He explains that matter is potentiality, where as form is actuality, which are connected first to knowledge and second to contemplation. The soul, he explains is the actuality of the body as a substance. Thus, the two entities are undivided, and it is life that distinguishes that which has a soul, from that which doesn't. Since there is an intimate connection between the body and the soul, it is through perception, through the body, that the soul can be understood. Aristotle uses the word *Aisthésis,* which can be translated to sense, perception or sensation, to describe this. For Aristotle, there are other potentialities of the soul: '' (…) nutrition, sense-perception, desire, movement, in respect of place and thought.'' (Aristotle, 2002, p. 14), being that desire comprises passion, wanting and wishing. Sense-perception, Aristotle (2002) continues, is similar to contemplation, however in sense-perception the things that trigger the activity are external, where as in contemplation they are internal; actual perception, thus, is particular, whereas knowledge, which is derived from contemplation is universal. Sense-perception, thus, is directly connected to the five senses, as the means through which the body apprehends and understand the world around. He summarizes: " Perceiving, then, is like mere assertion and thought, when something is pleasant or painful (the soul), pursues it or avoids it, as it were asserting or denying it. " (Aristotle, 2002, p. 63). Perceptions, he continues, are always intimately connected to consciousness itself. Thus, '' When one actually remembers, he must recognize in consciousness that previously he had recognized in thought or perception, (…).'' (Aristotle, 1906, p. 101).

Thus, for Aristotle, his views are more connected to nature, to the body and to the senses, which naturally, generates a distinct understanding of art and of aesthetics.

The differences on the value of art between the two philosophers are: where as Plato saw the value of art as being a link between the two worlds, Aristotle sees it as the ability to '' (…) repair the deficiencies of nature, (…).'' (Hofstadter and Kuhns, 1976, p. 79). It is not because they partially belong to the world of forms but because they perfect nature's 'errors' and 'imperfections' that they are important to humanity. The arts, for Aristotle are important in yet another way. Where as for Plato, it was 'madness' that granted artistic value, for Aristotle it is the experience of the arts, even the imitative lower arts, that grant it it's value. The experience of the arts allow for moral benefits to emerge, through a process of *catharsis*, that means roughly 'purification' or 'cleansing' by the effect of tragedy of comedy. Art then acts as a means for the liberation of emotions, and as a moral instrument. On this issue Albert Hofstadter and Richard Kuhns (1976) summarize that for Aristotle arts are instruments of learning, understanding and experiencing, and because of it their effects are always beneficial.

The differences in regards to the concept of beauty are: for Aristotle, beauty is not only a universal entity (like Plato sustained), but instead, a material essence that can be explained and analysed by the senses and by reason. Mark Foster Gage (2011) elaborates on this issue, when he claims that Aristotle dismantles Plato's ideas of beauty as a universal entity and replaces it with a list of factors that guide both the production and the recognition of beauty in the object. These are: '' 'Order', the size and shape of individual parts; 'symmetry', or what a contemporary voice might call proportion; (…) and 'definiteness', having a clear recognizable boundary of the overall form as a complete entity.'' (Gage, 2011, p. 45). It is important to note that order is the regularity of the proportions between the parts, as defined by Vitruvius. However, for Aristotle, Gage continues, beauty in a form, '' (…) relies on the conjunction of having a complete view of the object in a finite moment in time.'' (Gage, 2011, p. 45).

Beauty, for Aristotle, then, is a measurable entity that can be re-created and defined within the artistic process. Lastly, there is a point in common between both. Albert Hofstadter and Richard Kuhns *(*1976) summarize it as such: '' He agrees that art is a kind of techne, and that there is a measure and mean appropriate to the exercise of techne, and that the most important human arts (…) are imitative of human souls, bodies and actions.'' (Hofstadter and Kuhns, 1976, p. 79). Here, it is clear that for Aristotle, the process of 'mimesis' is the same as it is for Plato; they just differ in the means to attain it and in what it should achieve.

The duality…

The duality of Ideals (content) and Forms (matter), thus, led to defining two opposing views in aesthetics: the theories that believe the significance of art is in the ideas, in the content of the work itself, related to the intangible nature, the work of the pure spirit, imagination, spirituality and idealism; and in it's opposite, the theories that sustain that the significance of art is in its form, in it's matter, its relationships, it's proportions, colour and other materials properties that define the realm of physicality.

> ***Summary**: **Art for Plato,** is an 'imitative' process of making what can 'recreate' the intangible world of Ideas and Forms. Although inferior, because it belongs to the physical world, it can be like a shadow of the real and eternal truths. This is granted to the artist by a 'madness' or a 'poetic inspiration', that creates a link between the two worlds. The 'madness' that relates to beauty is that of 'erotic madness'. Art forms, in their physical sense, are guided by the idea of 'measure': the means by which 'real' beauty can be materialized. Lastly, beauty is the essence, related to the physical arts, that allows for man to be apart of the intangible world of Ideas. **Art for Aristotle** is a process of 'mimesis' that is grounded in nature and in the world of physical entities. It's importance lies in the fact that it can 'correct' nature and act as a learning instrument (moral, truths, etc.) through it's experience. Beauty, for Aristotle is a tangible and describable quality that can be observed and created by the adequate means. **These two views define the two opposing aesthetic theories that emerged from them.***

2.2.1.2. CONTEMPORARY AESTHETIC CONTEXTUALIZATION: ARTISTIC CAPITALISM

Another main issue that needs to be clarified in regards to aesthetics, is the understanding of contemporary aesthetics, which is more commonly defined as artistic capitalism. This is defined by Gilles Lipovetsky and Jean Serroy in their book *'"The Aestheticization of the World: Living in the Age of Artistic Capitalism*[43]*"'* (2014). The authors explain that the contemporary artistic world is marked by what they define as 'artistic capitalism': which can be understood as an aesthetic production that integrates art and aesthetics into the consumer culture, using them as means to generate further consumption. The authors summarize: '' Artistic capitalism is this formation that unites the economic to the sensitivity and to the imaginary (…).'' (Lipovetsky and Serroy, 2014, pp. 47, 48) [44]. Artistic capitalism, thus, uses artistic and aesthetic principles for non-artistic means and objectives: such as to promote further capitalism and

[43] With the original title *'L'esthétisation du monde'* and the version of the book used for the present thesis being in Portuguese with the title '*O capitalismo estético na era da globalização*'.

[44] Reference to: '' O capitalism artístico é esta formação que liga o económico à sensibilidade e ao imaginário (…) .'' (Lipovetsky and Serroy, 2014, pp. 47, 48)

consumption: style, beauty, taste and sensibility are used as strategic items for globalization, capitalism and hyper consumption, and design, fashion, publicity, decoration, cinema, magazines (and everything else that characterizes the world of capitalism) create and use a communication that is seductive, by means of affection and sensibility (seducing the senses, evoking specific feelings and provoking specific fantasies in the consumer's state of mind), in order to increase overall mass consumption. By using aesthetic means for their economical aims, the boundaries between what is real and what is 'fake' or 'empty' get diffused and blurred. As such, 'artistic capitalism' can be characterized by an increase in perceptual stimuli, experiences, sensations and a 'stylization' or 'aesthetic' depuration of products and communication that create a generalized integration of 'art' and 'aesthetics' into our lives, at all levels of existence.

This contemporary context can be understood better if contextualized into the overall aesthetic evolution throughout time; the authors thus define four major eras of artistic creation (the role of art in society) that pre-dated the fourth and current era, the era of 'Artistic Capitalism'. These stages were all independent from each other in goals, objectives and principles and they are summarized in the following page.

The four stages of Aesthetics:

(1) The first stage, entitled **'ritual artialization'** is defined by the type of artistic creations of primitive societies; for these primitive societies, art wasn't created with an aesthetic intent but instead was related to rituals with no specific aesthetic purpose other than fulfilling the ritual in which it was involved. They explain ''In these cultures, what relates to style cannot be separated from the religious, magical and sexual organization.'' (Lipovetsky and Serroy, 2014, p. 19)[45]. These were immersed into collective systems that sustained them, and the aesthetic forms created structured the social and religious organization. They translated the order of the cosmos by illustrating the myths of the tribes. As such it does not have a separate and independent existence but instead informs the whole of life.

(2) The second stage, entitled **'aristocratic aesthetization'**, is derived from the classical Ancient societies, such as the Renaissance, beginning in the end of the middle age and extending until the XVIII century. This defines what the authors describe as the first aesthetic society, establishing the premises for the aesthetic modernity with the appearance of the 'artist' separately from the artisan as well as the idea of the artist genius. The modern concept of art emerged, aiming at an instructed and cultured public. It was born through the aristocratic courts of Kings and Princes, (with the beginning of fashion, the sense of elegance and ''good customs'') and begins to be independent from religion and from the demands of the Church. The authors explain '' The aesthetic mission of art gains relevance, the artist should strive to eliminate all the imperfections and search for images that are in accordance with that which is more beautiful and more harmonious in nature.'' (Lipovetsky and Serroy, 2014, pp. 21, 22)[46]. it is also the beginning of the idea of grace, harmony, beauty. Artists are invited to the noble courts. Simultaneously, great cathedrals are built, cities are restructured according to principles of order and elegance, according to aesthetic principles. Art, beauty and aesthetic values acquire diginty and gain a central role in society.

(3) The third stage, entitled **'the modern aesthetization of the world'**, corresponds to the modern age of the western world, from the XVIII to the XIX century. It corresponds to a more complex development of the aesthetic and artistic world, where art frees itself from religious and aristocratic 'supervision' establishing itself as an independent and self-sufficient, with its own purpose and its own objectives. Art creates its own laws, values and principles, answering only to itself, and artists vindicate a voice of creative freedom. It further establishes a despise for control systems such as money and rules and an independence of themes and content. The authors explain ''Art supposedly allows for the ecstasy of the infinitely big (expansive) and of the infinitely

[45] Free translation from: '' Nestas culturas, o que se prende com o estilo nao pode ser separado da organização religiosa, mágica, sexual e do clã. '' (Lipovetsky and Serroy, 2014, p. 19)

[46] Free translation from: '' A missão propriamente estética da arte ganha relevo, o artista deve esforçar-se por eliminar todas as imperfeições e procurar imagens que estejam de acordo com o que há de mais belo, de mais harmonioso na natureza. '' (Lipovetsky and Serroy, 2014, pp. 21, 22)

beautiful, allowing for the contemplation of perfection, which means it opens doors for the experience of the absolute, of something that is beyond the common life.'' (Lipovetsky and Serroy, 2014, p. 27)[47]. Art became the way for an ideal life, taking the place of religion; nothing is more elevated or more sublime than art. The artist's ambitions of the time went far beyond aesthetic values, aiming to be a tool for the transformation of society (modern movements), that also begins to use the tools available of the time: commerce and industry.

(4) Lastly, the fourth stage, entitled **'the trans-aesthetic age',** defines our current world, and can also be defined **as 'Artistic Capitalism',** and generally comprehends a new form of society, economy and art. It can further be understood as the artistic activity being incorporated into the commercial world of globalization and capitalism. On this issue the authors claim: '' With the triumph of artistic capitalism, the aesthetic phenomena no longer returns to the small peripheral and marginal worlds: integrated into the worlds of production, marketing and communication of material goods, they constitute huge markets shaped by international economic giants. '' (Lipovetsky and Serroy, 2014, p. 31) [48]. Thus, artistic capitalism multiples the place of art in the contemporary world: scattering around in styles, goods, tendencies, trends, and in the world of show business. In this universe of super abundance, art infiltrates our lives in all fields. As such, it no longer stands for the creation of a cosmos, or something deeper or more meaningful, (the authors continue) it stands marketing strategy and games of seduction aimed to capture and captivate the viewer. The authors claim, referring to this type of art: '' (…) she has stopped being considered as an education to freedom, truth or morality.'' (Lipovetsky and Serroy, 2014, p. 39) [49] and further, they accentuate: '' (…) the arts are no longer destined to communicate with invisible powers or to elevate the soul to the ecstatic experience of the absolute, but to have consumer 'experiences', entertaining and emotional, capable of amusement in the search for etheric pleasures that leads to the stimulation of sales.'' (Lipovetsky and Serroy, 2014, p. 39) [50]. As such, the more it infiltrates into the commercial world and economy, the further it is from the spiritual values.

They explain, that the world of art itself has been changed because of this global Aestheticization of the world of production and consumption at multiple levels: firstly there is a broader desire to 'create art' because art is seen as something 'fashionable', 'trendy' and 'luxurious' belonging to that world of 'perfection'; as such, the number of spaces dedicated to art has also largely increased, and the economical value of art itself has increased tremendously. In the production of art itself, with Andy Warhol *(see Glossary)* art had become associated to the mass production and to the market of consumerism itself, creating 'images' that respond to the markets needs in terms of 'newness', visual effects and 'grandeur'.

What happens in this contemporary 'artistic capitalism' and society can be further understood by multiple characteristics: there is the incorporation of art to add commercial value to products; another characteristic is the de-differentiation of the economic and aesthetic sphere, defining a trans-aestheticized market oriented society; it is also characterized by an 'aesthetic inflation'. As further examples/characteristics of this type of 'contemporary world aesthetics' the authors annunciate various important examples: firstly, the rise of Design in everyday objects, that comprehend a sense of 'designing' and 'aestheticizing' of the everyday objects of life, at every scale of existence.

Another example is the 'hybridization' of all spheres of art (art, fashion, design, industry, commerce, etc.) where they mix together interconnecting at all levels, and commerce, best seen in fashion

[47] Free translation from: '' A arte supostamente proporciona o êxtase do infinitamente grande, e do infinitamente belo, faz contemplar a perfeição, ou seja abre as portas da experiência do absoluto, de algo para além da vida comum. '' (Lipovetsky and Serroy, 2014, p. 27)

[48] Free translation from: '' Com o triunfo do capitalismo artistico, os fenómenos estéticos já não regressaram aos pequenos mundos periféricos e marginais: integrados nos universos da produção, de comercialização e de comunicação de bens materiais, constituem imensos mercados moldados por gigantes económicos internacionais.'' (Lipovetsky and Serroy, 2014, p. 31)

[49] Free translation from: '' (…) ela deixou de ser considerada uma educação à liberdade, à verdade e à moralidade.'' (Lipovetsky and Serroy, 2014, p. 39)

[50] Free translation from: '' (…) as artes já nao estão destinadas a comunicar com poderes invisíeis ou fazer elevar a alma pela experiência do absolute, mas a ter 'experiências' consumistas, lúdicas e emocionais aptas para diverter, para procurer prazeres efémeros, para estimular as vendas.'' (Lipovetsky and Serroy, 2014, p. 39)

and luxury, where brands team up with artists to create 'cross' collaborations. Another characterization example is the fact that borders between genres of art have become more fluid, and all the arts use from each other, promoting each other in the commercial world.

2.2.3. ARCHITECTURAL AESTHETICS

Mark Foster Gage (2011), about the contemporary aesthetic Architectural theory, explains that the fact that Architecture engages only on formal discourses (use of technology that rely on abstract intellectual ideas exclusively), neglects all the other aesthetics aspects of architecture. Thereby, the author claims a shift from the conceptual aspects to the aesthetic aspects of architecture is necessary, in order to re-discover architecture's cultural value. The author claims: '' Architecture must be more than what it does, (….). Aesthetic theory offers us a way to understand the value of architecture in reconsidered terms without opposing worthy pursuits.'' (Gage, 2011, p. 20). In order to understand aesthetic theories of architecture, it becomes necessary to explain the historic contextualization, and analysis of the different main theories.

… for Vitruvius

There is little information on architectural theory and aesthetics in antiquity, until the 1st century BC with Vitruvius. With Vitruvius *(see Glossary)* in *De Architectura*, more commonly known as the Ten Books of Architecture, it is defined three guiding principles: *firmitas* (solidity), *venustas* (beatuty) and *utilitas* (adequation). Vitruvius claims in the first chapter of his Ten books of Architecture (1914): '' In all matters, but particularly in architecture, there are these two points: the thing signified, and that which gives it it's significance. '' (Vitruvius, 1914, p. 5). That which is signified, he explains, is the subject of Architecture, and that which gives significance is a demonstration of scientific principles. The architect, he continues, thus should be well versed in many different subjects: mainly history, philosophy, music, astronomy and medicine to name a few.

Vitruvius further defines six other fundamental Principles of Architecture as: order, arrangement, eurythmy, symmetry, propriety and economy. Of these principles, five of them relate to aesthetic considerations: order, arrangement, symmetry and eurythmy relate to an elegance of effect and beauty of the elements, and propriety, demands authority and expertise within that aesthetic decision-making. In Vitruvius's words: '' Order gives due measure to the members of a work considered separately, and symmetrical agreement to the proportions of the whole. '' (Vitruvius, 1914, p. 13), whereas: '' Arrangement, includes putting things in their proper places and the elegance of effect (…).'' (Vitruvius, 1914, p. 13), '' Eurythmy is beauty and fitness in the adjustments of the members. '' (Vitruvius, 1914, p. 14), symmetry, is a proper agreement between the elements of the work itself, and the relation between the parts to the overall whole, '' Propriety is that perfection of style which comes when a work is authoritatively constructed on approved principles.'' (Vitruvius, 1914, p. 14); it arises from usage and from nature, ; and, lastly, economy, denotes to the balancing between materials, site and cost, referring to its proper managing.

Gage (2011) summarizes Vitruvius's aesthetic ideas as a reconciliation between mathematical principles (such as Euclid's) and the visual configurations: '' Vitruvius suggests that it is the

responsibility of the architect to mediate between these concepts and reconcile what is actually correct, mathematically and abstractly, with what looks correct.'' (Gage, 2011, p. 65). Vitruvius, continues Gage, calls for an intuitive designer and architect that can finely tune the aesthetic decisions.

… for Alberti

Alberti *(see Glossary)* concluded his manuscript *De Re Aedificatoria* in 1452; it is more commonly known as ' *On the Art of building in Ten Books'*. He established a Renaissance position on architecture that had a different structure from Vitruvius'. Alberti's theory on aesthetics of architecture is based on three principles: *necessitas*, *commoditas* and *voluptas,* which means necessity, commodity and aesthetic pleasure respectively. Authors Claudia Basta and Stefano Moroni (2013) explain that beauty invokes an aesthetic focused on orders and proportions, '' (…) linked to ethics through its prescription of economy and prudence.'' (Basta and Moroni, 2013, p. 4); whereas *commoditas* and *necessitas* involve an aesthetics that is connected to desire, program and the creation of a set of universal principles or design rules.

Gage (2011) explains that Alberti's theories also rely on what he defines as 'lineaments', '' (…) which function as an abstract system of organizing lines that governs the building's shape and assure a cohesive relationship among the parts and the whole.'' (Gage, 2011, p. 73). Alberti, Gage (2011) continues, is the first to define a 'conceptual architectural holism', where he reflects Aristotle's concept of the soul: the whole is greater than the sum of the individual parts. '' Because it does not focus on structural constraints, his theory liberates the architect's aesthetic design ambitions (…) all the while maintaining that beauty is produced by what is essential – not by what is ornament.'' (Gage, 2011, p. 73). For Alberti, there are key factors which produce beautiful form, or beautiful architecture: '' These are number (of parts), placement (of parts), and *concinnitas*, which is best understood today as proportional relationships. '' (Gage, 2011, p. 73). These three factors, with the use of proper lineaments create a beautiful building. Beauty, thus for Alberti, is a result of the adequate proportional relationships and never of ornament, that cannot be responsible for the appearance of beauty. In book one Alberti claims: '' Architecture consists entirely of lineaments and structure. The significance and purpose of lineaments consists of ensuring the correct and perfect way of joining and connecting lines and angles, by which the appearance of the building is held together. '' (Gage, 2011, p. 75).

… by Sebastiano Serlio and Palladio

Sebastiano Serlio (1475 – 1554), in his treatise The five books of Architecture, which begun to be published, as Michele Toussaint (2009) explains, in Venice in 1537 and ceased its publication in 1554 with Serlio's death; it was a treatise, the author continues, based on illustrations, engravings and comments that could be easily read, that were directed to practice and could be easily accessed. Unlike the previous treatises before him, Serlio's books were not written in Latin, but instead were published in Italian, which probably (as the author suggests), led to a wider and broader distribution. Book I studies applied geometry, book II included perspective and scenography; book III, as Toussaint (2009) explains, uses architectural examples of temples, houses, bridges, palaces, theatres, among others, from classical to more contemporary examples such as the works of Bramante; book IV clarifies the five orders and their

according application, and lastly, book V establishes a correspondence between ancient temples and Christian churches. Palladio's views, that emerged shortly after Serlio's, will be analysed further throughout the thesis, since he is one of the case studies.

… for Guarino Guarini

Another important treatise, was published in the XVII century in 1737 are the works of Guarino Guarini (1624 – 1683), entitled *Architettura Civile* which is summarized by Michel Toussaint (2009) in his thesis. In the treatise Guarini explains that amongst all the other liberal arts, architecture is the one that has more advantages, not only because there are a large number of buildings, but also because it involves a large number of sciences. Toussaint (2009) further explains that he agrees with Vitruvius that architecture is a science, but adds that it can be subdivided into various groups, according to its different uses: defense, civil (public buildings such as palaces), economic, rustic (country Villas, gardens and others), aquatic (water based) and ecclesiastical (churches).

… essays: Laugier, Boullée and Ledoux

The types of architectural discourses that characterize the centuries that follow, mainly the XVIII, are characterized by the form of essays. Michel Toussaint (2009) claims *Essai sur l'Architecture* of Marc-Antoine Laugier published for the first time in 1753, as one of the best examples of the type of architectural theory of the time. Laugier defines architecture as: '' '' Architecture is of the useful arts, the one that demands the most broad talents, and the most vast knowledge. It is necessary, maybe, as much genius, spirit and taste to make a great architect as to form a Painter and a Poet (…). ''.'' (Toussaint Alves Pereira, 2009, p. 40) [51]. Laugier further establishes the fundamental principles of architecture centered around the concept and materialization of the primitive hut and the origin of the column; in the following chapters he describes the orders, the solidity and appearance of buildings, and lastly, chapters four, five and six are reserved for churches, cities and gardens, accordingly.

Another important essay are the works of Étienne-Louis Boullée and Claude Nicolas Ledoux, that created both physical and imaginary works of architectural drawings and wrote extensively about architecture. Étienne-Louis Boullée's views in multiple texts, explains Toussaint (2009), is that architecture is an art through which human necessities are fulfilled; he further claims that Vitruvius's definition of architecture as the art of construction is incorrect, for before construction there is a conceptualization which is a creation of the spirit, and this is what defines architecture; thus, for Boullée the art of construction is but a secondary art, and the real architecture is the freedom of creation of artistic endeavor. Therefore, in architecture he separates art and science, in order to establish an architectural artistic field in its own right, that echoes, summarizes Toussaint, Kant's ideas of art. Claude Nicolas Ledoux's writings and theories add other elements of architecture that he believed to be forgotten from architectural discourse such as the 'house of the poor'; however, like Boullée, Ledoux sustained the importance of the artistic element in architecture, explaining that it is it's expression that grants it enthusiasm: '' Monumentality stops being the exclusive field of architecture, to be included more modest

[51] Free translation from: '' ''A Arquitetura é de todas as Artes úteis, aquela que exige mais os talentos mais distintos, e os conhecimentos mais extensos. É necessário talvez tanto génio, espirito e gosto para fazer um grande arquitecto quanto para formar um pintor, e um poeta de primeira ordem.''.'' (Toussaint Alves Pereira, 2009, p. 40).

buildings, but all respecting the demands of the new expressed aesthetic intentionality.'' (Toussaint Alves Pereira, 2009, p. 45)[52]

… for John Ruskin

John Ruskin (1819-1900) *(see Glossary)* in his book *The Stones of Venice, Volume 1* (…) aims to describe and characterize the particularities and uniqueness of the architecture of Venice, describing its principles, character, construction and ornament, in order to define an overall idea of architecture. The book is the sequel, both chronologically and in subject-matter, to *The Seven Lamps of Architecture*. For him, '' (…) the architecture of Venice "exemplifies, in the smallest compass, the most interesting facts of architectural history.".'' (Ruskin, 1903b, p. xxi); through the understanding of Venetian Architecture, Ruskin believed that lessons on 'good architecture' and 'art' could be derived. The aim was to arrive at some laws, that could be applied '' (…) which we may apply to the architecture of all the world and of all time.'' (Ruskin, 1903b, p. 60).

Ruskin, in order to do so, tries to answer the question of ''What are the possible Virtues of architecture?'' (Ruskin, 1903b, p. 60); he identifies two overall qualities, explaining that we require from buildings, as from men, two kinds of goodness: first, the aspect of doing things well and the second, that they be 'graceful' and 'pleasing' in doing it (which is another type of duty). The practical duty can be understood in a two folded way: acting, as defence from violence and weather, talking, '' (…) as the duty of monuments or tombs, to record facts and express feeling; or of churches, temples, public edifices, treated as books of history, to tell such history clearly and forcibly.'' (Ruskin, 1903b, p. 60). As such, Ruskin summarizes that there are three great virtues of architecture: that it should 'act well', that it should 'talk well' (on which there are countless ways of conversation and expression) and that it should 'look well'. The 'talking' aspect of the building, cannot be used as a character that describes excellence in architecture, for it is too broad and personal. But the other two aspects are subject to laws, and these can be better described as 'Strength and Beauty', and they can be made most clear when understood as testimonies of the 'imagination' and 'intelligence' of the builder; he summarizes: '' (…) we take pleasure, or should take pleasure, in architectural construction altogether as the manifestation of an admirable human intelligence.'' (Ruskin, 1903b, p. 64); this is true of all forms of human creation in architecture, be in the qualities of beauty or in strength[53]. This is the origin of our pleasure in architecture.

In architecture above all other art, there is the connection of pleasure to the understanding of its maker and admiration of the workman's mind, and these are manifest in both its strength or good construction, and its beauty or good decoration. The capacities of man do not observe only the construction and the beauty, but the mental and emotional capacities that created it – the creator's soul – and in doing it, he creates works of art. Man expresses both (affections and intelligence) in his creations in equal terms: '' (…) it is the balance of both whose expression we need, and the signs of the government of them all by Conscience; and Discretion, the Daughter of Conscience.'' (Ruskin, 1903b, p. 67). Whereas

[52] Free translation from: '' A monumentalidade deixa de ser assim o campo exlusivo da Arquitectura, para nela serem incluídos edificios modestos, mas tudo respeitando as exigências da nova expressa intencionalidade estética.'' (Toussaint Alves Pereira, 2009, p. 45)

[53] Reference to: '' And again, in decoration or beauty, it is less the actual loveliness of the thing produced than the choice and invention concerned in the production, which are to delight us; the love and the thoughts of the workman more than his work; his work must always be imperfect, but his thoughts and affections may be true and deep. '' (Ruskin, 1903b, p. 64).

the intelligent part of man is expressed through construction, emotional aspects are expressed through decoration or beauty. The things demanded of beauty and decoration, continues Ruskin, is that of liking (it has to be liked by the creator), that of being honest and that of expressing the right thing, the right thing being the expression of God for '' (…) all noble ornamentation is the expression of man's delight in God's work.'' (Ruskin, 1903b, p. 70). Ruskin summarizes: '' So, then, these are the two virtues of building: the signs of man's own good work and the expression of man's delight in better work than his own.'' (Ruskin, 1903b, p. 70).

In regards to ornament, Ruskin (1930) claims: '' And all noble ornament (…) is the expression of man's delight in God's work. For to observe, the function of ornament is to make you happy.'' (Ruskin, 1903b, p. 264). Man finds happiness not in self expression, (not in pride) but in devotion and in universal matters, in 'looking at God'. The proper forms for this, then, are forms that follow God's rules and God's ways of creation: organic and natural, abstract lines that imitate the elements, such as forms of air (clouds), forms of fire (flames and rays), forms of earth (crystals) and forms of water (waves), the animal and the vegetation kingdom. The forms of ornament, then, are forms that follow the natural world, even in the use of abstract lines that should be derived from the lines of nature. Each one of these forms then, carry with them a symbolic meaning. As such, Ruskin explains that what is needed is to clarify how these forms can be organized or expressed.

True ornament, then, has a perfect condition to it, it is that, it belongs to that specific place and no where else, and that it contributes to the understanding and experience of the architecture where it belongs. In this case, Ruskin explains: '' Ornament, the servant, is often formal, where sculpture, the master, would have been free; the servant is often silent where the master would have been eloquent; or hurried, where the master would have been serene.'' (Ruskin, 1903b, p. 285). The degree of subordination to architecture is a subtle issue, and one that depends from case to case. Attached to ornamentation, is abstraction, which Ruskin explains, that if it is true and noble it is always delightful; this 'noble abstraction' is characterized as: '' It is taking first the essential elements of the thing to be represented, then the rest in the order of importance, and using any expedient to impress what we want upon the mind, without caring about the mere literal accuracy of such expedient.'' (Ruskin, 1903b, p. 286); noble abstraction aims to represent the spirit and the power of the 'reference' being represented, and it implies a simplicity of means and aims.

One of the particularities of nature that should extend to architecture, claims Ruskin, is the fact that it is always different in form and content for every distance of the eye[54], and these should work at the different scales, each order of 'ornament' being adapted for different distances. Another particularity of both ornamentation and architecture is what Ruskin entitles an 'Arborescent' quality, derived from the previous quality; this defines that '' (…) whatever order or class of it we may be contemplating, we shall find it subordinated to one that is greater, simpler, and more powerful; and if we then contemplate the greater order, we shall find it again subordinated to a greater still; (…).'' (Ruskin, 1903b, p. 302). If this process of subordination is incomplete, then it is bad architecture and bad ornament. As a summary, all ornament and architecture should express the laws of the divine, and be submissive to the overall form

[54] Reference to: '' (…) for every distance from the eye there was a different system of form in all natural objects: this is to be so then in architecture. The lesser ornament is to be grafted on the greater, and third or fourth orders of ornaments upon this again, as need may be, until we reach the limits of possible sight.'' (Ruskin, 1903b, p. 301).

and 'divine service' in a tree like way. Laws then, and 'obedience' guide both external forms and internal order. In regards to the distribution of ornament, Ruskin explains, that everything should be in perfect accordance, where there is no excess and no lack, in a unity between all elements. Lastly, '' (…) in regards to quantity of ornament. I have already said, again and again, you cannot have too much if it be good.'' (Ruskin, 1903b, p. 308). Thus, for Ruskin, what defines an architectural aesthetics, is a series of properties or qualities (virtues) that architecture, as an art, possesses. Further ideas of Architecture from Ruskin, will be described in the following chapter.

… by Viollet-le-Duc and Gottfried Semper

Viollet-le-Duc had similar views to Gottfried Semper, as both sustained that architecture was not only an artistic field, but that it also demanded and needed scientific method. Toussaint (2009) explains that Viollet-le-Duc, criticizing both the classical tradition of the Beaux-Arts and the ideas proposed by John Ruskin, claimed that in order to understand the past, a deeper logic of facts, principles and orders needed to be understood. Overall, le-Duc was deeply rooted in the Vitruvian doctrine.

… the first half of the Twentieth Century

There are multiple authors that helped shape the modern understanding of an aesthetics of architecture. One of the first authors to do so is considered to be Otto Wagner (1841-1918), that in his book *Moderne Architektur* (1895), defines the first fundamental traces of that modernity. For Wagner, Toussaint (2009) explains, art implies a broader and wider view than technique, and thus, architecture as construction, utility and aesthetics is placed in the first place amongst the other arts. Another author that had a profound influence in the modern way of thinking architecture was Adolf Loos (1870-1933), whom like Wagner, lived and worked in Viena. Loos sustained that only a small part of architecture was indeed an art, where as most architecture, such as private houses were not artistic in their nature, but still were architecture. Therefore, for Loos, architecture is connected to a mundane reality of the day-to-day, whereas art defines imaginary worlds. Following these aesthetic theories, it is also of relevance Frank Lloyd Wright's and Le Corbusier's writings which will be further analyzed in the case studies.

… for Scrutton

Roger Scruton in his book *The Aesthetics of Architecture* (1979), explains that most theories of architecture tend to concentrate on its form or on its object, describing '' (…) what we respond to.'' (Scruton, 1979, p. 3). However none of these formal or spatial theories provide a satisfactory understanding or description of architecture, because they ignore the features of architecture that '' (…) is both intentional and of the greatest architectural significance.'' (Scruton, 1979, p. 3). Architectural aesthetics, the author continues is something entirely different from architecture theory that aims to create and define maxims, rules and precepts that govern the practice of the builder. These precepts, that can be found in the work of Ruskin, of Vitruvius, of Alberti and of Serlio, assume that the reader already knows what is being tried to achieve: '' The nature of architectural success is not an issue; the question is, rather, how best to achieve it.'' (Scruton, 1979, p. 4). This type of theory of architecture only crosses the aesthetics of architecture when it defines universal ideals, rather than specific ones; this type of theory, thus, would have to be philosophical rather than practical.

Aesthetics in architecture firstly, continues Scruton (1979), understands that architecture (just like any art) is a mixture of art and craft, however, further than the other arts, it is a synthesis between the two. The functional aspects of the building belong to its essence, and thus, the value of architecture cannot be seen or understood independently of its utility. Likewise, Scrutton (1979) continues, the sculptural aspects of the building might also lead the viewer to judge it only according to those sculptural values and interest; however this should not be the case. Functionalism, he adds, is an attempt to assert architectural against sculptural values, however, the result is diluted forms that '' (…) no longer has the ring of necessary truth.'' (Scruton, 1979, p. 10).

Architecture, Scrutton (1979) claims, is founded in an impulse and desire for a 'sense of place' (the desire to mark a spot, to claim possession and to assert dominion over the land). Thus, the author adds: '' All serious architecture aims at an effect of unity (…).'' (Scruton, 1979, p. 11). Another point that is key in the understanding of architecture is firstly the understanding of technique (vital for what it allows architecture to be and do), the comprehension of it's public nature as a public object and the need for it to be rooted in tradition, becoming new only by creating new expectations (rather than incorporating that novelty). Lastly, the most important feature of architecture, continues Scrutton (1979), the feature that gives it it's significance in our lives, is '' (…) it's continuity with the decorative arts, and the corresponding multiplicity of it's aims.'' (Scruton, 1979, p. 16); however, architecture does not ascribe consciously to the meanings ascribed by its users, neither can it present self-consciously as an art, but rather is a natural extension of human activities. This kind of connection, establishes architecture as a sort of vernacular and organic natural activity, that allows for an aesthetics of architecture to be connected to the everyday wisdom rather than to the high arts. However, it is still an art, and thus needs to be understood aesthetically in it's complexity. Scruton's views will further be clarified in the following chapter in the understanding of what architecture as an art is.

… Contemporary Architectural Aesthetics: More for Less and the 'Open' characteristic

Slavoj Zizek (2010) *(see Glossary)*, at a conference talk in the University of Ljubljana (Slovenia) about 'Architecture and Aesthetics' explains that there is an inherent strength in saying 'more for less' and in abstaining from adding superficial ornaments because it will generate additional meaning and create a new kind of depth. This kind of '' (…) more for less, is perhaps even, one of the definitions of art.'' (Slavoj Zizek on Architecture and Aesthetics, 2010). As such, Zizek continues, the safest way to ruin a work of art is to complete it; that incomplete character is a quality that allows for it to be a 'work of art'. 'More for Less' is a quality of art. Contemporary architecture, on the contrary, the speaker announces, is an architecture of excess, of 'more'; trying to unite different concepts and ideals generating conflicting meanings: amusement and high art, profane and sacred, etc. All these meanings cancel themselves, and as such, the outcome is a kind of 'zero presence of meaning'.

2.2.3. THE FUTURE OF AESTHETICS

The future of Aesthetics as Reconciliation…

Scrutton (2009) sustains that the future of art, of aesthetics and beauty, should be to incorporate tradition, rather than fleeing from it; history shouldn't be abandoned but incorporated into the work: '' (…) the goal of the modern artist not as a break with tradition, but as a recapturing of tradition, in circumstances for which the artistic legacy has made little or no provision.'' (Scruton, 2009, p. 171). In this sense, the artist renews tradition, trying to claim a new place for beauty within that sense of tradition and history. An example of this approach, was with the Modernists, such as Matisse *(see Glossary)*, claims Scrutton (2009) that aimed to reconcile the artistic process with the artistic ideal and intention, trying to protect it from the corruptions of popular culture and life[55]. They wanted a recuperation of the inherent meaning of art, where beauty would be honored as 'the symbol transcendental values'. This approach had the artistic value and meaning at its heart.

Collingwood (1937) *(see Glossary)* explains, that artists tend to be good at understanding what is art and what it isn't; they are what he defines as artist-aesthetician, however they lack the ability to define art; philosopher-aestheticians are the opposite, they can define art well but they cannot distinguish between what is art and what is not, so they rely only on classics as examples. This gap has been bridged, Collingwood explains, by the recent the appearance of a third category of aesthetic theorists; these are artists, painters or poets that aim to shed some new light on the matter[56]. In this way, a new kind of aesthetic theory has emerged.

And lastly, for Arthur C. Danto, aesthetics doesn't relate to art (as essence) for it has a narrow understanding of art (the beautiful and the ugly); aesthetics he claims, has little described the artistic panorama of the 50's and 60's, and that is partly because aesthetics have dealt only with a narrow understanding of art: '' (…) the beautiful, the ugly, and the plain.'' (Danto, 1998, p. 133). Thus, he proposes that there should be a distance between art and aesthetics. It is art's essence (it's meaning and how it is expressed) that is the highest reality of art; but in order for it to be understood, it needs philosophy to clarify what the 'highest reality' is (a term coined by Hegel and used by Dante). He emphasizes: '' It is, however, as free art that art shares a metaphysical space with philosophy: the questions Warhol raises are philosophical questions.'' (Danto, 1998, p. 142).

It is this sense of art, that is hereby to be understood. And aesthetics, as playing a secondary role in it's understanding, just as proposed by Danto (1998).

[55] He continues: '' This ideal had connected the pursuit of beauty with the impulse to consecrate human life and endow it with a more than worldly significance. In short, the modernists set out to reunite the artistic enterprise with its underlying spiritual aim.'' (Scruton, 2009, p. 172).

[56] '' (…) who have taken the trouble to train themselves (…), and write (…) with the modesty and seriousness of a man contributing to a discussion in which others beside himself are speaking, and out of which he hopes that truths not yet known even to himself will emerge.'' (Collingwood, 1938, p. 4).

Summary Chapter 2:

In the present chapter a 'problematization' and 'contextualization' of the phenomena of significance was outlined and explored. While dealing with problematization we observed multiple theories that sustained that the problematic regarding art in the contemporary world were a two-folded essence: associated with the lack of definition of art sustained by various authors (Alain de Botton (2013) and Louis Armstrong (2013)) and the overall lack of significance in life and in art, sustained by Arnheim (1966), Kandinsky (1997), Saarinen (1948) and many others. We further defined that these aspects were derived from contemporary culture; from the detachment and fragmentation of the 'human being', the constant search for the 'novelty factor' and 'worlds of fictions', the mass media culture and the profusion of the image, the loss of criteria for excellence, as sustained by Pallasmaa (2011), Dillon (1999), Trott (2002) and Zumthor (2006). Lastly, the phenomena of signification was contectualized within the field of aesthetics, which is an ever changing and evolving field, related to the understanding of art, and we saw that although contemporary aesthetics was regarded as a an artistic capitalism, as defined by Gilles Lipovetsky and Jean Serroy (2014) (as creations that unite the economic fields to the sensitivity and to the imaginary and there is the incorporation of art to add commercial value to products), it was defined that the future of aesthetics was possible through the reunion and reconciliation between multiple spheres: past and future, tradition and novelty.

Synthesis Chapter 2:

1. *Defining the problematization: it is associated with the lack of definition of art sustained by various authors (Alain de Botton (2013) and Louis Armstrong (2013)) and the overall lack of significance in life and in art, sustained by Arnheim (1966), Kandinsky (1997), Saarinen (1948) and many others.*

2. *Authors Rudolf Arnheim (1966), Kandinsky (1997) and Saarinen (1948), associate the lack of significance in artistic creations with the lack of culture, with an insignificant type of life and absence of personal development. Various authors define the overall lack of significance as different ideas, such as Saarinen (1948) who proposed a lack of infused creativity, Pallasmaa (2010), who sustained a lack of emotional content, Handa (1999) that sustains the problem as 'fake authenticity', Freeland (2002) for whom non-signification is the lack of truth, and Steiner (1992) who claims productions are associated with reproduction and understanding and thus lack connections to the soul.*

3. *In architecture the same is found: the lack of significance is echoed by authors Alain De Botton (2008), Perez-Gomes (1994), Juhanni Pallasmaa and Peter Zumthor (2006) who all agree that most architecture is indeed insignificant, and 'meaningless' and is devoid of a capacity to create a 'real' connection with the viewer; it is lacking, love, cosmology, life, values and truth.*

4. *These problems are derived from contemporary culture; from:* ***the detachment and fragmentation of the 'human being',*** *the* ***constant search for the 'novelty factor' and 'worlds of fictions', the mass media culture and the profusion of the image, the loss of criteria for excellence****,* ***as sustained by Pallasmaa (2011),*** *Dillon (1999), Trott (2002) and Zumthor (2006)*

5. *Contextualizing the phenomena of signification: it is the field of aesthetics, which is an ever changing and evolving field, related to the understanding of art.*

6. *There is one important dualism that defines all aesthetic theories and that was clarified: the duality of Ideals (content), initially derived from Plato's theories and Forms (matter), derived from Aristotle's materialism.*

7. *Contemporary aesthetics, was understood as artistic capitalism, as defined by Gilles Lipovetsky and Jean Serroy (2014), as creations that unite the economic fields to the sensitivity and to the imaginary and there is the incorporation of art to add commercial value to products.*

8. *Architectural aesthetics was understood through Vitruvius, Alberti, Ruskin (1903), Gage (2011) and Scutton (2010), defining different aspects, values and properties that should sustain the realm of architecture.*

9. *To conclude, we understood the future of aesthetics on the one hand as a reconciliation between multiple spheres: past and future, tradition and novelty (Scruton), and on the other, as a distancing from art, so that art can be understood in its essence (Danto).*

BIBLIOGRAPHIC REFERENCES: Chapter 2

Aesthetics (2015). *Wikipedia, the free encyclopedi*a. Available at: http://en.wikipedia.org/w/index.php?title=Aesthetics&oldid=576795290 [Accessed 15 Oct. 2015].

Aristotle (1801). *Metaphysics*. London: Davis, Wilks and Taylor. Available at: http://warburg-archive.sas.ac.uk/pdf/akh237b32590817.pdf [Accessed 5 Aug. 2016].

Aristotle (1906). *De sensu and de memoria*. Cambridge: Cambridge University Press Wakehouse. Available at: https://archive.org/details/aristotledesensu00arisuoft [Accessed 5 Aug. 2016].

Aristotle (2002). *De anima: Books II and III*, 2nd edition. Oxford: Clarendon Press. Available at: http://people.exeter.ac.uk/sp344/0198240848%20-%20De%20Anima%20Books%20II%20and%20III%20(With%20Passages%20From%20Book%20I)%20-%20Aristotle,%20Christopher%20Shields,%20D.%20W.%20Hamlyn.pdf [Accessed 5 Aug. 2016].

Arnheim, R. (1966). *Toward a psychology of art: Collected essays*. California: University of California Press.

Arnheim, R. (1977). *The Dynamics of Architectural Form*. California: University of California Press.

Basta, C., Moroni, S. (2013). *Ethics, Design and Planning of the Built Environment*. New York, USA: Springer Science & Business Media.

Borjesson, K.I.B. (2006). *The affective sustainability of objects : a search for causal connections : studies of theory, processes and practice related to timelessness as a phenomenon*. PhD Thesis. University of the Arts London. Available at: http://ualresearchonline.arts.ac.uk/5219/ [Accessed 20 Dec. 2013].

Budd, M. (2014). Aesthetics. In: *Routledge Encyclopedia of Philosophy*. London: Routledge, Web. Available at: https://www.rep.routledge.com/articles/aesthetics/v-1 [Accessed 13 Sept. 2015]. DOI: 10.4324/9780415249126-M046-1

Collingwood, R.G. (1938). *The Principles of Art*. Oxford, U.K.: Clarendon Press.

Danto, A.C. (2014). *What Art Is*. New Haven and London: Yale University Press.

De Botton, A. (2008). *The architecture of happiness*. London: Random House Digital, Inc.

De Botton, A., Armstrong, J. (2013). *Art as Therapy*. London: Phaidon Press.

Eco, U. (1989). *The Open Work*. Cambridge, Mass.: Harvard University Press.

Ehrenzweig, A. (1971). *The Hidden Order of Art: A Study in the Psychology of Artistic Imagination*. Revised edition. Berkeley, California: University of California Press.

Freeland, C. (2002). *But Is It Art?: An Introduction to Art Theory*. Oxford and New York: Oxford University Press.

Gage, M.F. (2011). *Aesthetic Theory: Essential Texts For Architecture and Design*. New York and London: WW Norton & Company.

Hofstadter, A., Kuhns, R. (1976). *Philosophies of Art and Beauty: Selected Readings in Aesthetics from Plato to Heidegger.* Chicago: University of Chicago Press.

Holl, S., Pallasmaa, J., Gómez, A.P. (1994). *Questions of perception: phenomenology of architecture.* 2nd edition. New York: a + u Publishing Company and William Stout Publishers.

Kandinsky, W. (1977). *Concerning the spiritual in art.* 2nd edition. New York: Courier Dover Publications Inc.

Lipovetsky, G. (1989). *A era do vazio*. Lisbon, Portugal: Relógio de Água.

Lipovetsky, G., Serroy, J. (2014). *O Capitalismo Estético na Era da Globalização*. Lisbon, Portugal: Edições 70.

Norberg-Schulz, C. (1985). *The concept of dwelling: on the way to figurative architecture*. New York: Electa Rizolli International Publications.

Pallasmaa, J. (2011). *The embodied image: imagination and imagery in architecture*. Chichester: John Wiley & Sons.

Pallasmaa, J. (1996). *The Eyes of the Skin: The Architecture and the Senses.* London: Academy Editions.

Pérez-Gómez, A. (2008). *Built upon Love.* Cambridge, Massachusetts: MIT Press.

Plato (1937). *The Republic*, 2nd edition. Cambridge, Massachusetts and London: Harvard University Press and William Heinemann Ltd. Available at: https://ryanfb.github.io/loebolus-data/L237.pdf [Accessed 5 Aug. 2016].

Plato (1888). *The Timaeus*. London and New York: Macmillan and Co. Available at: http://www.math.upatras.gr/~streklas/public_html/timaeusofplato00platiala.pdf [Accessed 5 Aug. 2016].

Ruskin, J. (1903). The Stones of Venice, in: *The Works of John Ruskin*. Volume IX. London: Longman, Greene and Co. Available at: http://www.lancaster.ac.uk/depts/ruskinlib/Stones%20of%20Venice [Accessed 5 Oct. 2015].

Saarinen, E. (1948). *The search for form in art and architecture*. New York: Courier Dover Publications.

Scruton, R. (2009). *Beauty*. Oxford, England.: Oxford University Press.

Scruton, R. (1979). *The Aesthetics of Architecture*. Princeton, New Jersey: Princeton University Press.

Shelley, J., 2013. The Concept of the Aesthetic, in: *The Stanford Encyclopedia of Philosophy*. Available at: http://plato.stanford.edu/archives/fall2013/entries/aesthetic-concept/ [Accessed 8 Sep. 2015].

Toussaint Alves Pereira, M. (2009). *Da arquitectura à teoria e o universo da teoria da Arquitectura em Portugal na primeira metade do Seculo XX*. PhD Thesis. Faculdade de Arquitectura da Universidade Técnica de Lisboa. Lisbon, Portugal.

Trott, E. (2002). Permanence, change and standards of excellence in design. In: *Design Studies,* 23 (3), pp. 321–331. Available at: http://www.sciencedirect.com/science/article/pii/S0142694X01000412 [Accessed 22 Dec. 2014]. DOI:10.1016/S0142-694X(01)00041-2

Vitruvius (1914). *The Ten Books of Architecture*. Cambridge, England: Oxford University Press.

Zumthor, P., 2006. Thinking architecture. Birkhäuser. Basel, Swizterland

PART II

Theoretical Framework

Introduction note

Part II of the research is where an in-depth analysis of the theoretical framework that defines and composes the observed phenomena of significance is understood. It is organized in three main chapters: chapter 3 defines the artistic object as significance, understanding in the first place what art is, identifying and understanding the individual arts (architecture, painting and sculpture), understanding their commonalities and differences and the emergence of a new paradigm of art. Chapter 4, then begins to comprehend how and why the significance of an artwork occurs, observing both what happens within the creation process, and what occurs in the process of experiencing an artwork. These two observations lead to the third understanding of significance, defined in chapter 5, which is the means by which it is embodied, apprehended and understood. Numerous principles and values are announced and defined, for as the study shows, each theorist has it's own idea of what significance is: some of those ideas are concurrent, while others are unique.

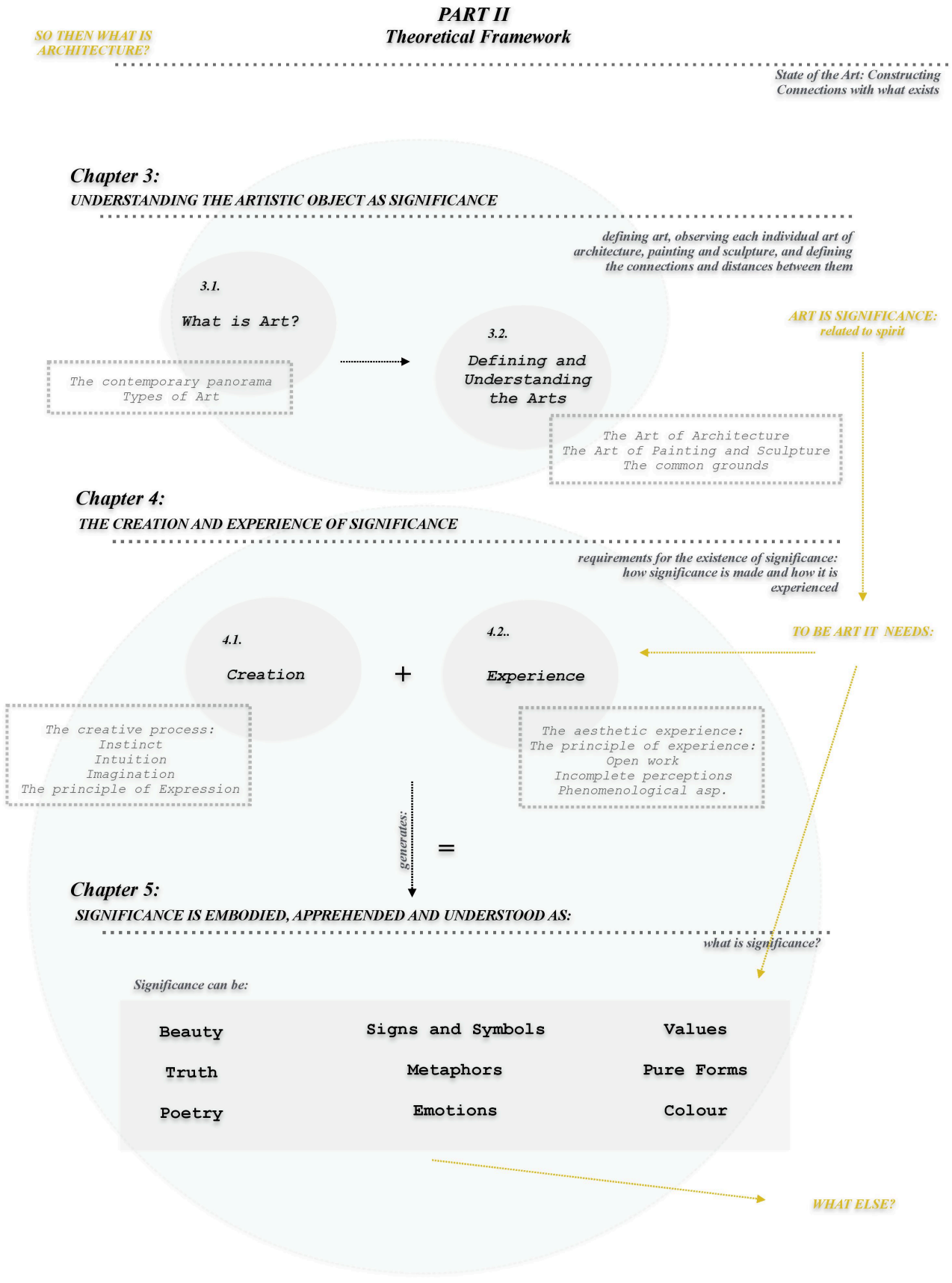


Figure 6: Diagram of Part II of the research.

CHAPTER 3

UNDERSTANDING THE ARTISTIC CREATION AS SIGNIFICANCE

Introduction

In the present Chapter 3, the artistic phenomena as significance is analysed and clarified: to begin with, the artistic phenomena as significance is observed leading to a further understanding of what that significance means and what it is composed of; following an identification and definition of the three artistic fields that are analysed in the present research as arts that create and generate significance: architecture, painting and sculpture is carried out. And once the phenomena and the individual fields have been defined, an analysis of the connections, differences and links between them is set out (looking at historical example) in order to give a broad understanding. Finally, the chapter will analyse the new contemporary creations that merge all three spheres of artistic creation, using tools, values and concepts from each other, trying to find new ways of creating and expressing significance.

1. WHAT IS ART?

What makes Art be Art?

The origin of the word, a historical context…

R. G. Collingwood (1889-1943) *(see Glossary)* in his book *The Principles of Art* (1938), explains that the word art originates from the Latin word *Ars*, which means 'skill' or 'craft'; this basic meaning of the word 'art' has changed over the centuries, and continues to evolve to today, which makes our understanding of art a very recent idea and concept. In the most general way, art refers to the creative skill being applied in the creation of something.

However, on the traditional sense of the word, of art as *'Ars',* Collingwood (1938) explains that it was used in both the Latin and the Greek language, meaning: '' (…) a craft or specialized form of skill, like carpentry (…).'' (Collingwood, 1938, p. 5). As such, in ancient Greece and Rome, there was no conception of art other than a craft, such as the craft of poetry, *ars poetica*. In medieval Latin, *Ars*, (the English word borrowed both the word and the sense): '' (…) meant any special form of book-learning, such as grammar or logic, magic or astrology. That is still its meaning in the time of Shakespeare: 'lie there, my art', says Prospero, putting off his magic gown.'' (Collingwood, 1938, p. 6). In the Renaissance, in Italy, the old meaning was re-established, and the artists saw themselves as 'craftsmen'. In the eighteenth century, when aesthetics begun to be defined the differences between fine arts (meaning beautiful arts, *les beaux arts,* which referred to the visual arts) and useful arts emerged and the word begun to evolve into another meaning altogether.

Is everything Art?

What art is not….

To understand what art is not, we will turn to Collingwood's (1938) writings. He sustains that the contemporary use of the word Art, it's contemporary meaning, has been filled with misconceptions and confusions[57]. As such, he clarifies what Art is not, in order to arrive at an adequate definition of art. This clarification is of the utmost importance.

According to Collingwood (1938), there are four types of human activity which are commonly called 'art', but which, should be distinguished from what he calls 'art proper' meaning high art, fine art or just art. The four misconceptions are: craft, representation, magic and amusement. In regards to art not being a craft, Collingwood (1938) explains that the idea of craft, emerged in Ancient Greece, can be characterized by the transformation of a material into a finished product by means of a careful planning and execution[58]. The theory of artistic technique supports this 'art as craft' idea[59] and so does the theory

[57] Collingwood (1938) further explains that there are three ways upon which something can be wrong in meaning, (specifically a word): there are obsolete meanings (retained by a force of habit), analogical meanings (associated with another sense of the word, usually to time or historical differences), and courtesy meanings (when the descriptive motive is overshadowed by the emotional one). The word art has all these misconceptions attached to it.

[58] Firstly by the fact that it involves a distinction between means and end, between planning and execution (the craftsman knows what he wants to make before he makes it), or more simply '' Means and end are related in one way in the process of planning;'' (Collingwood, 1938, p. 16). Also, a craft involves a transformation of a raw material into a finished product and there is a distinction between form and matter (form is what is changed and matter what remains the same. Collingwood claims that although these do not exhaust what craft is, it defines it.

[59] The theory of art as technique or artistic technique emerged against art being only a craft and states that artistic skill depends instead on technique, however Collingwood clarifies that it does not: for the best of skills cannot create a masterpiece. What makes someone an artist '' (…) is not his skill to construct such patterns but his imaginative vision (…).'' (Collingwood, 1938, p. 27). The skill and the technique is not the art, it is merely that which is used in the service of art.

that claims that art is created to provoke a specific feeling in the viewer[60]. In summary: it is not that the work of art doesn't contain a craft, a technique or a skill, it is merely that none of those things make it art; '' (…) no craft-features make an object into a work of art.'' (Kemp, 2012). Also, the idea that art is not representation, for representation is also a matter of skill and development of that skill. And lastly, the idea that art is not magic and it is not amusement. Magic simply consists of '' (…) a system of practices, a technique.'' (Collingwood, 1938, p. 63), with the aim of creating an emotion, they resemble the function of amusement, however it differs from it in that it uses representation: it represents and evokes an emotion that possesses a function in practical life[61]. A magic art can be for example Folk Art. With amusement occurs a discharge of a specific emotion so that it does not interfere in practical life, it is a sort of escape from it; amusement art is associated to play in its most basic form and examples of it are for example a sort of pornographic art. The difference between both is that while magic is utilitarian (for example hymns in a church service), amusement is not utilitarian but hedonistic (dealing with pleasures and an escape from the world. There are other circumstances that consider art wrongly, such as the communication of a message which is simply propaganda or exhortation. As such: '' These six between them, singly or in combination, pretty well exhaust the function of whatever in the modern world wrongfully usurps the name of art. None of them has anything to do with art proper.'' (Collingwood, 1938, p. 32). For Collingwood, a work of art can in fact possess the things stated previously, however those aspects (craft, magic, amusement) are not that which makes it art in the first place. Understanding the psychological reactions of things leads to the definition of 'pseudo-art' (something that is taken for art, but that is not art). None of these theories are 'aesthetics' but 'anti-aesthetics' claims Collingwood. They confound what art really is.

Synthesis of what Craft is: Craft can also be understood as '' (…) the power to produce a preconceived result by means of consciously controlled and directed action.'' (Collingwood, 1938, p. 16).The ideas of craft emerged, explains Collingwood from the Greek writings, for they defined a vast philosophy of craft, beginning with the Socratic School, and finding opposition with Plato in the Republic (justice is not a craft) and in Aristotle with Metaphysics where he rejects Plato's idea in Timaeus, '' (…) that the relation between God and the world is a case of the relation between craftsman and artifact.'' (Collingwood, 1938, p. 18). However, both of them in regards to poetry considered it a craft, a different type of craft than those of for example cobbling, and they named it poet-craft. However, Collingwood continues, all these forms of craft had one concern: '' They are all ways of bringing human beings into certain desired conditions.'' (Collingwood, 1938, p. 18). Collingwood proceeds to demonstrate and describe how none of those definitions of craft fit into the definition of art. Where as these characteristics might exist, for example matter and form can be identified, in art, there is something more that describes it and the above statements do not hold true[62]. As such, proper art cannot be any kind of craft and this fact is what aesthetic theory must fight against. In craft, making something follows two stages: '' (1) Making the plan, which is creating. (2) Imposing that plan on certain matter which is fabrication.'' (Collingwood, 1938, p. 133).

Art is not Representation:
For Collingwood (1938) representation as something used in art, is a misconception; he claims:

[60] The theory claims that art is created to provoke a specific stimulus in the viewer: '' Here the entire work of art is conceived as an artifact, designed (when a sufficient degree of skill is present to justify the word) as means to the realization of an end beyond it, namely, a state of mind in the artist's audience.'' (Collingwood, 1938, p. 30). This stimulus-and-reaction theory of art is not new, having been described by Plato and Aristotle, therefore it is almost taking over the poet-craft theory completely, and therefore, summarizes Collingwood, is a fake understanding of what art is.

[61] Reference to: '' Magic is a representation where the emotion evoked is an emotion valued on account of its function in practical life, evoked in order that it may discharge that function, and fed by the generative or focusing magical activity into the practical life that needs it.'' (Collingwood, 1938, p. 69).

[62] Reference to: '' There is always in art a distinction between what is expressed and that which expresses it; there is a distinction between the initial impulse to write or paint or compose and the finished poem or picture or music; there is a distinction between an emotional element in the artist's experience and what may be called an intellectual element. All these deserve investigation; but none of them is a case of the distinction between form and matter.'' (Collingwood, 1938, p. 25).

high art cannot be 'representative', because representation is a matter of skill. The representative doctrine being associated to art begun with Plato and Aristotle, and was later sustained by the Renaissance; only later, Collingwood (1938) explains, did some arts become associated with representation and other didn't. Associated to the ideas of representation, are the ideas of 'imitation' (resemblance) and 'originality' (lack of resemblance), and neither of these ideas can define or be associated to the artist object; if it does so, then, it is not art[63]. However, this does not imply that representation and artistic value are incompatible[64]. Representation in art doesn't mean resemblance, '' (…) but that the feeling evoked by the artifact resembles the feeling evoked by the original (I call this emotional representation).'' (Collingwood, 1938, p. 53). The 'artist' wants to re-create and 'represent' a specific feeling to the audience. Representation is a means to end (the re-evocation of certain emotions), however none of these forms describe art. This does not mean that the idea that sustained *mimesis*, proposed by Plato is not valid in artistic creation, it just means that it can be misused.

Art is not Magic and it is not Amusement: Collingwood explains that the word magic carries with it no significance other than being associated to tribal rituals in a negative way demonstrating the overall refusal to understand it[65]. A magical art '' (…) may be good or bad when judged by aesthetic standards, but that kind of goodness or badness has little, if any, connection with its efficacy in its own proper work.'' (Collingwood, 1938, p. 69). There are a number of artistic examples where the magical element of art can be found: 'folk-art', ceremonies of social life (weddings, etc.), dance, and the traditional low-brow arts of the upper classes such as hymns, and instrumental music[66]. Although folk art might use other values, it uses the main component of magic which is here used as an example: when taken out of context it can be misused. Therefore, Collingwood claims that these systems, although containing magic, are not proper art: '' The artistic motive is present in them all; but it is enslaved and denatured by its subordination to the magical.'' (Collingwood, 1938, p. 76). In regards to art as amusement, Collingwood clarifies: '' If an artifact is designed to stimulate a certain emotion, and if this emotion is intended not for discharge into the occupations of ordinary life, but for enjoyment as something of value in itself, the function of the artifact is to amuse or entertain.'' (Collingwood, 1938, p. 78). An amusement is a discharge of a specific emotion so that it does not interfere in practical life, it is a sort of escape from it. Amusement art is associated to play in its most basic form. Real play resembles proper art. Further: '' Hence, while magic is utilitarian, amusement is not utilitarian but hedonistic. The work of art, so called, which provides the amusement, is, on the contrary, strictly utilitarian.'' (Collingwood, 1938, p. 81). Unlike high art, it has no other value than that of amusement, a means to an end; it is strictly and skillfully constructed, and creates a make-believe situation. Examples of Amusement Art are: sexual desire being aroused by art such as pornography. Amusement, Collingwood claims, is bad when it contaminates real life or takes it over making it become 'emotionally bankrupt' and thus a moral disease takes over. As such, '' Magical function and amusement function in a work of art are of course mutually exclusive, so far as a given emotion in a given audience at a given moment is concerned.'' (Collingwood, 1938, p. 82). In both cases the representational artists needs to know what he is creating specifically in order to provoke the accurate emotion. There are cases where there in a mixture of the two. Both these forms of representation and craft have been confounded by critics and people as forms of high art. He claims: '' The villains of the piece are the self-styled artists. (…) So long as art is identified with amusement, criticism is impossible. '' (Collingwood, 1938, p. 92).

Qualifying art: High Art (as significance) and Low Art

'' (…) mere replicas may be useful as raw material for cognition but are produced by cognitive acts of the lowest

[63] Firstly a distinction between representation and imitation is necessary: '' A work of art is imitative in virtue of its relation to another work of art which affords it a model of artistic excellence; it is representative in virtue of its relation to something in 'nature', that is, something not a work of art.'' (Collingwood, 1938, p. 43). Furthermore, the opposite of imitation, originality also does not define art: '' Originality, in art, meaning lack of resemblance to anything that has been done before, is sometimes nowadays regarded as an artistic merit. This, of course, is absurd.'' (Collingwood, 1938, p. 43). Collingwood continues, if the production of something is designed to be like something else is mere craft, then, the opposite of it also is true.

[64] In summary: '' A representation may be a work of art; but what makes it a representation is one thing, what makes it a work of art is another.'' (Collingwood, 1938, p. 43).

[65] He claims: '' The alleged theory of magic has been constructed by manipulating the facts so that all magical elements are left out of them. In other words, the theory is a thinly disguised refusal to study magic at all.'' (Collingwood, 1938, p. 61).

[66] A distinction between magic and religion is of importance: '' Magic and religion are not the same thing, for magic is the evocation of emotions that are needed for the work of practical life, and a religion is a creed, or system of beliefs about the world, which is also a scale of values or system of conduct. But every religion has its magic, and what is commonly called 'practicing' a religion is practicing its magic.'' (Collingwood, 1938, p. 73).

> order and do not, by themselves, guide understanding. ‘’ (Arnheim, 1969, p. 140)

Once established what art is not, it is possible to define two types of art: high art and low art.

This is part of an ongoing tradition in aesthetics, sustained by multiple authors such as Croce, Collingwood (1938), Arnheim (1969) and Scrutton (2009), *(see Glossary),* that there are two types of art: a lower art (that merely entertains) and a high art (that possesses aesthetic judgment, significance and meaning). On this issue, Scrutton (2009) explains that Benedetto Croce created this distinction between lower art forms that were designed to entertain and amuse (where the viewer seeks entertainment[67] and there is no aesthetic judgment) and the true work of art, or high art, where the viewer seeks the significance and meaning of the work and is thus immersed in aesthetic judgment (defined in the following chapters). Scrutton (2009) continues explaining that both arts involve the imagination, but lower arts create fantasies that ‘pollute the world’ where as those of real art create an imagined real world in their own right (that comes through in an imaginative process)[68].

This distinction between high art and low art forms is of the utmost importance because one can establish a connection with the previous chapter and relate low art forms, that are devoid of significance with the overall lack of significant creations in the contemporary world.

How can we understand ‘High art’ or ‘Real art’?

Real art, then, continues Scrutton (2009), is significant because it presents meanings to the viewer and acts as meaningful communications[69]; they are not only forms with a small number of meanings, but are complex creations that carry within themselves a large and complex significance.

The value of the real work of art, what makes it so unique and special, then, is that it communicates content, meanings and significance. This significance and meaning does not reside in a content that can be identified, it is a content as it is ‘presented’, as a whole, inseparable from form and style – inseparable from the art itself; therefore when it is paraphrased or explained, meaning is lost: ‘’ (…) what you say will not explain the particular intensity of meaning which makes the work of art into the irreplaceable vehicle of its content.’’ (Scruton, 2009, p. 113). However, it is possible to understand, continues Scrutton (2009), that the significance of the work of art relates to the pure condition of human kind, giving us an explanation for our own existence, granting us a sense of belonging (of ‘fittingness’)[70] and relating us to our highest nature, affirming ‘another world’ where morality and spirituality exist and

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[67] Reference to: ‘’ (…) it is not my own reactions that interest me, but the meaning and content of the work. I am being presented with experience, uniquely embodied in this particular sensory form. When seeking entertainment, however, I am not interested in the cause but in the effect.’’ (Scruton, 2009, p. 101).

[68] He explains: ‘’ True art appeals to the imagination, whereas effects elicit fantasy. (…) Both fantasy and imagination concern unrealities; but while the unrealities of fantasy penetrate and pollute our world, those of the imagination exist in a world of their own, in which we wander freely and in a condition of sympathetic detachment.’’ (Scruton, 2009, pp. 104, 105). In real art, imagined scenes are ‘represented’ continues Scrutton, they come through thought, and are immersed in conventions, framing and restraint, as part of the imaginative process. As such, ‘’ (…) the real meaning of the painting is bound up with, inseparable from, the image, (…) ‘’ (Scruton, 2009, p. 110).

[69] Reference to: ‘’ We want to say that works of art are meaningful—they are not just interesting forms in which we take an unexplained delight. They are acts of communication, which present us with a meaning; and this meaning must be understood.’’ (Scruton, 2009, p. 110)

[70] In his words: ‘’ Art answers the riddle of existence: it tells us why we exist by imbuing our lives with a sense of fittingness.’’ (Scruton, 2009, p. 128). Not only is art’s meaning a clarification of our ‘fittingness’ in the world, but also, Scrutton (2009) continues ‘’ True art is an appeal to our higher nature, an attempt to affirm that other kingdom in which moral and spiritual order prevails. (…)’’ (Scruton, 2009, p. 192).

prevail above all other materializations; true art, '' (…) is the real presence of our spiritual ideals. '' (Scruton, 2009, p. 192).

As such, the broadest explanation of High Art or 'Real Art', of relevance for this research, is Art as the creation of meaning and significance for humanity. This view is further sustained by various authors, apart from Scrutton (2009) each in their own specific way. One of those authors is Joyce Carey (1984) *(see Glossary)* when he claims: '' Art is the creation of meanings for the senses and the sensibility, of the whole man.'' (Cary, 1984, p. 164). Art's 'immense power' lies in its dealing of content that relates to all humanity, that provokes a 'shock of pleasure' and 'makes life valuable'. This 'special pleasure' that exists only in art, is connected to the 'emotion of beauty' as a selfless understanding connected to freedom and grace[71].

Pallasmaa (1996) in the same way believes that all art (specially architecture), is connected to the establishment of 'pre-verbal meanings of the world'. It is the ultimate task of art and architecture to reconstruct an experience of the 'interior world' and make the observer belong to it, rather than merely being a spectator and observing it; in order to do so, art is rooted in the meanings of the world – deep meanings that can only be lived and not understood theoretically or intellectually[72]. Although one can claim that the ultimate task of architecture is to create spaces to live in, for Pallasmaa, the meanings it carries are what make it an art (further analysed in the following chapter). For Pallasmaa (2011) art has its origin in the emerging of human consciousness, individuality, and experience[73] and possesses an everlasting 'motive' as **it's significance: that of exposing and dwelling on the 'riddle of existence'**[74].

Also of reference are Saarinen's views on the matter, rising 'high art' to a type of religious experience. According to Saarinen (1948), there is only one standard according to which the 'true value of art' should be measured, and that is '' (…) the truest expression of the best of life.'' (Saarinen, 1948, p. 102); and so, to be able to create 'true art' or 'high art', art must be based on the fundamental principles that are 'innate to all things' – by this way becoming meaningful and transmitting significance. In this sense, art approximates a religious existence, echoing Goethe's vision; in his words: '' After all there is not much difference between religion and art, for the artist's state of mind at the moment of creation – when sincere, and at its best – is a religious state of mind. Goethe says: ''He who has art, even religion he has; He who has no art, let him religious be.'' '' (Saarinen, 1948, p. 43)

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[71] Reference to: '' (…) fundamental passions and reactions common to all humanity.'' (Cary, 1984, p. 163), and to '' For that enjoyment has no relation to appetite or self-satisfaction. It is something freely given, a good, a grace, a belonging simply to existence, to reality itself. For that minute, the meaning of existence is this special pleasure, the emotion of beauty.'' (Cary, 1984, p. 163)

[72] He claims: ''Artistic expression is engaged with pre-verbal meanings of the world, meanings which are incorporated and lived rather than intellectually understood.'' (Pallasmaa, 1996, p. 15)

[73] Reference to: '' Art originated in the emergence of human consciousness and individuality and in his encounter with the world. Even the oldest artistic expressions guides us to separate and simultaneous reflow of experience. (...) '' (Pallasmaa, 2011, p. 97) Translation from: ''A arte tem origem no surgimento da consciencia humana da individualidade e em seu encontro com o mundo. Até mesmo a mais antiga das expressões artisticas nos orienta para a separação e refusão simultaneas da experiencia. (...)'' (Pallasmaa, 2011, p. 97)

[74] Reference to: '' The basic motive of the art today is exactly the same as 30 thousand years ago. This timeless motif is the riddle of existence.'' (Pallasmaa, 2011, p. 97); Free translation from: ''(...) o motivo básico da arte, atualmente, é exatamente o mesmo de 30 mil anos atrás. Esse motivo atemporal é o enigma da existência. '' (Pallasmaa, 2011, p. 97)









Photo 1: Cy Twombly: School of Athens, 1961; Source:http://www.radford.edu/rbarris/art428/art427/Rauschenberg.html; Photo 2: Gaudi architecture, detail of Palau de la Música Catalana, Barcelona; Source: ://www.panoramio.com/photo/36899885; Photo 3: Classical sculpture in a cathedral, location unknown; Source:http://illestswaaag.tumblr.com/post/107108221286; Photo 4: Tadao Ando. The Oval, Benesse Arts Museum, Naoshima; Source:https://pt.pinterest.com/pin/452682200024800184/

PLATE 8: DEFINING ART AS SIGNIFICANCE

Synthesis: *One can identify two types of art: the lower art designed to entertain and amuse arts (creating fantasies that 'pollute the world' (Scrutton (2009)) and the higher art which contains significance and meaning and generates an aesthetic experience. This higher art, creates significant communications that demand to be understood; relates to our existential and spiritual condition, creating a sense of belonging and explaining our own existence (Scrutton (2009)). Significance further relates to the establishment of 'pre-verbal meanings of the world', exposing and dwelling on the 'riddle of existence' (Pallasmaa (1996)); connects to the senses and the sensibility of the whole man (Carey (1984)), and can be associated to a kind of religious experience (Saarinen (1948)).*

3.1.1. DEFINING ART: THE CONTEMPORARY PANORAMA

So how can contemporary 'high art' be understood?

Because contemporary art is so diverse and pluralistic (creating new ideas, new artistic forms and merging artistic fields), there has been a search for an understanding of art that encompasses the most broad and true definition of art; there has been a quest for the understanding of art's essence. All these theories sustain that classical aesthetic theories have become too narrow to describe contemporary art and only a new understanding can define this new art. In the fields of aesthetics, it is possible to define Arthur C. Danto (1998) as the author that arrived at this new definition of art. Following and expanding his ideas we can also find the theories of multiple contemporary authors such as Arthur C. Danto (1998) and Cynthia Freeland (2002). These theories and new ideas will be analysed as follows.

…by Arthur C. Danto: The Essence of Art

Arthur C. Danto *(see Glossary)*, in his book *What Art is* (2014), when contextualizing the evolution in aesthetics, from Plato's and Socrates' theories of imitation all the way through to Kant, Hegel and Heidegger, claims: '' My thought is that if some art is imitation and some is not, neither terms belong to the definition of art as philosophically understood. A property is part of the definition only if it belongs to every work of art there is. With the advent of Modernism, art backed away from mirror images, or, better, photography set the standard of fidelity. '' (Danto, 2014, p. xi). Imitation, then, he continues, stopped capturing the essence of art. It is in more recent art, contemporary art, that artists subtracted aspects that seemed previously important (such as the aspect of beauty) and searched for new criteria. Danto (2014) contextualizes the new understanding of what art is explaining that is was in the 1830's, with the invention of photography by the Englishman William Henry Fox Talbot, and then in 1895, with the screening of these photographs and the transformation into movies with sound and dialogue, art as it had been known prior to that time ended. Photography and film captured motion and 'real' life as it was lived and experienced, thereby, putting an end to the traditional ideas that led from Leon Battista Alberti's definition of art in his On Painting treatise ('' (…) there should be no visual difference between looking at a painting or looking out of a window at which the painting shows.'' (Danto, 2014, p. 1). Movements, artists and paintings begun to show this revolution in art, of which Danto announces the example of Picasso's Les Demoiselles de Avignon (painted in 1907), the works by the Fauve movement and the paintings by Henri Matisse, which all tried to creature something other than realistic images or pictures. The two major artists that greatly contributed to the evolution of art and to the new definition and

understanding of art, for Danto (2014) are: Marcel Duchamp in 1915 and Andy Warhol in 1964. Both of them connected to movements, each of them in some degree philosophical: Duchamp connected to the Dada Movement (that attacked the traditional idea of beauty and taste) whose contribution was mainly the idea that '' (…) something could be art but not beautiful.'' (Danto, 2014, p. 28), and Warhol that was connected to the Pop Art movement, that '' (…) helps us see what is likely to belong to the essence of art for as long as art is made.'' (Danto, 2014, p. 35).

Danto (2014), thus, explains that his view is that the understanding of art has to be a closed concept, with an underlying set of properties that makes it universal, even thought, it is pluralistic. He summarizes: What makes art so powerful a force, (…) is due to what makes it art to begin with. There is nothing like it when it comes to stirring the spirit.'' (Danto, 2014, p. xii).

In his article '*The End of Art: A philosophical defence'* (1998), aimed precisely to arrive at a definition of art that was 'always true'' and universal[75]. For Danto, art's essence is what allows it to be pluralistic in its different materializations, and therefore that essence: '' (…) cannot be identified with any of its instances, each of which must embody that essence, however little they resemble one another.'' (Danto, 1998, p. 128). It is art's essence, and its embodiment through many different materializations that allows art to be so diverse and that grants it its specific nature and significance. For Danto, this diversity is precisely what allows for an artistic essence to be drawn up clearly; by essence Danto means a 'real definition'[76]. This on-going search of his works, begun in the mid-60's, where the prevailing understanding of art was defined by Wittgenstein, (sustained that there can be no definition of art, because no single property could be identified) and more than ever before, there were no similarities between artworks being created at the time (such as Andy Warhol's Brillo Box). In *The Transfiguration of the Commonplace* (1981) (Danto, 1981), Danto (1981) identifies two conditions that define art's essence and that thus define art. The first condition is 'Aboutness', in the sense that one can understand what the artwork is about, what it refers to and what it means[77]. This fact leads to the second condition, which is 'Embodiment': '' An artwork, in this sense, embodies its meaning when it is seen interpretively.'' (Danto, 1998, p. 130); a non-artistic object does not embody a meaning (leads to the loss of interest and a lack of an interpretation process) whereas an artistic object embodies a meaning and generates interest through it's interpretation process. Danto explains that when Hegel spoke of the end of art, he refers to the fact that the artwork no longer was able to present the highest realities in sensuous form, turning it into a mere object: devoid of meaning and interpretation, or in other words, devoid of Aboutness and Embodiment. With this understanding of art, Danto (1981) identifies two fundamentals for art criticism which are the understanding of the content and the explanation of how the content is presented[78], the understanding of it's Aboutness (its meaning) and its Embodiment (how that meaning is embodied).

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[75] '' My aim has been essentialist: to find a definition of art everywhere and always true.'' (Danto, 1998, p. 128).

[76] Reference to: '' (…) a real definition, of the old-fashioned kind, laying out the necessary and sufficient conditions for something to fall under a concept.'' (Danto, 1998, p. 129), which was the main effort that sustained his previous work, *The Transfiguration of the Commonplace* (1981): to create a definition of art, a much needed understanding in the art world of the mid-60's.

[77] In Danto's words: '' But one could always, on the hypothesis that one was dealing with an artwork, ground an interpretive hypothesis - an ascription and a meaning- on certain of its properties, which would have no particular salience if the object were merely an object. '' (Danto, 1998, p. 130).

[78] Danto continues: '' (…) namely, (i) determine what the content is and (ii) explain how the content is presented.'' (Danto, 1998, p. 130).

Danto (2014) in *What Art is* (2014), further sumamrizes that for him works of art have meaning: '' We infer meanings, or grasp meanings, but meanings are not at all material.'' (Danto, 2014, p. 37); meanings are embodied in the work of art, thus, works of art are embodied meanings; as a whole, they possess aspects of themselves that do not possess meaning and others that possess it, thus: '' What the viewer must do is interpret the meaning-bearing properties in such a way as to grasp the intended meaning the embody.'' (Danto, 2014, p. 38). Another quality or aspect that is important, adds Danto, is a dreamlike aspect, (that has to be added to meaning and to embodiment, explains the author). Therefore, Danto explains, a better definition can be drawn of art, derived from Plato's and Descartes's ideas: '' I will define art as ''wakeful dreams''.'' (Danto, 2014, p. 48). Wakeful dreams require humans to be awake to dream. The differences between art and reality are invisible, which is something that Danto claims, he did not understand in his previous definition of art and understanding of 'the end of art'.

Another point raised by Danto (2014) that is a vital essence of what art is, is summarized from Kant's views. He explains that Kant sustained two conceptions of art: the first is related to taste, beauty and the ideas of morality, which set the grounds for the aesthetic theories of the Enlightenment and the theories that followed; however, this first idea, says little about contemporary art where good taste is optional and bad taste is acceptable. The second idea or view, is connected to Kant's notion of what he described as 'free beauty', which '' (…) is also possessed by certain natural objects, like some flowers, birds and seashells. (…) Had abstract painting existed, he would no doubt situated some of it under ''free beauty''.'' (Danto, 2014, p. 117). This idea of free beauty is connected to the concept of spirit, continues Danto, which is introduced in the last chapters of *Critique of Judgment,* and has little to do with taste: '' Taste, he now writes, '' is merely a judging and not a productive faculty.'' (…) ''. (Danto, 2014, p. 117). When Kant speaks of the spirit, he is speaking of a productive faculty, connected to the creative power of the artist. Hence, a painting might be tasteful and appeal in terms of beauty, but might be lacking in spirit, thereby being a poor work of art. This idea of spirit, Danto continues, echoes Hegel's views, where he claims that artistic beauty is '' '' born of the spirit and born again''.'' (Danto, 2014, p. 118). This is also connected to the idea of 'genius' as defined by Kant. Danto (2014) summarizes: '' It is the spirit in art – the presence of genius – that is highly important.'' (Danto, 2014, p. 121). This presence of spirit and genius in art, opens up whole new systems of ideas, and transforms viewers from the inside out; it cannot be taught, there are no rules for achieving it and it has little to do with 'judgments'.

Kant speaks of the spirit as '' '' the animating principle of mind'' which consists in ''the faculty of presenting aesthetic ideas''. '' (Danto, 2014, p. 123); which means, an idea presented through the senses, which is experience by the senses. Aesthetical ideas need to be conveyed by the senses; in doing so, what occurs is that '' The gap between eye and mind has been bridged by ''the middle term of art''.'' (Danto, 2014, p. 121). Kant's views of art as spirit, continues Danto, can describe any art across any time.

Danto summarizes: '' The embodiment of ideas, or I would say, of meanings is perhaps all we require as a philosophical theory of what art is. '' (Danto, 2014, p. 128). And further: '' Self-consciousness is the great attribute of absolute spirit, of which Hegel felt, fine art, philosophy, and religion are the chief and perhaps the only moments.'' (Danto, 2014, p. 149).

Therefore, understanding Art is an interpretative matter (that involves both rational and emotional connections) and relates to it's meaning and how that meaning is materialized[79]. These aspects will be further analysed in the chapters that follow. This is why, for Danto, aesthetics doesn't relate to art (as essence) for it has a narrow understanding of art (the beautiful and the ugly)[80], and thus there should be a distance between the two. It is art's essence (it's meaning and how it is expressed) that is the highest reality of art; but in order for it to be understood, it needs philosophy to clarify what the 'highest reality' is (a term coined by Hegel and used by Dante). He emphasizes: '' It is, however, as free art that art shares a metaphysical space with philosophy: the questions Warhol raises are philosophical questions.'' (Danto, 1998, p. 142).

> ***Synthesis**: For Arthur C. Danto, the new understanding of art relates to art's significance which is its essence: art, then, has o be understood through it's essence (that which is unchangeable, and common to all it's manifestations). It's essence, is defined by Aboutness (its meaning: what the artwork is about, what it refers to and what it means) and its Embodiment (how that meaning is embodied, created and communicated). This doesn't relate to aesthetics (that only considers taste and formal aspects) but instead, relates to philosophy, and the understanding of the 'highest reality'.*

… by Cynthia Freeland: a new contemporary definition of art

Cynthia Freeland *(see Glossary),* in her book '*But is it Art?'* (2002) also tries to understand and define what art is in a contemporary life, explaining that classical aesthetic theories have become too narrow to describe contemporary art. It was Arthur C. Danto, she explains, that opened the doors to the contemporary art world: where art no longer has to be something beautiful, moral, a manifestation of genius, or a devotion to God, but instead needs **only to express a 'meaning', a message within itself (a significance).** However, some works, good art, communicate its meaning in a better way than others, that have little meaning or that do not know how to communicate it, and this defines good art and bad art (the lack of meaning and significance).

Although her views are based on Danto's (1998) theories, she clarifies some further aspects.

One of Freeland's (2002) main ideas, is the fact that in order for this new understanding of art to be understood one has to observe the role of art throughout history; therefore, she creates 'virtual' distinction through five distinct phases or periods (each defined by their own theories, aesthetics and examples). The first phase, fifth-century BC in Athens, can be defined by the 'imitation' theory of art (Plato's creations as mimesis of the eternal ideal realities or 'forms') and the ideas of tragedy (Aristotle's catharsis). The second phase, medieval France, and the city of Chartres (Chartres Cathedral) in 1200, where **art is part of the city's religious and civic life,** and the theories by Thomas Aquinas that **defines beauty as a transcendental property of God** that should incorporate divine principles (rather than imitate them) through proportions, light and allegory (that made allusions to something else through details and forms). The third phase, defined by the formal gardens of Versailles (1660–1715), echoed

[79] In regards to art itself, Danto explains that '' It is not seeing but interpretive seeing that is at issue, which in effect means framing interpretive hypotheses as to meaning. One may respond to them aesthetically as well or one may not.'' (Danto, 1998, p. 133).

[80] For him, aesthetics little described the artistic panorama of the 50's and 60's, and that is partly because aesthetics have dealt only with a narrow understanding of art: '' (…) the beautiful, the ugly, and the plain.'' (Danto, 1998, p. 133), and have given 'taste' a much too central role in artistic understanding.

Kant's theories that defined **beauty as a 'harmony of the faculties'**; this could be found in the garden (also a form of artistic creation); thus, the work of art is understood not as imitation (first phase), not as signification for something else (second phase), but simply because it allows a 'harmony of the faculties', as beauty. The fourth stage, is defined by the premiere of Richard Wagner's opera *Parsifal*, in 1882, and the artistic theories that sustain **art signifies something meaningful** (In *Parsifel*, Wagner celebrates suffering in a story about the loss of innocence and the search to reunite with the Holy Grail; it signifies, spiritual transformation). The fifth, in 1964, with Andy Warhol's *Brillo Box*, that questioned all traditional art forms and led to Arthur C. Danto's definition of art as that which **communicates thoughts or feelings and expresses a 'meaning', a message.** As a summary, art is: imitation (first phase), signification for something else (second phase), 'harmony of the faculties' as beauty (third phase), signifier of something meaningful (fourth phase) and that which expresses a 'meaning', a message and a significance (fifth phase).

The five phases of artistic aesthetics summarized:
(1) **fifth-century BC, in Athens**, where the ideas of tragedy introduced one of the most prominent theories of art, which is the imitation theory. With Plato's ideas of 'techné' or skilled craft as mimesis or imitation, in regards to all forms of creation (poetry, sculpture, painting and architecture); these creations were imitations of eternal ideal realities, 'Forms' or 'Ideas', which led to his exclusion of tragedy from this ideal state (something tragic did not express good values). With Artistotle, tragedy was a focal point that could educate people's feelings and minds: '' If a tragedy shows how a good person con- fronts adversity, it elicits a cleansing or 'katharsis' through emotions of fear and pity. '' (Freeland, 2002, p. 32).

(2) medieval France, and the city of Chartres in 1200, , with an art form that is woven into the city's religious and civic life and the construction of the Gothic Chartres Cathedral. Simultaneously, in Paris, Thomas Aquinas, was the first religious scholar to theorize about beauty, who sustained that '' (…) that Beauty was an essential or 'transcendental' property of God, like Goodness and Unity. Human art-works should emulate and aspire to God's marvellous properties.'' (Freeland, 2002, p. 38). As such, for beautiful creations to be created, they should not try to 'imitate' but instead to incorporate three key principles: proportion, light and allegory (that created through allusions and symbols to something else)[81].

(3) the formal gardens of Versailles (1660–1715), that were seen as high artistic achievements. For Kant, gardens were considered a form of artistic expressions, because it could meet the criteria for 'free play of imagination'. For him the garden wasn't an expression or signifier of social order or the King's value, but instead it allowed for a 'harmony of the faculties', which allowed us to understand it as beautiful. Here, the work of art is understand not as imitation, not as signification for something else, but simply because it allows a 'harmony of the faculties', as beauty.

(4) the premiere of Richard Wagner's opera *Parsifal*, in 1882 and fifthly, in 1964, Andy Warhol's *Brillo Box*. Both artists, the author explains, exemplify the modern notions of artistic personality. In *Parsifel*, Wagner celebrates suffering in a story about the loss of innocence and the search to reunite the Holt Spear with the Holy Grail; it signifies, through its music, spiritual transformation. Warhol, emerging in the 60's as an artistic commercial icon, shaped the transition between New York Abstract Expressionism to postmodernism. For Danto (that tried to define Warhol's art), different people have different ideas of what art is, because they conceptualize and 'theorize' art in a different way. Danto, thus, opens the doors to the art world: where art no longer has to be something beautiful, moral, a manifestation of genius, or a devotion to God, but instead

[81] In the cathedral, everything 'alluded' to heaven, drawing believers closer to God's kingdom, for example, enhancing luminosity demonstrated God's heavenly illumination; the stained glass windows and the sculptures told stories. Allegory, for the medieval builders and thinkers like Aquinas was a way of understanding how God is present in the world; each thing was a sign to something else and each of the elements was subordinated to the overall purpose of the whole. The author summarizes: '' Everything in a Gothic cathedral is like a book full of meaning; cathedrals have been called 'encyclopaedias of stone'. The entire cathedral is an allegory for Heaven, since it is the House of God. All aspects of the cathedral at Chartres had allegorical meaning: the rose window referred to the orderly cosmos. The square, which illustrated moral perfection, was used to design portions of the façade, towers, bases of windows, walls of the interior, and even the stones themselves.'' (Freeland, 2002, p. 41).

needs only to express a 'meaning', a message.

Drawing from the above phases, art has reached a point where it can simply be defined as that which '' (…) communicates thoughts or feelings through a physical medium.'' (Freeland, 2002, p. 58). Another general definition of art, that includes all art forms from all cultures is defined by Anderson, summarizes the author: '' (…) ' meaning, skilfully encoded in an affecting, sensuous medium'.'' (Freeland, 2002, p. 89). However it is Danto's definition of art, as the expression of significance, that is of most value. Therefore, like Danto claimed, '' 'The task of criticism is to identify the meanings and explain the mode of their embodiment'.'' (Freeland, 2002, p. 58). Thus, contemporary art critics and theorists such as Lucy Lippard analyse three particular issues: the work's formal and material properties (how the work was made and what it looks like), its content (the meaning it expresses and the intentions of the artist) and lastly, it's context (the artists inspiration and cultural references)[82]. There are two further issues that the author considers of great importance in understanding art as 'meaning' (message and significance). Firstly, the fact that art is universal and that it's message can be universally perceived independently of cultures; this is sustained by John Dewey (art as a universal language)[83], by Clive Bell (Significant Form) and by Arthur C. Danto *(see Glossary)*. Although art is universal, to understand the meaning of the artwork there is a necessity of understanding additional facts such as why and how the artworks were made. As a summary, to interpret '' (…) is to offer a rational construal that explains the meaning of an artwork.'' (Freeland, 2002, p. 175), and to understand the meaning of the artwork both internal facts (the artwork itself) and external ones (such as the artist's life and culture) need to be understood.

There is yet another aspect that defines art (and contemporary art), and that is the idea that art **expands consciousness and awareness**, the author Freeland (2002) explains. This is sustained by the artist Robert Irwin when he defines art as '' (…) 'a continuous examination of our perceptual awareness and a continuous expansion of our awareness of the world around us'.'' (Freeland, 2002, p. 207). This view summarizes a particular goal of some of the contemporary artists: to expand awareness; but also defines the very traditional arts, such as the Chartres Cathedral. She explains: '' Irwin's definition emphasizes art's role in enhancing our awareness both of ourselves (expanding our perceptual functioning) and of the world.'' (Freeland, 2002, p. 207), claiming that art can indeed do both.

> ***Synthesis:*** *For Cynthia Freeland (2002), following Danto's views, art is the creation and the expression of significance and meaning. The evolution of art can be understood in five stages: art as imitation (first phase), art as a signification for something else (second phase), art as the 'harmony of the faculties' as beauty (third phase), art as the signifier of something meaningful (fourth phase) and art as that which expresses a 'meaning', a message and a significance (fifth phase and the contemporary new understanding of art). This meaning of art is universal, however a contextualization*

[82] Reference to: '' (…) (2) its content (the thought or meaning it expresses); and (3) its context, or place in the Western art tradition.'' (Freeland, 2002, p. 18).

[83] She explains that there are multiple defenders of art as something that is universal. An example is John Dewey, in his book Art as Experience (1934), insisted that art was in fact a 'universal language', and that aesthetic qualities were the same and independent of cultures, which suggests a direct experience of art and a wordless appreciation. Dewey sustained 'the language of art' as something that needed to be acquired, and defined art as '' (…)'the expression of the life of the community'. I like this definition, though I would go further than Dewey in saying we must know 'external' facts before trying to acquire the 'internal' attitude of appreciation for another community's art.'' (Freeland, 2002, p. 64).

always needs to occur through the analysis of both internal and external facts. It is the role of criticism to identify the meanings and explain the mode of their embodiment: this can be done by the analysis of three aspects: formal aspects (how it is made), content (meaning) and context

Summary:

3.1 What is art?:

1. *Art, as the contemporary world understands it, is a very recent idea and concept, traditionally it was simply associated to 'skill' or 'craft' of making something.*

2. *Art, is not craft (a skill), it is not representation (also a matter of skill) , it is not magic (subordination to the qualities of rituals), and it is not amusement (entertainment). These are lower art forms (Collingwood (1938)).*

3. *Lower art, then, is designed to entertain and amuse (creating fantasies that 'pollute the world' (Scrutton (2009)) whereas* ***higher art is that which contains significance*** *and meaning and generates an aesthetic experience.*

4. ***The real work of art, communicates and creates significance, content and meaning*** *(Scrutton (2009), Cary (1984) Pallasmaa (1996) and Saarinen (1984).*

5. ***The significance of the work of art****:*

    - *has a content 'presented' as a whole, inseparable from form and style.*
    - *gives us an explanation for our own existence, grants a sense of belonging (of 'fittingness') and relating us to our highest nature, affirming 'another world' where morality and spirituality (Scrutton)*
    - *relates to the establishment of 'pre-verbal meanings of the world',*
    - *exposes and dwells on the 'riddle of existence' (Pallasmaa (1996))*
    - *connects to the senses and the sensibility of the whole man (Carey (1984)),*
    - *can be associated to a kind of religious experience (Saarinen (1948)).*

3.2. DEFINING AND UNDERSTANDING THE ARTS: A SHARED SIGNIFICANCE

Once the distinction of what makes art be art has been clarified, and an understanding that there is lower art forms and high art forms, it is desirable to observe and define the different types of arts in order to define the three art forms observed and analysed in the present research: architecture, painting and sculpture.

What are the different types of Art?

Fine Arts and Functional Arts: The Traditional Separation

The French *Beaux-Arts* in the eighteenth century system (as previously seen) organized the arts into Fine Arts (Painting and Sculpture) and Functional Arts (Architecture). Scrutton (2009) explains that this traditional distinction derived from a traditional understanding of beauty, where beauty is understood as something superfluous, appreciated for what it is in itself; so, it was not connected to functionality or utility[84] but with play: '' 'With the good, the true and the useful,' wrote Schiller, 'man is merely in earnest; but with the beautiful he plays.'.'' (Scruton, 2009, p. 17). As such, functional arts or useful arts (such as architecture or carpentry) are the arts that have a function, and they are judged according to how well they fulfill it; whereas fine arts, where artistic objects that have no function. However, for Scrutton (2009) this distinction doesn't hold true anymore, because the functional aspects of art cannot be a determining factor (although function and space are vital components of architecture, what makes a work of architecture be an art is not its functional or spatial aspects but the other qualities that sustain it). This idea, already defined by enlightenment thinkers, led to the contemporary understanding of art, that sustains that, art's value exists in itself, and not in its purpose or function.

The Formative Arts: Kant's division and understanding of types of Art

Kant (1976) *(see Glossary),* also didn't consider that distinction to be valid, and therefore created another one that relates to content rather than to function. For him, what all arts had in common, was the manifestation of an 'aesthetic idea', and therefore they should be organized in accordance with how that aesthetic idea was communicated: the arts of speech (rhetoric and poetry), the formative arts (architecture, painting and sculpture, as proposed by the *beaux-arts*) and the art of the play of sensations. The formative arts, as Kant explains, are expressive through 'sensible intuition'[85], relate to the expression of ideas by figures in space, and can either be of sensible truth (sculpture and architecture that uses touch and sight) or sensible illusion (painting which uses only sight). Kant emphasizes that for both forms, the 'aesthetical idea' (the original image in the mind) is essential, only the materialization of it is distinct in its means and

[84] In other words: '' When our interest is entirely taken up by a thing, as it appears in our perception, and independently of any use to which it might be put, then do we begin to speak of its beauty.'' (Scruton, 2009, p. 17).

[85] Reference to: '' (…) those by which expression is found for ideas in sensible intuition (not by representations of mere imagination that are aroused by words), are either arts of sensible truth or of sensible illusion.'' (Hofstadter and Kuhns, 1976, p. 324).

execution[86]. Kant further creates a hierarchical system of importance for the arts, where he emphasizes that poetry is the 'first rank' of all art forms (because it sets the imagination free[87]), and that painting is the most important in regards to the formative arts (because it can penetrate further into the region of ideas).

> ***Synthesis:***
> *The traditional distinction between fine arts (painting and sculpture) and functional arts (architecture) is not valid anymore because function doesn't define a determining factor in art but rather a requirement that needs to be satisfied (Scrutton (2009)). Other distinctions were created, such as Kant's views. For Kant (1976) the arts should be organized according to how they express their aesthetic idea; Architecture, painting and sculpture thus are Formative Arts (expressive through sensible intuition and to the creation of figures in space); these could be further subdivided in two: in sensible truth that uses touch and sight (sculpture and architecture) or in sensible illusion that uses only sight (painting).*

3.2.1. THE ART OF ARCHITECTURE

> *'' Architecture, as with all art, is fundamentally confronted with questions of human existence in space and time, expressing and relating man's being in the world. Architecture is deeply engaged in the metaphysical questions of the self and the world, interiority and exteriority, time and duration, life and death.'' (Pallasmaa, 1996, p. 8)*

Author Johnson (1994) *(see Glossary)* explains that '' The first inklings of architecture as an art starts almost two millennia before Kant. Vitruvius was grateful to his parents for his training in architecture ('' … for being taken care that I should be taught an art.''). '' (Johnson, 1994, p. 180).

The fact that Architecture is an art, is as various authors will show, commonly understood.

Michele Toussaint in his Doctorate thesis entitled *Da arquitectura à teoria e o universo da teoria da Arquitectura em Portugal na primeira metade do Seculo XX* (2009), compares various definitions of Architecture from multiple European dictionaries, both general and specialized, explaining that the artistic aspect of the definition which is present in all of them, is given more emphasis on the specialized dictionaries, that consider it to be a dominant and fundamental aspect of Architecture.

However it is important to understand, that just like the other arts, there can be high and low art forms: which means that there can be artistic creations that are endowed with many significances (high) and artistic creations that are devoid of significances (low). As the work will show, just like all the other arts, the distinction above in valid: there is a lower type of architecture (designed to entertain, amuse or devoid of any aesthetic experience such as mere construction) and there is a higher type of architecture, here understood as the art of architecture, or merely 'Architecture'. Authors that sustain this theory are: John Ruskin (1849), Scrutton (2009), Juhanni Pallasmaa (2011) and others *(see Glossary)*. Where as these

[86] Reference to: '' The aesthetical idea (the archetype or original image) is fundamental for both in the imagination, but the figure which expresses this (the ectopy or copy) is either given in its bodily extension (as the object itself exists) or as it paints itself on the eye (according to its appearance when projected on a flat surface).'' (Hofstadter and Kuhns, 1976, p. 324).

[87] Reference to: '' It expands the mind by setting the imagination at liberty (…), rising aesthetically to ideas. It strengthens the mind by making it feel its faculty – free, spontaneous and independent of natural determination. '' (Hofstadter and Kuhns, 1976, pp. 327, 328).

authors agree that Architecture is indeed an art, and that there is another form of lower type of creation of architecture that can be understood as construction, their views on what makes it be an art differ, and each author defines their own aspects and principles.

The work will thus analyze the different theories that sustain that architecture is an art, and clarify why it is so, with the purpose of creating an overall understanding of what it means for architecture to be an art.

What is Architecture as an Art?

…. By John Ruskin: that which contains principles

For John Ruskin (1819-1900), as explained in his book *The Seven Lamps of Architecture* (1849), there is mere Construction or building (Low Art) and Architecture (High Art). To build, is to '' (…) put together and adjust the several pieces of any edifice or receptacle of a considerable size. '' (Ruskin, 1903, p. 27); in this sense, building (merely edification or construction), doesn't become architecture by the means and the things it constructs. Architecture, as one of the fine arts, continues Ruskin, is something else altogether. Architecture, he claims, begins with the adding of elements, which are useless, in terms of its construction; it is Architecture that guides the decision process about things, which do not have to be that way, but that add other values, dimensions and significance. Architecture, therefore, is defined as: '' ARCHITECTURE is the art which so disposes and adorns the edifices raised by man, for whatsoever uses, that the sight of them may contribute to his mental health, power, and pleasure.'' (Ruskin, 1903, p. 27). Although architecture needs building processes, it concerns itself with aspects that are beyond it's use[88], responding to the aim of contributing to man's health and pleasure. Therefore, for Ruskin, because Architecture is a discipline that influences intellectual and emotional life of man, as such, it should possess principles that endow it with the nobility and the spirituality needed for the maintenance of human life. Architecture should, then, be a manifestation of human virtue and of the order of the divine. In order to do so, it possesses a series of principles or lamps innate to its condition.

The lamps were defined, from personal observation, in his book *The Seven Lamps of Architecture* (1849), as qualities or principles that define good architecture or architecture as an art and aimed to be of aid to the architect. According to Ruskin, all the Lamps or Principles should work together to define Architecture in its most noble and artistic form: an expression of man's creation, that is manifestation of craftsmanship and that fits into the divine order. This type of architecture shouldn't be inventive and original, but instead use the styles already created in a new way, sustaining vitality and spirituality. The best example of architecture, for Ruskin, that incorporates all these principles is the Gothic of the medieval cathedrals and the city of Venice. The lamps identified are the lamp of Sacrifice (1), Truth (2), Power (3), Beauty (4), Life (5), Memory (6) and Obedience (7). Below is a brief summary of each. These will be thus summarized, for they define principles that sustain the understanding of what Architecture is, being vital for the present clarification.

[88] Although it is not easy to clarify this distinction, for architecture needs building processes too, it is '' (…) Architecture concerns itself only with those characters of an edifice which are above and beyond its common use.'' (Ruskin, 1903, p. 29).











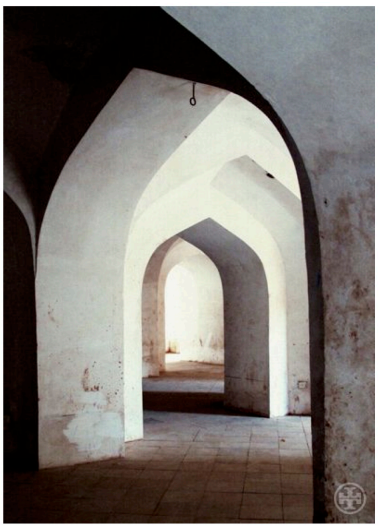


Photo 1: Interior of the Roman Pantheon; Source:https://commons.wikimedia.org/wiki/File:Rome-Pantheon-Interieur.jpg; Photo 2:Adalberto Libera's Villa Malaparte, Capri, 1938; Source: http://www.domusweb.it/en/from-the-archive/2012/07/21/adalberto-libera-s-villa-malaparte.html; Photo 3: Tempietto di San Pietro in Montorio, Rome, 1502, by Bramante; Source:https://en.wikipedia.org/wiki/Renaissance_architecture; Photo 4: Naoshima Contemporary Art Museum by Tadao Ando; Source: http://emrayfo.tumblr.com/post/36132786828/naoshima-contemporary-art-museum-by-tadao-ando; Photo 5:The ***Farnsworth House,*** *designed by Ludwig Mies van der Rohe between 1945 and 1951; Source:https://en.wikipedia.org/wiki/Farnsworth_House; Photo 6: Inside Amber Fortt; Source: https://pt.pinterest.com/pin/251075747955778205/*

PLATE 9: THE ART OF ARCHITECTURE

Lamps of Architecture, by John Ruskin:

The (1) **Lamp of Sacrifice**, is defined by the spirit of 'offering' of 'precious things' **simply** because they are 'precious. Ruskin explains that it is this spirit that: sustains the choice of more costly materials simply because they are more beautiful, that sustains self-denial, self-discipline and restrictions for a cause. It is a practice that is private, and is connected to God. He explains: '' It is not the church we want, but the sacrifice; not the emotion of admiration, but the act of adoration; not the gift, but the giving.'' (Ruskin, 1903, pp. 39, 40). It is the spirit of offering that defines the spirit of sacrifice. Ruskin emphasizes the value of the appearance of labour in architecture (sacrifice of workers), which he considers to be one of the most frequent sources of pleasure which 'belongs to the art'.

The (2) **Lamp of Truth**, is defined by the spirit of honesty and understanding of 'truth', not because truth can be advanced by being incorporated into architecture as an art, but because the work needs to be brought about by truth and in truth. Ruskin explains that the action of imagination is not an act of deception (as previously believed) but an act of truth, '' It is a noble faculty so long as it confesses its own ideality; when it ceases to confess this, it is insanity.'' (Ruskin, 1903, p. 58). The act of painting is not an act of deception (creation of worlds) but an honest act that proclaims the imaginative nature of its creation. In architecture, truth is connected to the honesty of materials, honesty of means and execution.

The (3) **Lamp of Power**, describes the property that defines an architecture that exudes features of power, reflecting in many ways, the power of the divine and spiritual power. These are features that can be both majestic and mysterious or more simple in character, but it's nature exudes power and strength. Ruskin explains that '' (…)whatever is in architecture fair or beautiful is derived from nature; and what is not so derived, but depends for its dignity upon arrangement and government received from human mind, becomes the expression of the power of that mind, and receives a sublimity high in proportion to the power expressed. '' (Ruskin, 1903, p. 101). In this sense, power is connected to the realm of man, and is manifested by two intellectual powers in architecture, that of veneration (a just and humble veneration for the works of God upon earth) and dominion (an understanding of the dominion over those works which has been vested in man). It is an expression of living authority and power that is concordance with the works of nature. The value of architecture, Ruskin explains, depends of the character of power (as perceived by human life) and of beauty (derived from the external appearance of nature).

The (4) **Lamp of beaut**y, then, is identified with the elements of architectural beauty that are connected to imitative forms, only in the sense that they are extracted and derived from nature, for '' (…) man cannot advance in the invention of beauty, without directly imitating natural form. '' (Ruskin, 1903, p. 139). As such, Ruskin summarizes: '' All beauty is founded on the laws of natural forms.'' (Ruskin, 1903, p. 141). However he explains, forms are not beautiful because they 'copy' from nature, but because they portray the principles that define 'beauty', that can only be found in nature, and can never be created by man. Beauty in architecture, then, allows for man to enter a state of rest and contemplation; further, it is associated to the beauty we perceive and search for in the everyday life. Attached to beauty in architecture are two principles: that of abstraction and of proportion.

The **Lamp of Life (5)**, describes the property of architecture (and other art forms) that possesses a vitality of life. Ruskin explains that they: '' (…) in their substance, or uses, or outward forms, are noble or ignoble in proportion to the fullness of the life which either they themselves enjoy, or of whose action they bear the evidence of, (…).'' (Ruskin, 1903, p. 190). He continues, things are noble in proportion to their fullness of life, and in that way, the traces of the creative life, the mind and spirit of man. Accompanying this 'life' in architecture is the reflexion of a struggle toward an independent existence, a valuable existence. Life, then, needs to be portrayed at all stages of the creation process, including the finishes, which define a valuable character of the 'living' qualities of the Architecture. Another form of expression of life contained in Architecture, Ruskin continues, is the expression of boldness from the master architect. 'Living architecture' also possesses 'sensations' in every inch of the creation; through sensations, proportions, forms, and a degree of freedom Architecture communicates and possesses life.

The **Lamp of Memory (6),** portrays a 'remembering' of the greatest emotions and feelings that were brought about by nature, and that should be exuded by architecture; Ruskin claims: '' It is as the centralisation and protectors of this sacred influence, that Architecture is to be regarded by us with the most serious thought.'' (Ruskin, 1903, p. 224). We need Architecture to remember, continues the author, the two conquerors of memory is Poetry and Architecture, and Architecture included Poetry. Architecture, then, is to be made historical and keep records of what is important

for humanity, preserving legacies and nations, becoming memorial and monumental. Architecture, in this way, becomes a temple for man. Maintaining and reflecting memory connects to the understanding and glorification of God; for through our memories, we understand our paths in the world, and Architecture possessing memory, is a reflexion of this journey.

The **Lamp of Obedience (7),** is connected to the 'obedience' of the divine. Ruskin explains: '' Life its happiness, Faith its acceptance, Creation its continuance,— is Obedience.'' (Ruskin, 1903, p. 248). This sense of obedience to a greater and divine order of the world is founded on a type of freedom; although the two seem to be contradictive, continues Ruskin, they are not, for obedience without freedom is merely subjugation; and the perfection of obedience lies in direct proportion to the freedom it carries. So too, in Architecture, in order to keep its continual influence over the emotions of daily life, it needs to possess the quality of obedience to all the laws of nature, humanity and the divine. With this sense of obedience and freedom, originality emerges; originality does not mean an invention of new words or in poetry of new measures, but rather, it means an execution of the liberties through the style that the day of his time possesses.

Synthesis: *For Ruskin, architecture is an art that exists beyond 'building' (mere construction as a lower form); it deeply influences the intellectual, emotional and spiritual life of man contributing to man's mental health, power, and pleasure; as such, it should be a manifestation of human virtue and of divine order, and in order to do so it should possess principles that endow it with the nobility and the spirituality needed for the maintenance of human life. These principles are defined as Lamps, the Lamps of Architecture: The Lamp of Sacrifice (1) defines the dedication of man's craft to God. The Lamp of Truth (2) sustains that buildings should be honest in how they present themselves: honesty in the display of materials, structure and construction. The Lamp of Power (3) defines a quality of strength. The Lamp of Beauty (4) defines a quality that is sustained through the 'imitation' of nature and its principles, being that nature is the only example of real beauty upon which man should 'recreate'. The Lamp of Life (5) defines that architecture should possess a quality of vitality, as such, it should manifest the work of its labourers, the work of human hands. The Lamp of Memory (6), defines a respect for the culture and history that occurred in the past and that should be sustained for the future. The Lamp of Obedience (7), that architecture should 'obey' the rules and laws of life, man and of the divine.*

… by Roger Scrutton: that which moves beyond function and becomes meaningful itself

In a similar manner, Scrutton's (2009) understanding of what makes architecture an art is focused on the moving beyond of the functional aspects (the basic aspects of construction) into other principles. For him, it is the understanding of what these functional aspects mean, and how they should be incorporated into the design, that allows architecture to be significant (to be Architecture) or that can turn it into mere construction. Scrutton (2009) claims that functional aspects of architecture are merely a primary level (a condition that must be satisfied), however it is not of the essence. Architecture as an art implies that other conditions and principles are contained in the work, but also, that the work is an end in itself rather than 'a means to some goal'. In his words: '' We are implying that a work of architecture can be appreciated (…) **as a thing intrinsically meaningful**.'' (Scruton, 2009, p. 18). Scrutton further emphasizes that, architecture is not a means for a purpose but a creation that is intrinsically significant and meaningful in itself. The fact that Architecture is significant in it's own existence (just like any artistic object) can be clarified by the example of the Sancta Sophia in Istanbul that changed it's use multiple times throughout history. As examples of this distinction, he claims: '' Beautiful buildings change their uses; (…). Sancta Sophia in Istanbul was built as a church, became a barracks, then a stable, then a mosque and then a museum.'' (Scruton, 2009, p. 22).

He continues, explaining that architectural function is important to the judgment of beauty, but function is intrinsically connected to the aesthetic goal and not a purpose in itself [89].

Architecture, then, as an art, understands functionalism and the pragmatics of construction that are necessary for its existence, not as the driving force of the creation, but as a background: these are conditions that need to be satisfied, but they do not define the Architectural creation. Just like bones and muscles define the pragmatic motor skills of human existence, they need to be there, in the background, but they do not define the spirit, the energy, the personality or the overall existence of the person. Those, for the person and for Architecture, are defined by other aspects, qualities, properties or principles – its meaning and its significance.

> ***Synthesis:*** *For Scruton (2009) architecture is an art that exists beyond functionality, and incorporates other principles into its creation. Functionality is related to construction, and is only taken into account at a primary basic level. Architecture, then, is that which makes all other decisions from that point on, responding to other conditions and principles and containing them within the work. Architecture, then, as an art, is not a means for a purpose but a creation that is intrinsically significant and meaningful in itself, just like any artistic object.*

… by Norberg-Schulz: that which allows dwelling

Norberg-Schulz (1985) in his book 'The concept of dwelling' sheds some new light in what defines architecture. For the author, architecture is deeply connected to the activity of dwelling; he claims that in general, '' To dwell in the qualitative sense is a basic condition of humanity.'' (Norberg-Schulz, 1985, p. 12). But in order for it to occur, an engagement needs arise; dwelling demands something from us as well as from the environment: we have to have an open mind and the environment needs to allow for rich possibilities to emerge. Thus, the author summarizes: '' To dwell implies the establishment of meaningful relationships between man and a given environment.'' (Norberg-Schulz, 1985, p. 13). It is in 'dwelling' that man finds himself, and a sense of being-in-the-world is established.

To dwell also implies an act of identification (the establishment of a sense of belonging to a place), which can also be understood as the experience of a total environment as meaningful, where some things can stand forth as significant. This process of identification also connects to the qualities of things, as it is deeply connected to the action of orientation which is what defines spatial interrelationships; one can orientate around a space without identifying with it, or one can identify with qualities without orientation, however most of the times these two actions are deeply connected (one might be stronger than the other). In architecture, both identification and orientations are always present: '' Together identification and orientation make up the general structure of dwelling (…).'' (Norberg-Schulz, 1985, p. 15). The author explains that this process of identification occurs with every 'thing' that is the environment (not only with architecture); these 'things' reveal their meaning through their configuration and they can be understood, making a reference to Heidegger when he claims that these 'things' are what create a 'gathering of world'[90]. This 'world', can be thus understood as a multitude of distinct interrelated

[89] Reference to: '' (…) but architectural function is bound up with the aesthetic goal: the column is there to add dignity, (…) and so on. In other words, when we take beauty seriously, function ceases to be an independent variable, and becomes absorbed into the aesthetic goal.'' (Scruton, 2009, p. 22).

[90] '' What then are these things which reveal their meaning through their configuration? Heidegger offers an answer in a famous essay, where he defines the thing as a 'gathering of world'.'' (Norberg-Schulz, 1985, p. 17).

things. However, architecture, as a specific kind of 'thing', possesses specific conditions. The author explains, that identification is more connected to the bodily form where as orientation is more connected to the spatial order of things, and they correspond to the architectural functions of embodiment and admittance.

Norberg-Schulz (1985) writes: '' Works of architecture are objects of human identification because they embody existential meanings, making the world stand forth as it is.'' (Norberg-Schulz, 1985, p. 19). But how does this embodiment occur? He explains that in general, embodiment 'mirrors' other things, and represents a way of being that exists between earth and sky (the two concepts defined by Heidegger). Genius loci, the spirit of a place, is determined by a mode of embodiment which is present; atmospheres (landscapes that are filled with an airy feel) are a good example of this. Through identification man possesses the 'world' which is embodied in the 'thing', and an identity (which can be defined as an interiorization of understood things).

Orientation, which is necessary for identification in most cases (such as architecture), implies that man creates an 'environmental image' or a 'phenomenology of orientation' that creates an understanding of the existential space: this image or phenomenology aims at defining an understanding and meaning of three things: centre, path and domain.

> **The centre**, the basic constituent of existential space, are where primary actions take place, and can be found at all levels; the author adds: '' The centre represents what is known, in contrast to what is unknown and perhaps frightening.'' (Norberg-Schulz, 1985, p. 22); it is the point where man acquires a sense of existence, a sense of 'psychic being' where he 'lingers' and 'lives', and is always experienced as a sort of 'axis-mundi' which unites earth and sky, where movement has stopped and man rests. It is the centre that is the place of the embodied existence and is possesses a sacred dimension of space; '' It represents a 'path' towards a reality which may be higher or lower than daily life, a reality which conquers the gravity of the earth, or succumbs to it. '' (Norberg-Schulz, 1985, pp. 22, 23). It connects to a cosmic existence, and is the place where a breakthrough 'from one realm' to another may occur. **The path** is a complement to the centre, since it implies the actions of arrival or departure; paths which are present in all environmental levels represent a possibility of movement with a purpose (as opposition to getting lost); they entail a direction, which is an intrinsic property of the world; in general, it represents man's world of action: '' (…) man chooses and creates paths which give his existential space a particular structure.'' (Norberg-Schulz, 1985, p. 23). A path always has continuity, is horizontal, and is defined by a certain rhythm, which is a complement to the tension defined by vertical elements. **The domain**, thus, is defined by both centres and paths, and is '' (…) a less structures ground on which they stand forth.'' (Norberg-Schulz, 1985, p. 24). They are distinguished by a quality of uniformity and have a unifying structure in existential space; they complete the network of paths and create a 'space' that is a potential places for man's actions.

Thus, Norberg-Schulz (1985) adds: '' Our discussion of human orientation shows that having a world does not only mean identification with the qualities embodied by things, but also orientation within the space they constitute. Space admits actions, and hence allows life to take place. '' (Norberg-Schulz, 1985, p. 25). All works of architecture need to possess a spatial order of the kind presented above, which is connected to the both the natural world and to the patterns of human action.

Dwelling, then, the author adds, can occur in four modes of architecture and ways of dwelling in it: (1) as settlement, where natural dwelling takes place and is deeply connected to the natural world; (2) collective dwelling, which is connected to the activities of gathering and assembly in urban spaces; (3) public dwelling which is the engagements that occur in public spaces, shared by a community; and lastly

(4) private dwelling which are the actions that occur in a house or a home. Following is a brief description of these four types of dwelling:

> **(1) settlement:** to settle means to delimit an area, and thus, to settle is mainly a point of arrival; the settlement becomes a centre and invites man to dwell; it can be large in scale (such as a town) or small (such as a farm or a village that are related to their immediate surroundings); it implies a 'friendly' relationship with the site in which it is based, where man respects and caters the landscape, revealing them and cultivating them; thus, '' The settlement interprets the site and transforms it into a place where human life may take place.'' (Norberg-Schulz, 1985, p. 31); in interpreting the site, the settlement makes its properties come alive, accentuating it's character; it is usually revolved around natural centres already proposed by the landscape itself such as high hills; a natural centre is where earth and sky are interrelated to form a conspicuous totality. As such, '' When a natural centre is used for the location of a settlement, architecture serves to reveal and emphasize qualities that are already present.'' (Norberg-Schulz, 1985, p. 31); this is defined as a process of visualization. An example are the Italian hill towns, that use the hill tops for settlements. When a natural centre is not present, architecture has to add what is absent, in a process of complementation: building thus define an area, and establish a relationship between earth and sky. The morphology of a settlement is usually defined by its skyline, and by it's silhouette. An example of this is the old city of Jerusalem, where the contents of the city are signalled by the turrets and the domes. The topology of the settlement is defined by one of the three types: the cluster (elements or buildings organized in simple proximity without order or symmetry), the row (where buildings are placed along a continuous line) and the enclosure (where they form a closed figure around a space). The topology can be defined by two interrelated properties: the form like built form and a space organized in terms of centres, paths and domains, where the built form gives character to the individual spatial elements. Together, the built form and the organized space make up a place. Norberg-Schulz (1985) adds that the loss of settlements in the contemporary world has led to a continuous loss of place; it is a result of continuous planning, and has brought about a weakened sense of human belonging and thus a loss of identity.
>
> **(2) collective dwelling, meeting as public space:** the city is the place where man discovers possibilities, engages in meetings and encounters others; things reflect each other, and out of these reflexions images arise around which our existence is defined. '' Meeting and choice are hence the existential dimensions of the city. Through meeting and choice we gain a world and remember Wittgenstein's words: 'I am my world.'.'' (Norberg-Schulz, 1985, p. 51); in the city, we have a world, we can dwell, and gain an individual identity within a complex dimension; it creates a self identification 'I am a New Yorker.'; and there life is presented in a multitude of options and richness. This type of collective dwelling is not only a mere coming together, but a being in the world somewhere as someone; it is the place that makes life itself be visible; we are conditioned by the place and gain our identity according to that place itself; public spaces and cities gather worlds that both close and distant always promoting a kind of approximation and likewise, distancing. The activities of meeting and choice are connected to the concepts of identification and orientation; meeting allows for orientation whereas choice implies identification. The form of the settlement or of the public space should thus allow for these two activities to emerge in a way that a world is created; it implies density (proximity between elements), variety, and continuity (a fundamental property of urban interior), which compose the three main properties; the morphology, thus, with those three properties, can be defined by the elements of street and square; the topology can be defined as the property of being enclosed in the sense that they have to create a sense of an interior; and lastly the typology is defined by its public spaces, such as its squares. In all cases, Norberg-Schulz (1985) accentuates the importance of sustaining the *genius loci* of the urban place.
>
> **(3) public dwelling or institution:** public buildings are defined by the common idea of collective dwelling, allowing for the accent of common consent to occur, but, more specifically, they have to '' (…) give concrete presence to the meaning of these actions as a way of life or a mode of being-in-the-world.'' (Norberg-Schulz, 1985, p. 71); the building should promise the ideal of how things are, and it should carry the meaning of itself within its space in all its microcosms; it shouldn't act as an abstract symbol but as a partaker of life itself, relating to both the timeless and the common day-to-day. Institutions such as museums, organize society itself, and keep the memories of mankind; thus, '' (…) when we use these institutions the world is opened up, and belonging realized.'' (Norberg-Schulz, 1985, p. 71). Public dwelling implies a correlation and identification with the poetical meanings defined by the architecture; it

allows for both embodiment and admittance. The morphology of the institution, thus, as the embodiment of meanings, is defined by a sense of spatiality that aims to be concrete rather than abstract, actualizing the world in a specific kind of way. The topology is defines by spatial composition, and volumetric figures which reveal existential spatiality. These are in direct opposition to the modern ideas of free plan and spatial flow, however, these still emphasize centres and directions. Lastly, the typology can be defined by forms that rise towards the sky. Overall, the qualities rely on the hierarchical symmetries and the volumetric compositions. The best examples of this type of institution, for the author, are the ecclesiastical architectural examples of Europe, and the Greek Ancient temples.

(4) private dwelling or home: it is in the house that man becomes familiar with the world; he does not have to choose between paths, but finds a place where daily life occurs. '' Daily life represents what is continuous in our existence, and therefore supports us like a familiar ground.'' (Norberg-Schulz, 1985, p. 89). It acts like a cradle, allowing man to dwell peacefully and intimately; thus, it is personal identity which is the content of private dwelling. In the house, what occurs in the world of phenomena rather than explanations which occur in the public spaces. The house also visualized the atmospheric qualities of the environment acting on man, and expresses the mood of the actions that there occur. It is endowed with properties of warm welcome, of celebrating light, of a sense of togetherness, a festive and liberating character and lastly, a harmonious intimacy. The author adds: '' This is the task of the house: to reveal the world not as essence but as presence, that is, as material and colour, topography, vegetation, seasons, weather and light. .'' (Norberg-Schulz, 1985, p. 89). It is the house that allows for the development of personal identity, thus it is identity that should determine the form of the house. The morphology of the house, thus, is the creation of a microcosms, creating a space within a space, infinitely, for every action and dwelling that occurs. The topology, although less formal than the public institutions, is more complex, for it constitutes a highly complex spatial organism for multiple differentiated functions of daily life; the three basic principles previously defined define the basis of the house topology. The typology is evolving: it begun as the *domus* and the *insula* in ancient Rome, and has evolved continuously to the present day; what all of them in common, is the aggregation of individual areas or rooms, on which different activities occur and develop as different types of dwelling.

This language of architecture (that allows for dwelling to occur) can be understood as morphology (how something is built, defining the formal aspects), topology (concerned with spatial order, can be defined as 'spatial organization') and typology (connected to the archetype)[91]. Thus, when morphology, topology and typology, the language of architecture, is used to express the actual circumstances, the general relates to the local and temporal, and the existential nature of man and place occurs.

It is language that defines the common denominator between the four types of dwelling. Making a reference to Heidegger, Norberg-Schulz (1985) explains that language comprises the whole of reality, and is considered as a 'house of being'. Architecture is a language because it embodies meanings, as poetry: '' (…) meanings that are too deep for words.'' (Norberg-Schulz, 1985, p. 111).

Synthesis: *Architecture creates the possibility of dwelling which implies the establishment of meaningful relationships between man and a given environment; It is*

[91] **Morphology, Typology and Typology:** Morphology is concerned with the how something is built, defining the formal aspects; in existential architectural space, should be concerned with the connection between earth and sky, how It stands (relationship to the ground, to earth), how it rises (relationship to the sky), and how it opens up (relationship to the environment, the connection between outside and inside). Topology is concerned with spatial order, can be defined as 'spatial organization', is connected to the idea of *topos* (which is the Greek for place), and is composed of the ideas of centre, path and domain; and lastly typology, is concerned with the modes of dwelling: '' The very word indicates that places are not an endless multitude of basically different cases, but constitute a universe of meaningful identities.'' (Norberg-Schulz, 1985, p. 29); and lastly, typological differentiations include the notions of 'tower', 'dome' or 'hall', which are connected to language, and can also be considered to be architectural archetypes. Norberg-Schulz (1985) adds that architectural archetypes may be defined by modes of dwelling concretized by the general principles of embodiment and spatial organization; thus, typology relates to language and to the creation of archetypal standards.

> *in 'dwelling' that man finds himself, and a sense of being-in-the-world is established. Dwelling implies an act of identification (the establishment of a sense of belonging to a place), and orientation (spatial interrelationships) through which the environment is experienced as significant. The architectural ideas and means that are used to make man's 'being-in-the-world' a fact are embodiment and admittance; embodiment is connected to the built form whereas admittance is connected to organized space. Thus, the previous analysis of architectural organization needs to exist within the multiple forms of existential environmental levels (the four types of dwelling) which are presented as qualities that exist as expressive possibilities*[92] *and can be understood through their language (morphological, topological and typological).*

… by Norberg-Schulz: that which is poetic and establishes a world

Besides the idea of dwelling, of embodiment and the other concepts previously announced, Norberg-Schulz (1985) also adds other aspects that are deeply important. Deeply influenced by Heidegger's views on art and architecture, he claims: '' Together with painting, sculpture and music, Heidegger explicitly names architecture as one of the arts which '' in essence is poetry''. In general, '' art is the setting-into-work of truth''. Basically this happens as a 'poetic projection' (…). '' (Norberg-Schulz, 1985, p. 112).

From Heidegger, Norberg-Schulz (1985) continues, it is possible to understand that architecture as an art does not represent anything, but rather it presents: bringing something into existence. It brings into existence God, the destiny of human beings, and makes all things of the earth visible (the rocks, the animals, the sea, the air, and the darkness). In doing so, the temple, echoing Heidegger's example, opens up a world, setting truth into work. It accomplishes this, by, what Heidegger defined as 'standing there'. The temple, Norberg-Schulz (1985) continues, stands there, in a promiment place, forming a holy precinct. He adds: '' How the building makes the destiny of people present, is not explicit, but it implies that this is done simultaneously with the housing of the God, which means that the fate of the people is also intimately related to the place.'' (Norberg-Schulz, 1985, p. 117). Thus, architecture as a work of art makes the place be what it already is, giving a thing or a place, the world, presence. Norberg-Schulz (1985) explains that what a poem and a work of art (including architecture) have in common is precisely the figural quality they embody and the ability to create a presence.

Thus, a work of architecture, Norberg-Schulz (1985) continues, does not exist in a vacuum but in the world of things and human beings and thus, reveals this world. It is architecture, continues the author that allows man to 'dwell poetically', dwelling poetically can occur because he is able to listen to the 'sayings of things'. This occurs when architects are able to translate into a form and a space, what is apprehended as 'world' into an architectural language.

A work of architecture, therefore, is the result of a poetic understanding of the world; it allows for both embodiment and admittance; the building embodies a way of being in the world, through the way it stands, rises and opens. The embodiment always occurs as a 'something' but always represents the union between earth and sky and represents the conquest over chaos. As a synthesis, the author claims: '' The meaning of a work of architecture therefore consists in its gathering the world in a general typical

[92] Norberg-Schulz (1985) explains: '' The qualities exist as expressive possibilities, which have to be set into work as settlement, urban space, institution and house.'' (Norberg-Schulz, 1985, p. 26).

sense, in a local particular sense, in a temporal historical sense, and finally as something, that is, as the figural manifestation of a mode of dwelling between earth and sky.'' (Norberg-Schulz, 1985, p. 30).

> ***Synthesis:*** *For Norberg-Schulz (1985), architecture is the result of a poetic understanding of the world; it's relation to the other arts is the figural quality they embody and the ability to create a presence. Embodiment, is a vital aspect of architecture and can be defined as an embodiment of a way of being in the world. Architecture allows man to 'dwell poetically'; architecture as a work of art makes the place be what it already is, giving a thing or a place, the world, presence. The significance of a work of architecture therefore consists in its gathering the world establishing a mode of dwelling between earth and sky.*

…by Hegel: that which portrays beauty and is an expression of spiritual freedom

According to Hegel *(see Glossary)*, as explained by author Houlgate (2014), there are two distinct ways in which architecture can be art: firstly it can portray beauty, and secondly it can be a sensuous expression of divine and human freedom (like all other art forms). However, for Hegel, architecture as an art always falls short of possessing the genuine beauty of genuine art, for it is never the direct sensuous expression of spiritual freedom itself. This fact is a limitation of architecture: architecture can symbolize meaning but it can't be the spiritual freedom and become the explicit manifestation or embodiment of free spirituality itself. Although it can never achieve the qualities of other artistic forms, it can be an art nonetheless, and it can achieve this in two distinct ways: Firstly it can create a space that as art (through regularity, symmetry and harmony) allows for the accommodation of other artistic forms such as sculpture[93]. Secondly, architecture can be more symbolic in nature, and become itself partly sculptural and partly architectural (sculptural as it is built for it's own sake and not to house something else, and architectural as it is creating space through mass). Both these types of works of architecture acquire a value as art, because they contain a significance within themselves as art.

> ***Synthesis:*** *For Hegel, what makes Architecture an art, is the fact that, like other art forms, it can communicate beauty and be a sensuous expression of divine and human freedom. Although it can't ever do that at the high levels of the other art forms, it can still communicate significance and meaning: either by being a space that accommodates art, or in being sculptural. For Hegel, it is in being Sculptural that Architecture can raise its value and embrace (and create) new meanings, in that way, drawing from both disciplines, it can have the best of both worlds.*

… by Pérez-Gómez: that which echoes Spiritual, Poetical and Ethical desires…

Pérez-Gómez *(see Glossary),* in his book *Built upon Love* (2008), claims that a meaningful architecture both fulfils material needs, and remains aware of the 'worlds resources' for the perpetuation of human civilization. For this, architecture must be in fact 'built upon love'. Looking at architectural history, the author explains that '' Impressive buildings were constructed to fulfil spiritual needs that seem almost absurd from a late modern perspective (…).'' (Pérez-Gómez, 2008, p. 4)**;** it was human spiritual desire and the idea of a sustainable development that deeply shaped the built environment. Understanding

[93] The art of architecture allows for sculpture to be free (as in the example of the Greek Temples) and in this purpose of shared meaning, exists it's own significance The architectural object has an added meaning that is outside of their artistic presence, such as housing a pharaoh. '' Hegel claims that the pyramid is the image or symbol of symbolic art itself . '' (Houlgate, 2014).

architecture as an art, is understanding the relationship between love and architecture, finding points of contact between poetics and ethics: the quest for beauty and the common good. Thus the author proposes an uncovering of deep connections between ethical and poetic values in the primary tradition of Architecture.

At this point, the issues raised by Pérez-Gómez (2008) seem to be defining an architecture that is rooted in principles rather than defining if architecture is or not an art. This is of the utmost importance in the present thesis, because it is the principles and values that sustain art that are of value. However, as the work will show, the principles announced define art itself, and are part of architecture in the same way. The author continues establishing that connection, and arrives at the same idea that for architecture to embody these values and principles, it is indeed an art.

For Pérez-Gómez (2008), he continues, what makes architecture an art, is a connection to the idea of love, from which spiritual, poetical and ethical desires are made manifest. For him, thus, love is a crucial essence of the world, of humanity, and of all the arts, especially architecture (the art that should mostly be rooted in spiritual, poetical and ethical desires). Love, despite its contradictory nature, can indeed be spoken about and understood. 'Love' or architecture built upon love, allows for an engagement, transforming the viewer into a participant; this engagement, explains Perez-Gomez is obvious, and if it is not so, it is only because 'architectural meaning' has been attached to (in a deceptive way) our desires for happiness and hedonism. Love, the author explains, '' (…) in its multiple incarnations as desire, is as open-ended as life itself and remains the ground of meaning even in times of obsessive materialisms.'' (Pérez-Gómez, 2008, p.5). It is the root of architecture as an art and the source of the poetic image.

As an art, he continues, architectural creations have something in common: they posses qualities, principles and poetic images that allow us to recover the spiritual dimension of the world:

> '' The miraculous eloquence of the poetic object invites a recollection of being and an opening of vision through light and rhythm. These are the qualities that we find in artifacts as diverse as Le Corbusier's La Tourrette, the Catholic and Protestant architecture of Antoni Gaudi and Sigurd Lewerentz respectively, the minimalistic architectural objects of Juhanni Pallasmaa, the books of John Heijduk, and the luminous spaces of Steven Holl. The significance of these works has nothing to do with style, and yet they have something in common that is worth exploring further.'' (Pérez-Gómez, 2008, p. 109).

…. by Juhanni Pallasmaa: that which creates ontological understandings

Juhanni Pallasmaa (2011) defines a specific view of what makes architecture an art. For him, the artistic value of architectural is similar to that of the other art forms, however architecture has the power to create an 'embodied spatial experience'. For him, the artistic value of architecture, what defines it as an art is **the existential human aspects** that emerge from the experience through fascination and wonder ('' (…) architecture aspires to express the human condition, **the experience of our existence** in the world.'' (Pallasmaa, 2011, p. 99)). Thus, what occurs in this significant architectural encounter, is the communication of **cosmological, ontological and existential values and principles** that allows man to understand his place in the world, by providing a 'cosmic and mental' space for man's existence. It is this fact, this communication of these values that makes architecture be an art. This experience, the fundamental significance of architecture as an art, emerges without a 'conscious understanding',

emotionally and not intellectually and is the materialization of the invisible, (a 'reactivation of occult images' that define our existence).

For Pallasmaa (2011), these principles and values in Architecture (artistic values), are materialized through three aspects: occupation, habitation and glorification (echoes the words of Ludwig Wittgenstein when he claims that ''Architecture immortalizes and glorifies something.'' (Pallasmaa, 2011, p. 97)). An example of this is the temple as defined by Heidegger[94]. Architecture, thus transforms the vulgar and the ordinary reality ('chaos') into a cosmos, defining man's being in the world by responding to the inner necessities of 'order', 'protection' and 'glorification'. In order to achieve this, it has to, not only establish a 'cosmos' (an order in the randomness) but also is a 'cosmos' in itself by embodying cosmological principles that act as a signifier of the order of the cosmos.

As an art, what architecture glorifies can be very diverse: examples of these principles and significances can be found throughout the thesis and more specifically in the case studies.

Examples of ontological values of Architecture:

As an example, of the ontological origin of Architecture, Pallasmaa refers to Louis Kahn's architectural creations, claiming that his biggest contribution was the 'rediscovery of the ontological essence' of the various aspects of architecture; 'what a building wants to be' and what are the 'atemporal' traditions of this 'form' of art; by this way, his work, Pallasmaa claims, '' emanates an emotive archaic power'', especially when in relation to the relation to the contemporary International style that relies in product of rationality and technical canons. With its roots in classical architecture (Greece, Rome and Egypt) Kahn was able to grant his architecture with a new 'origin'. Other works that echo ''the origins'' says Pallasmaa, are the works by Louis Barragan, Aldo Van Eyck, Sverre Fehn, Alvaro Siza and Peter Zumthor; these works posses an 'emotive power', a 'presence' and a 'deep sentiment'.

…. by Zumthor: that which creates insights, understanding and truth (poetry)

Peter Zumthor in his book *Thinking Architecture* (2014), claims that it is in intense memories of past architectural experiences that his idea of what architecture is and what it should do is rooted and grounded. He explains: '' Memories like these contain the deepest architectural experience that I know. They are the reservoirs of the architectural atmospheres and images that I explore in my work as an architect. '' (Zumthor, 2006, p. 8). For him, he continues, architecture is a deep experience that resonates within the user in multiple ways. But in order to do so, architecture has to possess various aspects. The first aspect that Zumthor (2014) points out is the act and art of construction itself; for Zumthor, not only is architecture an art, but the act of construction itself is also an art. He claims: '' Construction is the art of making a meaningful whole out of many parts. I believe that the real core of all architectural work lies in the act of construction. (…) I feel respect for the art of joining, the ability of craftsman and engineers. '' (Zumthor, 2006, p. 11). It is this art of joining things together, and creating a meaningful whole out of those many parts, that Zumthor considers to be vital in architecture. A second aspect that he announces of the utmost importance is the idea of poetry and truth; on this issue, he claims that when he was a child, he

[94] He explains that architecture, through it's existence materializes the invisible, allowing man through it's experience, to find his own place in the world and understand those invisible forces of the universe (example is the temple as defined by Heidegger). A deep experience of architecture emerges emotionally and not intellectually, out of a totality that comes from the 'reactivation of occult images', that are part of our existence in the world; thus, its artistic power, is in the ability to condition the existential experience directly, without a 'conscious understanding'. Pallasmaa summarizes that both Heidegger and Bachelard define architecture as a means that defines an 'experimental order' and a 'fundamental significance'.

used to think of poetry as a 'coloured loud' that possessed metaphors and allusions that were illusive and diffuse, and that were not relatable to the world in any way; however, as an architect, he continues, he understand that this is not the case, but in fact the opposite of it is more correct[95]. Poetry and architecture, for Zumthor, have a very close relationship, when architecture is art. Architecture, then, is a work of art when forms and contents combine and provoke a strong mood. In his words, he writes: '' If a work of architecture consists of forms and contents that combine to create a strong fundamental mood powerful enough to affect us, it may possess the qualities of a work of art.'' (Zumthor, 2006, p. 19). This artistic aspect of architecture, however, has nothing to do originality, 'interesting configurations', innovation or novelty, but instead is connected and concerned with '' (…) insights and understanding, and above all with truth. Perhaps poetry is unexpected truth. It lives in stillness. Architecture's artistic task is to give this still expectancy a form.'' (Zumthor, 2006, p. 19).

It is possible then to summarize Zumthor's views on architecture as art as such: that architecture can be an art when it manages to provoke moods and emotions in the viewer, that that artistic quality of architecture is connected to truth and understanding, that idea of truth can be understood as poetry in itself and lastly, that it is the role of architecture to create a form of stillness for that truth. He concludes: '' The building itself is never poetic. At most, it may possess subtle qualities, which, at certain moments, permit us to understand something that we were never able to understand in quite this way before.'' (Zumthor, 2006, p. 19). These ideas will be further analysed in his case study, in Chapter 6.

…. by Perez-Gomez: that which creates poetical and cosmological values as a totality

For Perez-Gomes (1994) for architecture to be an art, it must possess poetical and cosmological aspects/principles that grant it specific meanings and significances. For the author, this connection to the cosmological aspects of humanity and of the universe, as a principle aim of Architecture, was already defined by Vitruvius, for whom Architecture signified the order of the cosmos [96]. Associated to this creation of poetical and cosmological values, is also the idea of the *Chora* (Greek concept that clarifies the indissociability between matter and space). For him, the significant presence of the architectural space (the poetic mobility), emerges from the union of a series of properties (elements, contemplative and inviting nature) that endow it with a significant presence. In his words: '' It is simultaneously the work and the 'space', it's ground and lighting; it is that which is unveiled, the ''truth'' embodied by art, and the ''space'' between the world and the experience. '' (Holl et al., 1994, p. 18). Therefore the meaning and significance of Architecture lies also in its 'invisible significance' as a totality.

… by Alain de Botton: The Significance of Architecture as defining a way of life

Alain De Botton (2008), to clarify the importance and role of Architecture, makes a reference to the theories of John Ruskin, when he proposes that we want two things of our buildings: firstly that they

[95] Reference to: '' In my youth I imagined poetry as a kind of coloured cloud made up of more or less diffuse metaphors and allusions, which, although they might be enjoyable, were difficult to associate with a reliable view of the world. As an architect, I have learned to understand that the opposite of this youthful definition of poetry is probably closer to the truth.''. (Page 19).

[96] Perez-Gomes (1994) claims that according to Vitruvius: '' (…) the discursive order of cosmology was the significature of the constructed work, to which he refers as named as significant, the architecture that signifies. In other words, traditional architecture signified, for all of society, the order of the cosmos.'' (Holl et al., 1994, p. 10)

'shelter' us, secondly, that they speak of what we 'need to be reminded' of. The duty of architecture, for the author, lies in the ability to transform the merely functional and practical into something beautiful that both 'shelters' and 'reminds', allowing for different associations and meanings to emerge. The role of architecture (its meaning and significance), then, is to define an ideal way of life. As a synthesis, in his words: ''Belief in the significance of architecture is premised on the notion that we are, for better or for worse, different people in different places - and on the conviction that it is architecture's task to render vivid to us who we might ideally be.'' (De Botton, 2008, p. 13). Choosing a building or an object (art, architecture or design), is thus, choosing a certain way of life.

… by Rudolf Steiner: The art of Architecture as a spiritual occurrence

According to Rudolf Steiner, Architecture can only be considered Art when the architectural forms respond to spiritual dimensions of the human being; thus, as an Art, '' (…) architecture refers to a time beyond this life.'' (Steiner, 1992, p.145). Architecture as art, for Steiner (1992) creates a space for the encounter and departure of the soul; therefore, to understand the artistic aspect of architecture is to understand the ways in which the soul reacts to space (when it leaves the body) and what it's needs are in order for it to occur[97]. It is this timeless condition and aspiration of architecture that allows it to become art: addressing the human spirit, and allowing for a connection with the soul.

… by Bruno Zevi: The art of architecture as an interior space

Bruno Zevi (1977) explains that one of the problems derived from treating architecture as an art closely related to painting and sculpture (derived from the Beaux-Arts system, as previously explained) is that art critics engage in an architectural discourse that merely observes externally and superficially the plastic phenomena of architecture. This, he continues, '' Is an error of a philosophical attitude.'' (Zevi, 1977, p. 13) [98]. With this union of the arts, it seems, Zevi continues, that any art critic has the capacity to analyze architecture, however that is not the case; these art critics engage in an architectural discourse that only describe pictorial values, completely discrediting and neglecting the architectural essence; in this way, Zevi (1977) claims: '' (…) they forget that what is specific of architecture is, therefore, different from sculpture and painting, that is, deep down, what makes architecture be what it is.'' (Zevi, 1977, p. 13) [99].

For Zevi (1977), the main essence of architecture that makes it be different for the other artistic activity is the fact that it uses a three dimensional vocabulary that includes man; where as painting is two dimensional, sculpture is three dimensional but it excludes man, architecture is three dimensional and it engages man. The author further explains that there are multiple dimensions that are common to all the arts: such as for example the use of the forth dimension, the temporal aspect, which is used by painting, sculpture and by architecture itself. But therefore, because all of the arts use it, it cannot

[97] The author continues explaining that: . '' If we want to understand the actual artistic aspect of architecture we always have to look at where the human soul is leaving the body and what its needs are in regards to space.'' (Steiner, 1992, p.144). and rhat '' (…) architecture refers to the soul's departure from the body, and the art of dress to the soul's departure from the body, and the art of dress to the soul's coming into the body.''' (Steiner, 1992, p.145).

[98] Free translation from: '' Em vez de uma falta de método crítico, é um erro de atitude filosófica.'' (Zevi, 1977, p. 13)

[99] Free translation from: '' Desta forma, esquecem o que é especifico da arquitetura e portanto, diferente da pintura e da escultura, isto é, no fundo, o que vale na arquitetura como tal.'' (Zevi, 1977, p. 13)

describe architectural essence. What defines architectural essence is an interior space. He claims: '' Beautiful architecture is that which contains an interior space that attracts us, elevates us, and subjugates us spiritually; ugly architecture is that which bores us and repels us. But the most important thing is to establish that architecture has an interior space.'' (Zevi, 1977, pp. 23, 24) [100]. Zevi's definition of architecture does create some difficulties of understanding in regards to where architecture ends and sculpture begins for a number of reasons: firstly because for him all architecture that does not have an interior space is not architecture, and secondly, therefore, everything that does have an interior space is architecture. This idea is conflicting with numerous works of art and of architecture: such as the works of Richard Serra, which create an interior space but are not considered architecture. However, besides this, the definition does create a specific idea of what the art of architecture is: it is an interior space, which creates positive emotions and elevates the spirit, acting spirituality on man through it's experience. He summarizes: '' That space, the void, is the protagonist of architecture, (…) is natural because architecture is not only art neither an image of historic life, (…) it is also, and mainly, the environment where our life is set.'' (Zevi, 1977, p. 28) [101]. These ideas of the differences between architecture and the arts of painting and sculpture will be further analyzed in the following chapter.

…By Jorge Cruz Pinto: Architecture as divine inspiration

Jorge Cruz Pinto (2007) in his book '*Ver, Desenhar, Imaginar, Projectar*', defines architecture as '' (…) a fundamental construction of a superior value, a 'archi-tectonic' (technique of divine inspiration), that in it's poetical sense expressed by its aesthetic qualities of form, composition, proportion, construction, symbolic and inspirational intentionality, differentiates itself and places itself above the prosaic and merely utilitarian constructions.'' (Pinto, 2007, p. 21)[102]. 'Archi-tectonic' as a technique of divine inspiration, is an expression firstly used by Severino[103]. It is in this way, Pinto continues, that architecture has been generally considered the house of both men and Gods. Another point that the author emphasizes is that architecture, as the art of qualifying space, adapts to the pragmatic, aesthetic and psychological aspects of 'living'. He sustains that the greater architecture's capacity is to integrate and articulate its various intentions (pragmatic, technical, aesthetic, psychological, ethical) the bigger it's intrinsic value will be of surviving time, use and interpretation. In this way, he claims, '' Form follows intention, for intention is the direction of the conforming force which determines it, ' the force is the substance of sensation' as claimed by Fernando Pessoa, (…).'' (Pinto, 2007, p. 21)[104].

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100 Free translation from: '' A arquitetura bela será a arquitetura que tem um espaço interior que nos atrai, nos eleva, nos subjuga espiritualmente; a arquitetura feia será aquela que tem um espaço interior que nos aborrece e nos repele. Mas o importante é estabelecer que tudo o que não tem espaço interior não é arquitetura. '' (Zevi, 1977, pp. 23, 24)

101 Free translation from: '' Que o espaço, o vazio, seja o protagonista da arquitetura, se pensarmos bem, é natural, porque a arquitetura não é apenas arte nem só imagem da vida histórica, ou de vida vivida por nós e pelos outros; é também e sobretudo, o ambiente, a cena onde decorre a nossa vida. . '' (Zevi, 1977, p. 28)

102 Free translation from: '' A Arquitectura é entendida como construção fundamental de valor superior, como ''arqui-tectónica'' (técnica de divina inspiração) que no seu sentido poético expresso pelas qualidades estéticas da forma, composição, proporção, construção, intencionalidade simbólica e inspiração, se diferencia e se coloca acima das demais construçoes prosaicas ou meramente utilitarias. '' (Pinto, 2007, p. 21)

103 Paraphrased by Eugenio Trias in his book Logica del Limite, p.79 (Ediciones Destino, Barcelona, 1991).

104 Free translation from: '' '' (…) A forma segue a intenção, pois a intenç\ao é a direcção da força conformadora que a determina, e 'a força é a substancia da sensação' conforme afirmou Fernando Pessoa, (…).'' (Pinto, 2007, p. 34)

… by Le Corbusier

Le Corbusier had a very unique view of what architecture was and what it was capable of doing. Le Corbusier, in his book 'Toward a New Architecture' explains that Architecture is an 'artistic fact' that deals with the stirring of emotion; as such, it is completely different from mere construction (which is that which holds things together and is a skill). In his words: '' ARCHITECTURE is an artistic fact, an emotional phenomenon that is outside questions of construction, beyond them. Construction: THAT'S FOR MAKING THINGS HOLD TOGETHERE; Architecture: THAT'S FOR STIRRING EMOTION.'' (Corbusier and Cohen, 2007, p. 97). This distinction makes it clear that for Le Corbusier not everything that creates space is architecture… there is a difference between construction (mere building things together) and Architecture, as that which creates emotions[105]. Therefore, for Architecture to exist an Architectural Emotion needs to be created and occur; architectural emotion occurs when the works resonates inside of us and is in tune with the universe (as an echo of universal laws). Thus, our ability to recognize beauty is linked to that which 'touches the heart and minds': which is Architecture and is Art; it occurs by the transcendence of the requirements through the establishment of new connections that stir up emotions. Thus, the architectural work to be elevated to the condition of an art needs to arrange the elements in such a way so that they create a poetic instance and act emotionally and powerfully on the senses of man, communicating a sense of 'order' or a vision of the world. These ideas will be further analysed in his case study, in Chapter 6.

… by Frank Lloyd Wright

Wright in an essay titled *A Philosophy of Fine Art* (1900) wrote: '' A work of architecture is a great coordination with a distinct and vital organism, but it is in no sense naturalistic-it is the highest, most subjective, conventionalization of Nature known to man, and at the same time it must be organically true to Nature when it is really a work of Art." (Cronon, 1994, pp. 17, 18). In the essay, Wright further clarifies his theory of Art and his doctrine of 'conventionalization' (a natural like process that belonged to the arts), which he believed also applied to architecture. Overall, he believed that an 'organic architecture', developed according to a set of principles and ideals (not through imitation of forms but principles), would allow for man to become more in tune with his existence, the world, his spirit and God. Architecture, thus, should portray a sense of shelter and protection from the outside world; the architecture should be derived (and inspired) from nature in an abstract way, and should be guided by the proportion and feeling of the human body. These theories will be further analysed in his case study, in Chapter 6.

… by Tadao Ando

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[105] In Le Corbusier's words: '' Architectural emotion: that's when the work resounds inside us in tune with the universe whose laws we are subject to, recognize, and admire. '' (Corbusier and Cohen, 2007, p. 97). And also Le Corbusier on this issue, further claims: '' "One uses stone, wood, cement, and turns them into houses or palaces; that's construction. It calls for skill. But, suddenly, you touch my heart; you make me feel good. I am happy. I say: it's beautiful. This is architecture. It is art....You have not only adapted raw materials to the functional requirements of a project but also, ***transcending*** these requirements, have established relationships that stir my emotions. That is architecture.'' '' (Muller, 2004, p. 54)

Tadao Ando in his acceptance speech of the Pritzker Architecture Prize, states that there are 'two separate dimensions' coexisting in architecture: the first, concerns 'function, security and economy', and deals with the aspects of living and of the 'real'. He asks: '' Can architecture be architecture with this alone?'' (Ando, 1995, p. 1) and this question leads him to define the second dimension as architecture as an art, in his words: '' Since architecture is a form of human expression, when it steps out of the exigencies of sheer construction toward the realm of aesthetics, the question of architecture as art arises. It is at this point that the other dimension, imagination, comes into play.'' (Ando, 1995, p. 1). He continues, on this issue, that since Vitruvius with his three principles (utilitas as function, firmitas as strength, and venustas as delight or beauty) considerations of the dimensions of imagination were already contained within architecture and seen as way of deeply effecting human spirituality, remarking that it is architecture's fate to live beyond the realms of mere functionality and into the reals of art. Ando continues: '' (…) what is of primary importance are the imagination and fictionality that architecture contains beyond the substantive. '' (Ando, 1995, p.1); architecture achieves this fictionality by stepping into the 'ambiguous realms of the human spirit', and therefore: '' Only after speculating the worlds of both the actual and the fictional together can architecture come into existence as an expression, and rise into the realm of art.'' (Ando, 1995, p. 1). Ando clarifies that the imagination and the creation of fictionalities not only are of primary importance, but that it is this realm of fiction combined with the actual that elevates architecture into a means of expression and into the realms of art. These views will be further analysed in his case study, in Chapter 6.

…. by other authors

For Kant (1976) architecture, unlike sculpture, does not have its ground on nature but in an 'arbitrary purpose' and possesses a 'use' attached to the fact that it is an artistic object; in such a case, the aesthetical ideas are limited and bound to that use. However, it is in this duality, of use and artistic freedom that grants architecture it's unique essence.

Then, what is Architecture as an Art?

Defining Architecture as an Art

According to what was just put forward, architecture does not exist to create a function, to reflect a program or to mirror aesthetic principle (although it can indeed do all of those things). Architecture, as an art, defines a symbolic, metaphoric or poetic spatial sensory experience, and is endowed with phenomenological, ontological and spiritual values, becoming a vehicle of significance, allowing for an integration of the being within the self, within it's soul and within the world.

The function of architecture, then, is to complete psychological, emotional and spiritual needs.

> ***Synthesis**: Architecture, just like other art forms has a lower type (construction and building) and a higher type or art (which is Architecture it it's real essence). Thus, Architecture begins with the adding of elements, which are useless, in terms of its*

construction but that add other values, dimensions and significance (Ruskin (1849)). Likewise, for Scruton (2009) architecture is an art that exists beyond functionality, and incorporates other principles into its creation. Architecture, then, is a creation that is intrinsically significant and meaningful in itself, just like any artistic object (Scrutton (2009)). What defines Architecture (as an art and as significance) is: the creation of poetical and cosmological values (Perez-Gomes (1994)), the duality of both 'use' and artistic freedom that grants architecture it's unique essence (Kant (1976)), the creation of insights, understanding and truth (poetry) that affect the viewer (Zumthor (2006)), the communication of beauty and be a sensuous expression of divine and human freedom (Hegel), the communication of cosmological, ontological and existential values and principles that allows man to understand his place in the world, by providing a provides a 'cosmic and mental' space for man's existence (Pallasmaa (2009)), the principles it incorporates into itself (Ruskin (1849) and Scrutton (2009)); the ability to transform the merely functional and practical into something beautiful that both 'shelters' and 'reminds', allowing for different associations and meanings to emerge (De Botton (2008)); the definition of an ideal way of life (De Botton (2008)); the creation of a space for the encounter and departure of the soul (Steiner (1992)), the addressing of the human spirit, and the allowance for a connection with the soul (Steiner (1992))

4. THE ART OF PAINTING AND SCULPTURE

> '' What then is the secret science which he has or which he seeks? That dimension which lets Van Gogh say he must go ''still further''? What is the fundamental of painting, perhaps of all culture?'' (Johnson and Smith, 1993, p. 123)
>
> '' Painting is an unspoken and largely uncognized dialogue, where paint speaks silently in masses and colours and the artist responds in moods.'' (Elkins, 2000, p. 5).

What is the Art of Painting?

A brief introduction to the tradition of the art of painting…

Painting, at a first level, can be understood as the act of creation with a liquid medium, in two dimensions. It can be generally described as the act of representation of the world on a canvas or other two dimensional surface, using a means such as a paint brush or the fingers, and a medium such as acrylics or oil paint, to create.

Author Phillip Ball (2013) *(see Glossary),* contextualizes the art of painting by explaining it's different evolutions through time and cultures. He explains that Egyptian painting was a sort of documentary art (people fulfilling their daily duties, fishing, washing, building, etc.), capturing and representing an overall impression of a calm orderly society where the artist portrayed an ideal way of life (a desire for order to prevail over chaos): '' (…) art was an instrumental means to this end, since it was invested with a magical power to transform the world.'' (Ball, 2003, p. 69). The pigments used were made of ground-up natural materials, applied in a kind of tempera method. In Ancient Greece, very little of Greek Painting survived and what is known is from ancient writings, such as Plutarch, Vitruvius, and Pliny, explains the author. One can also add that the painting in ceramics can also be used as a reference that survived time. The Greeks, in some cases, didn't see stone that was left plain as something positive or sacred, and painted and coloured sculptures, architecture and walls with a four-colour pallet. Contrasting with the austerity of the Greeks, is the brightly hued artistic creations of the Persians and the India.

Medieval painting, sought to create scenes that described a narrative, a story; figures didn't have to be realistic, but instead, be identifiable and relatable, encoded with colour meanings that enhanced the splendour of God. In the Renaissance, the author continues, **painting took on a new meaning**: aspiring to resurrect the ideals of classical times, the Renaissance artists, used colour in a distinct and new way: they searched for truth associated to reality and to nature, striving, for the first time to depict things as they saw them, which led to the emerging of light and shade (which begun with Giotto di Bondone founder of the Florentine school of painting), which is '' (…) one the distinguishing aspects of Renaissance art.'' (Ball, 2003, p. 117). This is a symptom of a profound shift in philosophical views, that affected all areas of life and knowledge. The Renaissance artist also discovered the use of perspective, locating objects in space. The artist, thus, needed to study nature and understand it, in order to create 'nature' like images, thus leading him to learn from the understanding of nature's laws and principles. Leon Battista Alberti's texts, namely *Della Pinttura*, demonstrate how artistic reasoning dispensed from the medieval ages, should incorporate the use of perspective and strive for beauty. To the Renaissance artists, the most important

quality of painting was the ability to draw well, the capture of the form (through geometry and proportions) whereas colour was, for most artists, secondary (emphasis on drawing).

What most of these artists have in common, is the use of drawing as a foundation for their paintings. The drawing, thus, was used throughout different cultures and times as the basis of the three arts of architecture, painting and sculpture and for the observation of the natural world for scientific purposes. An example of this are the drawings defined by Leonardo da Vinci.

It is contemporary painting that engages in a new discourse that begun with the shift of the philosophical and aesthetic views of the eighteenth century and continues until today. Painting, has evolved from being narrative, representational and descriptive, into a more expanded field, that brought new criterias and aimed at capturing and representing aspects of life itself: the cubists (that aimed to portray the dissolution of forms and viewed reality as composed of geometric essences), the surrealists (that emphasized the subconscious forces of the being), the impressionists (that aimed to capture the changing light of the intangible atmosphere), the abstract expressionist painters (that aimed to embody expression of the self over any other form of creation), and one last example, the abstract creations of Yves Klein and other abstract artists, that aim to represent an abstract essence.

Painting, however, it is possible to define, is always focused on capturing, expressing and portraying an essence: be it of a person, a space, an atmosphere, or of an idealized world of geometries.

…by James Elkins: Painting is alchemy

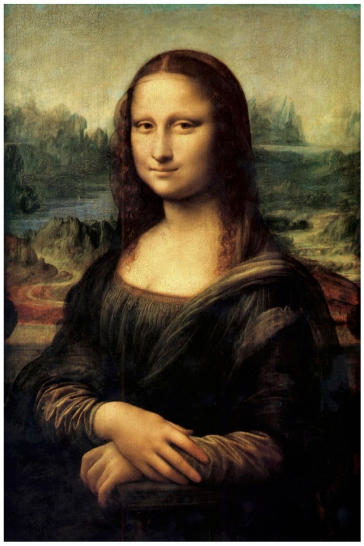
Author James Elkins (2000) *(see Glossary)* defines the high art of painting as alchemy: for it uses basic materials (water and stone) to create spiritual significances[106]. For the alchemists, God already created a '*materia prima'* (the Aristotelian quintessence, that which composes the heavens, and many other names; it refers to seeing everything[107]) and it was the alchemist's role to bring it out; painting as a *'second materia prima*' acts as a bridge between the spiritual world and the physical world[108] and tries to bring out the *materia prima* (the real essences). In this case, painting contains within itself significances that are echoed through the creation: there are infinite ideas, numbers, concepts, and meanings, that are contained in the work and that spring, both consciously and unconsciously from the mind and spirit of the artist.

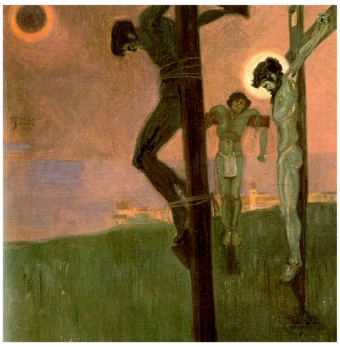
Another aspect that is important, is that painting (like alchemy) focuses on the process of making a discovery, like a laboratory of significances; it is these significances ('liquid thoughts'[109]) that qualify painting as an art. Only the real process of discovery artists (painter), like the alchemist, explores fields that are unknown) in the act of painting can make the work be alive and be a work of art as significance [110] (which is why works of art can't ever be recreated or reproduced); this exploratory type of laboratory, that allows the artist to create through intuition and impulse, is of the utmost importance.

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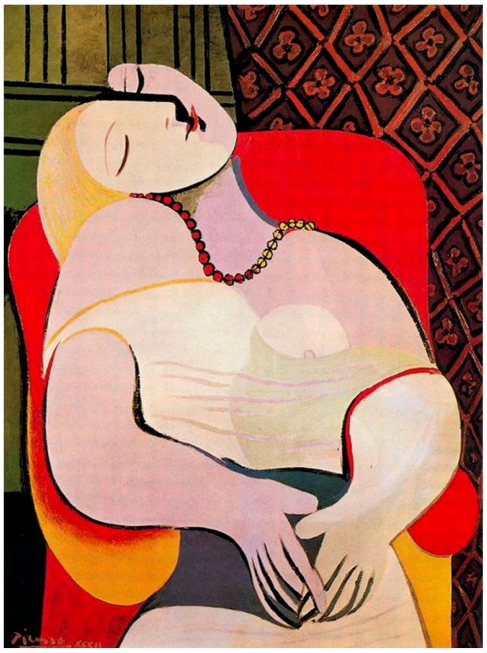
[106] In his words, he emphasizes: '' For a "spiritual" alchemist, whatever happens in the furnace is an allegory of what takes place in the alchemist's mind or soul.'' (Elkins, 2000, p. 3).
[107] Reference to: '' *Materia prima* is a name for the state of mind that sees everything in nothing. '' (Elkins, 2000, p. 85)
[108] Reference to: '' God has already made *materia prima,* and it is up to alchemists to accelerate and complete His work. Occasionally alchemists talk about a *secunda materia,* and they mean this halfformed *materia prima* (...) as the hinge between spiritual existence and the visible world. '' (Elkins, 2000, pp. 79, 80)
[109] What is of relevance in painting as an art, is '' (…) the act of painting, and the kinds of thought that are taken to be embedded in paint itself.'' (Elkins, 2000, p. 5).
[110] Reference to: '' Alchemy is the old science of struggling with materials, and not quite understanding what is happening: exactly as Monet did, and as every painter does each day in the studio. '' (Elkins, 2000, p. 17)











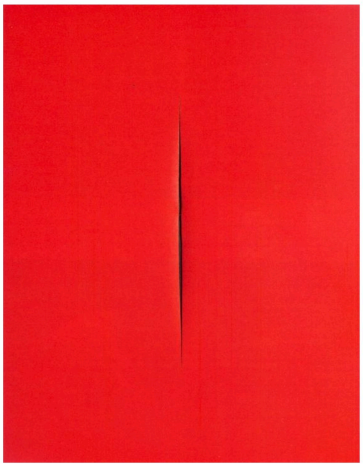


Photo: Van Gogh's sunflowers; Source: http://www.daydaypaint.com/van-gogh-painting-032-p-385.html; Photo 2:Photo: Egon Schiele, Kreuzigung ; Source: http://en.wikiquote.org/wiki/File:Schiel01.jpg; Photo 3: The Mona Lisa, by Leonardo da Vinci, 1503–1517; Source:http://www.britannica.com/topic/Mona-Lisa-painting; Photo 3: Le Rêve, by Pablo Picasso, 1932; Source:http://www.wikiart.org/en/pablo-picasso/a-dream-1932; Photo 4:Richard Diebenkorn: The Ocean Park Series,1967 to 1988; Source:http://www.ocma.net/exhibition/richard-diebenkorn-ocean-park-series; Photo 5: Lucio Fontana painting; Source: https://pt.pinterest.com/pin/251075747951840573/

PLATE 10: THE ART OF PAINTING

In his words, painting as an art represents and communicates 'substances' (thoughts, ideas, and feelings) to the mind of the viewer: '' Substances occupy the mind by invading it with thoughts of the artist's body at work.'' (Elkins, 2000, p. 95). The word substances is used by the alchemists, as a word to describe a variety of natures: materials, qualities, sensations, and even principles. And it is in this communication of substances that lies another of painting's value and significance.

> ***Synthesis**: According to the author James Elkins (2000), painting is a form of alchemy that uses basic materials (water and stone) to create spiritual significances: it creates a bridge between the spiritual world and the physical world, trying to create the materia prima. In order to do so, it uses a process of discovery (through insight and intuition) to create 'liquid thoughts' or significances. Painting, thus, as an art communicates 'substances' (thoughts, ideas, and feelings).*

…by Merleau-Ponty: an organ of the spirit

It is Merleau-Ponty (2009) *(see Glossary),* that gives us a most complete clarification of what painting as an art is. For him all art is an 'expression on an interiority' in a deeper approach to things (a sort of philosophy). In painting (as with the other arts) operates a 'metamorphoses' that searches within signs, significances[111]. Painting, then, as an art, expresses that interior world by drawing from a specific 'fabric of meaning'[112] that only painting can understand. It is only the painter (led by a sense of urgency drawn from an inner world) that can understand the 'world suspended' without being obliged and restrained by duties of 'appreciation' or appraisal'. It is through painting, as an expression of 'his feelings' that the painter finds 'himself', with each painting (with each creation), a more defined 'interior schema' is clarified; each work reveals a 'significant key' to the artist, a significance of his own 'interior world'. In this process, unveils the particular 'style' of the artist.

Painting, thus, as an 'organ of the spirit' continues Merleau-Ponty (1991), contains a 'matrix of ideas', providing 'emblems' whose meaning and significance is never finished and is always constantly developing. This allows a constant assimilation and retransmission of contents, senses, meanings and significances, always open to new interpretations. The significance, continues the author, is impregnated and imbued within the painting, rather than the panting expressing significance[113]. It is not necessarily the signs used or the system of relationships between the signs, but instead the 'operating significance' that emerges thought the expressive gesture (which is a 'sense of genesis'[114]).

It is modern painting, Merleau-Ponty claims, that defines '' (…) in which way we are rooted within the universal, through what we have that is most particular.'' (Merleau-Ponty, 1991, p. 53)[115]. Modern painting admits a truth that is not related to the representation of reality, neither does it 'mirror' or

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111 As explained on page 52 and 53 of his book '…' (Merleau-Ponty, 1991, pp. 52, 53)

112 Free translation from: '' Ora a arte e especialmente a pintura bebem nessa camada de sentido bruto da qual o activism nada quer saber. Elas são as únicas a fazê-lo em toda a inocência.'' (Merleau-Ponty, 2009, p. 16)

113 Free translation from: '' É mais o sentido que impregna o quadro do que o quadro o exprime.'' (Merleau-Ponty, 1991, p. 56)

114 Free translation from: '' O sentido do gesto expressivo no qual fundamos a unidade da pintura é por principio um sentido em gênese.'' (Merleau-Ponty, 1991, pp. 72, 73) ; English translation: '' The sense of expressive gesture in which we established the unity of the painting is by principle a sense in genesis.'' (Merleau-Ponty, 1991, pp. 72, 73)

115 Reference to: '' the problem of knowing how it is possible to communicate without the support of pre-established Nature and to which would open the senses for all of us, in what way we are rooted in the universal by what we have that is most personal.'' (Merleau-Ponty, 1991, p.53); Free translation from: '' O problema de saber de que modo é possivel comunicar-se sem o amparo da Natureza preestabelecida e à qual se abririam os sentidos de todos nós, de que modo estamos entranhados no universal pelo que temos de mais pessoal.'' (Merleau-Ponty, 1991, p. 53) ;

reflect things, neither does it possess pre-established relationships. Rather, the expression recreates and metamorphoses, consequently, the artistic expression is a means of interpreting and representing the complexities of the spiritual worlds.

> ***Synthesis**: As stated by Merleau-Ponty (1991) painting is an 'organ of the spirit' that recreates an interior world, by drawing from a 'fabric of meaning' through expression (rooted in a sense of genesis). It contains a matrix of ideas, significances and meanings, (imbued within the painting) that are always open to new interpretations.*

…by Kant: intuition and ideas

Kant (1976) considers painting, the second kind of formative arts, presents the sensible illusion combined with ideas. Among the formative arts, Kant claims that painting is of most value because '' (…) as the art of delineation it lies at the root of all the other formative arts, and partly because it can penetrate much further into the region of ideas and can extend the field of intuition in conformity with them further than the others can.'' (Hofstadter and Kuhns, 1976, p. 331). Kant conveys the idea that painting extended the field of intuition and penetrates much further than any other art into the region of ideas. However, for the author, it is it's essence that is attached to a form of illusion: in fact everything it creates is an illusion.

… by Hegel: painting as spiritual freedom

Hegel, Houlgate (2014) explains, painting is the representation of the concrete expression of spiritual freedom. Just like the other art forms, however only painting, can grant us 'the face of spirit'; in his words, painting: '' (…) gives us, as it were, the face of spirit in which the soul within manifests itself *as* the soul *within.''* (Houlgate, 2014). Further, it is painting that for Hegel is best suited to manifest relations between human beings. The highest examples of painting can be found in the works of Raphael, Titian and the Dutch masters.

… by Steiner: Painting as an inner space for the soul

Painting, explains Steiner (1992) is defined by a moving towards spacelessness: moving away from three-dimensions, towards an inner dimension; as such, it shouldn't be concerned with naturalism, perspective or space, but instead should focus on colour alone. In painting, man has an inner soul experience: it exists and creates only an 'inward' soul level. In his words, he claims: '' Thus painting is an art of which we can say that man has an inner soul experience of it, for whether we paint or appreciate paintings, it is an inner soul experience to begin with.'' (Steiner, 1992, p.151). As a result, this soul experience, the author continues, is felt by the painter and by the viewer, in the deepest aspects of the being. It is this quality, the ability to create a inner space for the soul, that allows painting to be an art.

…by other authors

Many other authors also sustain painting as an art, as a means of communication of an inner world and of creating and expressing significances and meanings. Although this is a general principle of all the arts, and not exclusive to painting, it is in painting that this assumes a central motive and force:

painting is a communication of the inner world itself. Author Maria João Durão (2012) *(see Glossary),* for example, also explains painting as an 'alchemical process' and as a sort of 'psychic container' in which a deep process of transformation occurs: '' Painting is an alchemical process, a ritual act as a psychic container for transformation.'' (Durão, 2012, p. 4). Author and artist Nadir Afonso (2010) *(see Glossary),* claims that painting is an art of space and colour with accurate connections and relations from which meanings occur. In his words, he states: ''As painting is the art of space and colour endowed with precise relations and measurements, so is poetry the art of rhythm and sound.'' (Afonso, 2010, p. 49).

> ***Synthesis****: Painting is: an art of space and colour with accurate connections and relations from which meanings occur Nadir Afoso (2010); an 'alchemical process' and a sort of 'psychic container' in which a deep process of transformation occurs Maria João Durão (2012); the representation of the concrete expression of spiritual freedom, (just like the other art forms), however only painting, can grant us 'the face of spirit' (Hegel); the creation of the sensible illusion combined with ideas (Kant (1976)); a moving towards spacelessness: moving away from three-dimensions towards an inner dimension, generating an inner soul experience (Steiner (1992)); shouldn't be concerned with naturalism, perspective or space, but instead should focus on colour alone (Steiner (1992)); is a soul experience that is felt by the painter and by the viewer, in the deepest aspects of the being. (Steiner (1992)). It is painting that expands the field of intuition and penetrates much further than any other art into the region of ideas (Kant (1976)).*

What is the Art of Sculpture?

… sculpture in general and the evolution of sculpture

Sculpture is generally considered the branch of the fine arts that deals with the creation of artistic objects that are three dimensional in their nature. Traditionally, sculpture was connected to the activity of carving (removal of material) and modeling (adding of material), and used durable materials such as marble, stone or wood and was connected to the representation of human form as a means of portraying the human soul. However, since modernism sculpture has witnessed an expansion of it's field: expanding in themes, materials, forms and in concept. Contemporary understandings of sculpture encompass the creation of any form in space. These advances in sculpture are said to be derived from Pablo Picasso's (1881 – 1973) sculptural creations, in the beginning of the 20th century, that combined different objects into one final artistic work, thereby questioning the traditional understanding of sculpture and expanding it's real. Another artist that greatly contributed the evolution of the field was Marcel Duchamp (1887 – 1968) , and the works of the work of Constantin Brâncuși (1876 – 1957) *(see Glossary)* that led the way for later forms of abstract sculpture. Therefore, it is possible to define that traditional sculpture, prior to the 20th century, was three dimensional, representational, involved a sort of solid mass, and was composed out of carving and modeling; in opposition, sculpture, after the beginning of 20th century is no longer restricted to specific means of creation, is mainly abstract in its essence and character and embodies new principles and values such as motion.

Author Rosalind E. Krauss (1981) explains in her book *Passages in Modern Sculpture*, that to understand Sculpture (specially contemporary sculpture) one must comprehend that it is connected to two

independent dimensions: to both space and time. She explains that each sculptor deals with these two components in their own way; for example '' Brancusi's arrangement of forms imply a different temporal condition than that of Gabo: it's meaning arises from an entirely different set of appeals, (…)'' (Krauss, 1981, p. 4). Sculpture, the author explains, uses forms in a rhythmic way to create a volume that gains a life of it's own, and it corresponds to a sensibility of touch and movement, which is part of a temporal dimension (one needs time in order to move around the sculptures). Nonetheless, because the sculptural object itself is static, there is an inherent contradiction within its nature than needs to be resolved. These two aspects, the dimensions of time and space, are the two components that describe and characterize all the artistic objects that can be understood as 'sculptural': whichever materials, forms, theories or ideals it sustains, sculpture deals with the physicality of space and with the temporality of experience of the object.

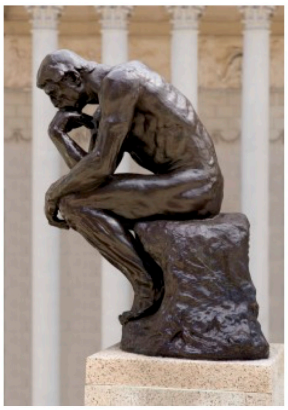
… by Rudolf Arnheim: traditional sculpture

Rudolf Arnheim (1977) in his book 'The dynamics of architectural form' explains that traditionally sculpture served to create icons, specially of divine figures: '' (…) which are not so much portraits of super human powers dwelling elsewhere as embodiments of the powers themselves. '' (Arnheim, 1977, p. 215). The stone or the other materials used were endowed with the properties of the figure it represented as is addressed as the bodily presences of that power. This early conception of sculpture, can be by what Arnheim defines as 'self-image'. These self-images were not concerned with likenesses but with the embodiment of properties themselves.

… by *Robert Morris: sculpture as the creation that uses physicality*

Robert Morris's article '*Notes on Sculpture'* (1966) clarifies that there has been very little 'definitive writing' on present day sculpture. Sculpture, is an independent art form, from the other arts, and has articulated, with time, a field of it's own; sculpture, the author continues, unlike painting, has never been associated to the creation of illusions. Sculpture thus, the author continues referring to modern sculpture, is free from representation, and uses three coordinates, rather than just two (like painting does); it is an object, in space, that uses gravitational force; it uses physical properties and qualities ('' The qualities of scale, proportions, shape, mass are physical.'' (Morris, 2005, p. 830)) and uses space, light and materials, in a concrete and functional way. As an artistic object, sculpture creates multiple sensations on the viewer, derived from it's mass, volume and form that use light, an element that is not physical but that is part of space. Sculpture has become 'more complex and expanded' as contemporary sculpture, the author continues and has been exploring size and scale, pure form and volumes, as a way to avoid intimacy and search for universal principles.









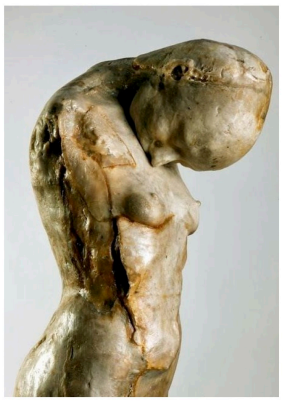






Photo 1:David by Michelangelo, 1501; Source: https://en.wikipedia.org/wiki/David_(Michelangelo); Photo 2:August Rodin (French, 1840–1917) The Thinker, ca. 1880; Source: https://legionofhonor.famsf.org/about/thinker; Photo 3:Photograph of Alberto Giacometti by Henri Cartier-Bresson; https://en.wikipedia.org/wiki/File:Photograph_of_Alberto_Giacometti_by_Cartier_Bresson.jpg: Photo 4:Calder's Flamingo sculpture in Chicago; Source:http://www.marcomahler.com/original-calder-hanging-mobile-for-sale/; Photo 5: Sculpture by Nicola Samori; Source:https://pt.pinterest.com/pin/251075747953689693/; Photo 6: Anish Kapoor, Cloud Gate; Source:https://ns2015designbuild.wordpress.com/2015/03/26/precedent-art-anish-kapoor/; Photo 7: Anish Kapoor, Unittled, in fiber glass, 2013. Source: https://pt.pinterest.com/pin/313422455297174316/

PLATE 11: THE ART OF SCULPTURE

… by Josef Beuys

Josef Beuys (2004) (see Glossary), in the book *What is Art?: Conversation with Joseph Beuys,* explains that his sculptural work, 'his objects' as he calls them, '' (…) are to be seen as stimulants for the idea of sculpture, or of art in general. They should provoke thoughts about what sculpture can be (…).'' (Beuys and Harlan, 2004, p. 9). He continues explaining, that to understand sculpture and art, is to understand that it is manifest as a phenomenon of freedom: '' (…) speak of art – that is so to speak, of a kind of science of freedom''. (Beuys and Harlan, 2004, p. 13). Sculpture, therefore, for Beuys, is the means by which this phenomena of freedom can better be explored: for, it's three dimensionality and spatial dimension allows for a broader engagement with the viewer; however for him, there is no distinction between creating a drawing or creating a sculpture. In describing one of his sculptures, he comments: '' This goes right into the most spiritual territory, for here, this crack that leads into the darkness could clearly even be seen as mythological. It is not banal, not at all. I mean you can imagine all sorts of (…) connections to life that are also to be found in nature.'' (Beuys and Harlan, 2004, p. 33).

… by *Kant: Sculpture as the creation of that which could have existed*

Kant (1976) affirms that sculpture relates to presenting corporeal concepts as things, as they might 'have existed in nature' with an aesthetic purposiveness and its expression. It is the three dimensionality of the art that grants it it's specific essence: the re-creation of things as they could have existed. Thus sculpture has this quality of creating 'reality' as it 'could have been'; a more rooted in 'reality' type of art than painting is (associated to the creation of illusions, or things that could never have been).

… by *Hegel: Sculpture as the embodiment of spirit*

Hegel argues that sculpture, like painting, can represent the concrete expression of spiritual freedom. However, only sculpture, because of it's three dimensional nature, can 'embody spirit'. Houlgate (2014) claims: '' (…) sculpture is the material embodiment of spirit, (…)*.''* (Houlgate, 2014). It is, Greek sculpture that for Hegel, creates the *purest beauty* of the purest art: the best example of sculpture as an art.

… by *Steiner: sculpture as the creation of spiritual happenings*

Sculpture, for Steiner (1992), for whom art is related to the experiences of the soul) is defined by a three dimensional object, thus concerned with spatial forms, that creates 'spiritual happenings' in a descriptive nature rather than an encasing in itself. It is in the creation of these descriptive 'spiritual happenings' that sculpture is an art.

> ***Synthesis:*** *Sculpture as an art is understood as possessing the same intent as the other arts: that of creating significance. However, because it uses three-dimensionality (materiality, form and light) it possesses unique particularities: it creates multiple sensations on the viewer, derived from it's mass, volume and form that use light, and it is an object, in space, that uses gravitational force and other physical properties and qualities (Robert Morris (1966)). In it's essence, sculpture, then, is the creation of that which could have existed (Kant (1976)), is that which 'embodies' spirit (Hegel) creates 'spiritual happenings' in a descriptive nature (Steiner (1992)). It is in the creation of descriptive 'spiritual happenings' that sculpture is an art (Steiner (1992)).*

3.2.3. THE CONNECTIONS AND DISTINCTIONS BETWEEN THE ARTS

From the above analysis it is possible to understand that what all the arts, have in common is their artistic essence as the creation of significance. At this point, it is thus of value, to understand what the connections and collaborations between the arts are and how they occur.

Architecture and the other arts (painting and sculpture) have had a long and complicated relationship. Many authors consider architecture to be 'the mother art': the one art that contains all the other arts, and from where they grow from (this view, that begun in the Renaissance, was later abandoned); while others believe that program conditions (and others) prohibit architecture from belonging to the realm of pure artistry, leaving it to be in third place in the scale of the high arts. At times, they were united and collaborated with each other, at other times they were separate and independent in their ventures. A brief summary of these connections and distances will be presented bellow.

So what are the connections between the arts?

…. by Mark Pimlott: historical connections between the arts

The relationships between the arts is not a new theme or idea. Architecture and the arts of Painting and Sculpture, ever since their origins and throughout the course of history, have been interacting and collaborating with each other in multiple ways. Although, traditionally, in the Renaissance, for example, the disciplines were considered independently from each other: there were treatises on architecture that didn't approach painting and sculpture such as the ones composed by Alberti or Palladio. The same holds true for the discipline of painting, for example, and the writings of Leonardo da Vinci about painting as an independent discipline. Palladio, as we will further study in chapter six, studied only architecture and did not have painting or sculpting as a background; instead he was a stone carver; later in his architectural maturity, he sustained an independent approach to the arts, believing that architecture should use painting as decoration.

However, generally, at the time, there was a specific type of innate relationship between the arts: that of a complementary nature. This is explained by thee author Mark Pimlott (2009) *(see Glossary),* in his paper '*Natural Antagonism: Notes on color or architectur*e' (2009) explains that until the development of the modern movement in both the visual arts and architecture, (around 1920's), the relationship between art and architecture was a complementary one. Plastic arts (sculpture and painting) were integrated within architectural space, to clarify and elucidate it's '' (…) imagery, allusions and nascent narratives.'' (Pimlott, 2009, p. 1). This idea of a happy relationship between the arts came from the Renaissance, says the author, where the integration maintained the integrity of each art form. In the Egyptian, Roman, Islamic and Gothic architecture, according to the author, the relationship between the arts was quite different: the structures were 'subsumed in pictorial motifs' or the motifs filled the spaces left by architecture; the plastic arts, 'superimpose' themselves on the architecture form. However in the Renaissance, the author mentions, there is a different relation and connection between the two: painting extends the ''(…) spatial fictions of representational architecture, both in its constructions and its subject matter, while retaining its own space.'' (Pimlott, 2009, p.1). Painting, was used to create visual two

dimensional representations that could engage with the space three dimensionality, acting as if they belonged and extended the space itself. As such, painting, sculpture and architecture supported each other's function and understanding. This is partly due to the architects of the Renaissance often being engaged in all three fields of artistic practice and thus represented a totalizing view. Such is the case with the architect Filippo Brunelleschi *(see Glossary),* and his definition of perspective that provided new parameters for both painting and architecture and set a new partnership for the 'ideal world through realistic re-presentation'.

This complementary relationship, the author explains, extended all throughout the nineteenth century, in Art Nouveau *(see Glossary)* ornamentation of architecture*,* and the first forms of the modern Movement. Thus, until modernism, there was this kind of complementary relationship between art and architecture, where architecture defined the framework and painting and sculpture provided the complement and amplification of the meaningful phenomena defined.

However with the Deutscher Werkbund and the Bauhaus *(see Glossary)*, emerged the necessity of finding new connections and relations between art and architecture. During Modernism, new ambitions were set into play, for the relations between painting and architecture. In general terms, in the modern movement, architecture pursued the ideals of function, shutting away traditions and representational characters, and defending a new technological, scientific and objective means of existence. Painting, on the other hand, pursued its own enquiries, leading towards perception, phenomena and abstraction.

Each field became autonomous in its pursuits, and the author explains: '' Art and architecture learned to co-exist as distinct fields of activity within a utopian social or operative idea.'' (Pimlott, 2009, p.2) There was, what the author refers to as an 'autonomy between the arts', where painting was no longer subdued to architecture. The first artists to claim this autonomy in an artist/architecture collaboration in its new terms, was Theo Van Doesburg and Bart van der Leck of the Stijl movement. In this case, painting wasn't a support, but instead they interacted through colour[116]. In all these cases, there was a sort of replacement or enhancement of the architectural orthogonal dimensional space (mainly defined by an accentuation of the two dimensions of verticality and horizontality) with colour, in an approach that was contradictory with the functionalist ideal proposed by the majority of Modern Architects. The Bauhaus school, which was not a movement and did not have architecture as a course until very late in its development, also had central ideas and ideals about the interaction of the arts. Pimlott (2009) explains that they proposed a relationship between art and architecture in which art was ''(…) either subservient to or subsumed within the structures of design, (…)'' (Pimlott, 2009, p.4). However, the De Stijl strategy of 'dematerialization' was taken up by the architect Ludwig Mies Van der Rohe. Mies, *(see Glossary),* the author states '' (…) used painting and sculpture for their capacity to orchestrate or extend the spaces he made both within and beyond his buildings.'' (Pimlott, 2009, p.5). In his presentations, paintings (mainly

[116] **Van Doesburg and Bart van der Leck of the Stijl movement:** '' Van der Leck declared that he wanted painting (and colour) to be given the opportunity to 'destroy' or 'deconstruct' architecture; Van Doesburg wanted art and colour to either 'replace' architecture, or assume an even greater role by making architecture's invisible characteristics visible.'' (Pimlott, 2009, p.2). Colour, for Van Doesburg, in Tot en Beeldende Architectuur (1924), was architecture's organic means of expressions. The author explains that in the Petit Salle-Dancing, Café Aubette in Strasbourg (1926-28), Van Doesburg managed to replace the spatiality of architecture with the spatiality of art, making the architecture subservient to the panels of colour and light. This 'destructive' kind of architecture and art was parallel to Piet Mondrian's interior for Ida Bienert (1926) and was preceded by Gerrit Rietveld's scheme for an exhibition room published in 1923.

by Paul Klee and Schwitters) are featured as architectural elements, as surfaces that cover floor to ceiling, and sculptures (either by Kolbe or Maillol) are used as focus points within 'views towards the horizon'. In Mies understanding, the paintings and the sculptures contributed to the ''spatial character of the building proposals''. (Pimlott, 2009, p.5).

In the late 60's, a new kind of art started to emerge: with Pop Art *(see Glossary)* and its relation with consumerism, with Art Povera *(see Glossary)* and its connection to the world; both started to blur the boundaries between the arts and the distinction between painting and sculpture was no longer clear or useful.

In Pimlott's views, this dematerialization of the art object echoed the spatial dissolution proposed in the 1920's, and like this, art was led towards architecture: towards an understanding of the spatial conditions and the interactions between the arts. Conceptual and post-conceptual art *(see Glossary),* provided contemporary artistic practices that turned towards architecture in the process of making and 'positioning' their works; this led to collaborations between architects and artists. This was led by the idea that something different and meaningful could emerge from such collaborations. The artist, by the end of the 1980's was granted a wider range of activities; this resulted in new kinds of public art. Not surprisingly, architecture in the beginning of the 1970's had been approximating and returning to the field of aesthetics.

So how can these collaborations be understood and defined?

… Defining levels of connections and collaborations

It is possible to announce four types of collaborations and unions: firstly the interaction of the plastic arts within architecture (shared significance), secondly the search for significance through the other art forms (drawing inspiration from each other), thirdly the development of the artistic self and significance through various art forms (the artist that is also an architect), and lastly, the merging of the arts (a new art form of the contemporary world).

Firstly, the collaboration can be defined as all arts sharing the same significance (the same expression and principles), and collaborating in a shared space to make those ideals come alive in a more active way. In this case, painting and sculpture are placed in architecture; and what occurs, is that the three art forms enhance each others significance, creating one coherent whole. Although each of the arts have their own goals, such as architecture's primordial role of producing space: it is what qualifies that space that can possess common principles with the other arts. Examples of this can be found in the classical tradition of Ancient Greece (sculptures and paintings in temples), in the Renaissance's Cathedrals and basilicas (that used painting to accentuate the meaning of the space, such as the Sistine Chapel and the painting by Michelangelo *(see Glossary)*), or even in the modern movement with for example, the work of Le Corbusier (that used painting to add another dimension to the space, such as the painted doors in La Ronchamp).

A

PAINTING AND SCULPTURE AS PART OF ARCHITECTURE







Photo 1: The Acropolis in Athens; Source:https://pt.pinterest.com/pin/222717144045700351/; Photo 2: The Sistine Chapel with Michelangelo's paintings; Source: http://edition.cnn.com/2012/10/30/world/gallery/sistine-chapel/; Photo 3: Painted doors by Le Corbusier for La Ronchamp; Source:https://sensingarchitecture.com/gallery/

B

THE UNIFIED LANGUAGE OF INFLUENCES



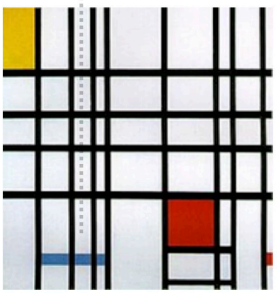




Photo 1: Piet Mondrien, Composition with Yellow, Blue, and Red, 1937–42; Photo 2: Red and Blue Chair designed by Gerrit Rietvled in 1917. ; Photo 3:Photo: Gerrit Rietveld, Interior of "The Shroder House", 1924; Source: http://ryanmcginley.wordpress.com/2012/09/20/summer-project-de-stijl/; Photo 4: The Charnel House Series by El Lissitzky; http://thecharnelhouse.org/2013/09/16/proun/proun-5a-1919-el-lissitzky-1355192764_org/#main;

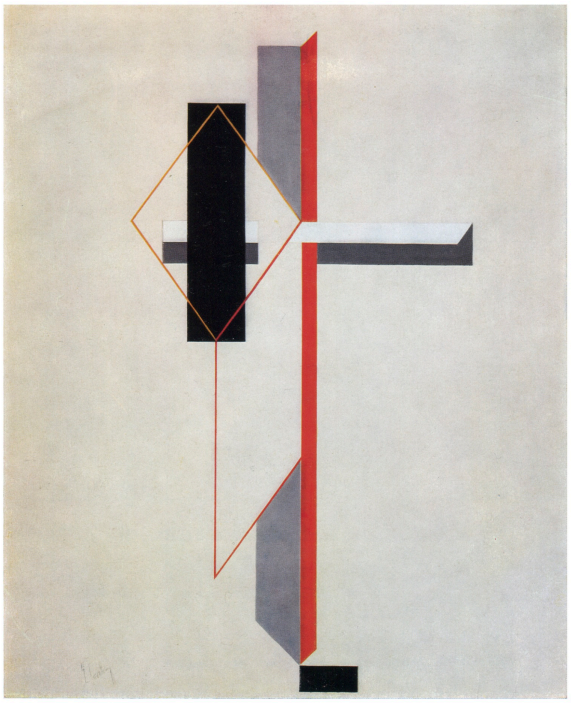


PLATE 12: LEVELS OF CONNECTIONS AND COLLABORATIONS BETWEEN THE ARTS

In all these examples, the three arts shared the same principles and ways of expressions, and collaborated in a shared significance within the same space, in order to amplify each others significance in a whole cohesive experience. Even if the principles and expression are not shared, they can collaborate by means of understanding: form an understanding of the significance of the space, the painting can be created, thereby amplifying it's intensity and overall significance.

This idea, that the arts should share the same significance and that they should collaborate with each other in order to amplify it, is sustained by multiple authors and by multiple schools of thought. The Bauhaus school, in 1919, already in their first manifesto, reflect ideas that all the arts needed to be held together, in one single union.

Secondly, the collaboration between the arts can be defined as the arts drawing inspiration and ideas from each other, learning and progressing in sync, in order to define a new language and significance that could define humanity. Pinto (2009), on this regards, emphasizes that there is a poetic relationship between architecture and the arts, where they influence each other mutually. These influences have a profound impact on the disciplinary field of architecture, at both a living level and an interpretation one. From the architectural figurations of the renascence painters to the abstract incursions of the modern movement, he emphasizes, they are all 'figurative mutual contaminations' between painting, sculpture and architecture. (This view echoes Marchán Fiz's ideas.) As an example of this it is possible to announce the De Stijl movement *(see Glossary)*, led by Architect Theo van Doesburg (1883-1931) and by the Artist Piet Mondrian (1872-1944) *(see Glossary)*, that further developed the ideas proposed by the Bauhaus School. While as they sustained that the arts should collaborate in the same space (explained above) they also sustained that all art should define a new language that would permeate the multiple artistic fields in a shared significance and collaboration; in order to do so, the arts should learn from each other. Examples of this, can be found in plastic artists Kazimir Malevich (1878-1935) and El Lissitzky (1890-1941) *(see Glossary)* that searched in the architectural language for a new artistic vocabulary. And later, in 1918, with the Architect Le Corbusier and Artist Amédée Ozefrant (1886-1966) *(see Glossary)* that define their purist manifesto with the aim to create a new visual significant language for all the arts (a language that drew inspiration from both architecture and painting); they created an artistic language that was pure, objective and devoid of emotional values, and that would cater to both architectural and painting needs.

In the third place, another type of connection between the arts, is found in the fact that there are **multiple architects that are also artists and create paintings and sculptures, with equal artistic quality**. This idea that artists are architects and that architects are also artists was most prominent in the Renaissance with the works of: Michelangelo and Leonardo da Vinci (that were painters, sculptors and architects and the latter was also a scientist); in 17th-century Rome, it is possible to announce the work of Giovanni Lorenzo Bernini (an architect known for his palaces and churches and also a sculptor *(see Glossary)*); more contemporary examples can be found with Le Corbusier (architect, painter and sculptor) and Zaha Hadid (architect and painter) *(see Glossary)*. These artists and architects excelled in all forms of artistic expression that they ventured in, which validates that there is a profound connection between the multiple arts; although, some might be better recognized for the significance and contribution developed in one specific field more widely, for example Le Corbusier is much more praised for his architectural works; as

an exception, it is Michelangelo that is one of the few architects, painters and sculptures that is considered to possess the same level of excellence in all three fields. Or the exploratory painting of Alvar Aalto. On this issue, Pinto (2009) adds that painting, sculpture and drawing constitute research methods that are both autonomous and that trigger the imagination in an instrumentalized way for architecture[117]. In the abstract white intangible forms of Alvar Aalto's paintings, he continues, one can read his architectural intention of mass, luminosity and special forms.

Here, the **connection between the arts exists at a creation level:** what occurs is the development of a language of significance that is transverse to all artistic forms, with the use of the plastic arts as 'laboratories' for architecture; because architecture is conditioned by time, clients and other requirements, the significant artistic language can be developed and understood through the other art forms. But what also occurs is the development of the artistic self and the means by which significance can occur is made clear.

And last of all, **the merging of the artistic fields** which is observed as a condition that defines our era where sculpture has blended into architecture, architecture to sculpture, and painting to both sculpture and architecture. Jane Rendell (2006) *(see Glossary)* defines this art form, as the 'space between'; for her the increasing growing interest of architects with art is derived from the fact that art is 'free' (from economic pressures, from client requirements, etc.) whereas the interest of artists with architecture is related to the complexities and significances of architectural sites and its 'cultural and social role'[118]. Pallasmaa (2011) also uses explains that architecture and sculpture have been in the past decades, merging their fields, and architecture has been considered a sculptural element, and sculpture has been viewed as an architectural context. For both authors this is not seen as neither negative or positive, for it all depends on how those spheres permeate each other and why: if the arts aid each other in constructing a qualified experience, this can in fact enrich and succeed in creating deeper connections and deeper experiences with the viewer[119]. Although this may be interesting for the fields in order to expand their values and principles, it is generally understood by contemporary critics that it does not create remarkable works of architecture. This new artistic field will further be analysed in the following pages.

> ***Synthesis:*** *We understood four types of collaborations and unions: firstly the interaction of the plastic arts within architecture (shared significance), secondly the search for significance through the other art forms (drawing inspiration from each other), in the third place, the development of the artistic self and significance through various art forms (the artist that is also an architect), and lastly, the merging of the arts (a new art form of contemporary world). What all these these four types of connections and union between the arts have in common, is the desire to enhance and amplify the significance of the work of art.*

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117 '' (…) onde a pintura, a escultura e o desenho constituem modos de pesquisa, tanto autônomos como desencadeante do imaginário instrumentalizado para a arquitectura. '' (Pinto, 2009, p. 85).

118 She further claims: ''Artists value architecture for its social function, whereas architects value art as an unfettered form of creativity.'' (Rendell, 2006, p. 3). For Rendell, there has been a growing fusion between the realms of art and architecture, being public art the space that exists where both co-exist: what she defines as 'the space between'.

119 Pallasmaa (2011) thus explains that a wrong understanding of the way the arts can co-exist together, is to reject the independent nature of all the arts, and forget their fundamental essences, their own ontological roots: what each one is meant to be and do (as defined in the previous chapters).

… For John Ruskin

According to John Ruskin (1903) *(see Glossary),* the interaction and collaboration between the arts should be carried out in a very specific way. He sustained that sculpture in architecture should be subordinated to it: they should enable its qualities, and allow for an understanding of the divine, through the architecture where it belongs; as such, both the arts and the ornament should be 'animal or organic'[120] and not figurative, for then it becomes a subject in itself rather than an extension of architecture.

Thus, Ruskin (1903) continues explaining, that the arts should be seen as 'ornaments' for architecture: in the sense that they emphasize it's significance and it's meaning. He claims: '' No perfect piece either of painting or sculpture is an architectural ornament at all, except in that vague sense in which any beautiful thing is said to ornament the place it is in.'' (Ruskin, 1903b, p. 284). Thus, for Ruskin (1903), architecture is different from building precisely because it adds a part that is beyond usefulness: the decoration aspects. When painting and sculpture are not ornament, but instead are central pieces in themselves, what occurs is that the architecture becomes subordinate to the artistic element rather than acting in unison. He explains: '' It is very possible that the sculptured work may be harmoniously associated with the building, or the building executed with reference to it; but in this latter case the architecture is subordinate to the sculpture, as in the Medicean chapel, and I believe also in the Parthenon.'' (Ruskin, 1903b, p. 284).

The idea of painting and sculpture acting as ornament (as summarized previously) is an idea that ornament is that which belongs to that specific place and no where else, and that it contributes to the understanding and experience of the architecture where it belongs, enhancing it's significance.

However, Ruskin continues, architecture needs to be complete in its own existence, rather than requiring from the other art a complementary 'meaning'. As such, ornamentation and beauty exist as part of architecture. The glory of Gothic Architecture, Ruskin continues, is that it possess a union of all elements into the overall meaning of the whole of architecture: '' This is the glory of Gothic architecture, that every jot and tittle, every point and niche of it, affords room, fuel, and focus for individual fire.'' (Ruskin, 1903b, p. 291).

The separation between the arts…

There connections and interdependences weren't always clear, and there were moments when each one developed their own independent ways. Architect Pallasmaa (2011) claims, as an example of this, that during the times of the International Style (set forth by the exhibition of the 1932), art was always considered a 'decorative' element, and therefore there should be a separation between architecture and the other art forms.

With the generation of architects that followed the modern movement, such as the works of the Architects Richard Neutra (1892-1970), Oscar Niemeyer (1907-2012), Alvar Aalto (1898-1976) and Louis Khan (1901-1974) *(see Glossary)*, there was also an independence of architecture towards the arts. This separation of the arts is also relevant in some of the contemporary architects: such as the work of Siza Vieira *(see Glossary)*, who has the profound desire to leave his architectural space 'devoid' of added

[120] Reference to: '' It was a favourite theme with Ruskin that all ornament should be based on the animal or organic kingdom.'' (Ruskin, 1903b, p. xxvii)

elements. In these cases, the arts each search for their own meaning and their own significance, independently from each other; architectural space, then, is created as an independent entity, that doesn't need the arts, and the art of painting and sculpture, in their own way, also search for languages, meanings and expressions that don't depend on architecture.

The separation, then, is always led by the desire to understand the essence of the artistic object in it's own right, away from other artistic influences. It is a desire for an independent significance. However, this desire goes against art's essence: which has at its core the aim of creating significance for man's existence. Therefore, because all the arts can draw from each other influences, meanings, languages, expressions and significances, it was even more possible to understand that they on the one hand share common traits of significance, and on the other hand, posses differences that need to be sustained.

So what is the shared significance between the arts?

The shared significance of all the arts…

One main common trait to all arts, (Architecture, Sculpture and Painting) is that they use the same means of expression, conceptualization and execution: drawing, space, geometry, light, colours, models, three dimensional conceptualizations, etc. In summary, they use the same intermediate codes of creation. Although they use different means of execution (brushes for painting, chisel for sculpture and construction for architecture), and painting and sculpture create something to be viewed (albeit by the mind) rather than lived in, they possess the same means of creation, and the same principle of generating experience and communicating.

Another common trait is pointed out by Architect Pallasmaa (2011) when he explains that every powerful artistic expression (are 'existential condensations' capable of communicating the complex experience of 'being human', through the means of an 'image'; all arts, then, share this ability to create ontological and metaphysical understandings of man's existence in the world through an 'image'. Another aspect that all the arts have in common is what can be defined by their essence as 'artistic inutility'. This is explained by Rudolf Arnheim (1966) *(see Glossary)*, when he emphasizes that even the defenders of 'pure form' assert that all art is 'concerned with nothing but itself'; in doing so, all art lies in a sphere of existence that is beyond the basic 'stimuli' and rooted beyond the most basic needs of existence[121].

Pérez-Gómez (2008) *(see Glossary)*, states that what unites architecture with other art forms, is the significance: they all evoke wisdom and embody significance. Instead of meaning something, arts and architecture allow for meaning to present itself as a specific 'embodiment'. It is the significance that distinguishes the work of art and architecture from all other technical achievements. The author summarizes: '' What the work has to say can be found only within itself, grounded by language and yet beyond it: this is the original sense of mimesis (…) means that something meaningful is there in itself.'' (Pérez-Gómez, 2008, p. 116). This embodiment, means an incorporation of significance within its form and within it's creation: the art form (weather a painting or a space) possesses significance in it's core. This idea will be further be developed in the following chapter.

[121] Reference to: '' Art is the most powerful reminder that man cannot live by bread alone; but we manage to ignore the message by treating art as a set of pleasant stimuli.'' (Arnheim, 1966, p. 12)







Photo 1: Brigitte Bardot and Malapart House; Source: http://www.alvaroportela.es/blog/wp-content/uploads/2013/04/18-malaparte.jpg; Photo 2: Turrell's Roden Crater; Source: http://www.flat-surface.com/Roden-Crater-James-Turrellsiemer/; Photo 3: Anselm Kiefer, Only with Wind, Time, and Sound (Nur mit Wind, mit Zeit und mit Klang), 1997, Acrylic and emulsion on canvas, 470 x 940 cm, Guggenheim Bilbao Museoa; Source: http://www.guggenheim-bilbao.es/en/works/only-with-wind-time-and-sound/

PLATE 13: MERGING ART FIELDS AS SIGNIFICANCE

> ***Synthesis:*** *As a summary, all the arts are significant and create significances that communicate to the human being on a physical, emotional and a spiritual level, allowing him to understand his ontological and metaphysical existence (Pallasmaa (2011)) . They are defined by their essence by their 'inutility', possessing value as an artistic object in itself (Rudolf Arnheim (1966)) and they all use the same means of creation (conceptualization, creativity, etc.) and the same levels of experience (the establishment of a communication between the object and the self).*

The differences between all the arts…

There are various authors that sustain that the three arts have many differences between each other. Some of these, as explained by Morris (1996), Pallasmaa (2011), Scrutton (2009) and Steiner (1992) are pointed out below *(see Glossary)*. Robert Morris (1996) says there may be a general sensibility between the arts, however each art is involved in very specific and separate concerns. He also argues that: '' At best, the assertions of common sensibilities are generalizations that minimize differences.'' (Morris, 2005, p. 826). The concerns of each art are different, meaning that each of them has their own place of existence, it's own function in the world and it's own means to achieve it. For Pérez-Gómez (2008), what distinguishes architecture from other art forms, is its interconnection to life itself in the form of 'significant action'; architecture offers a space for existential orientation. Thus, '' As representation of meaningful action, it contributes to an understanding of one's place in the world.'' (Pérez-Gómez, 2008, p. 109). Pallasmaa (2011) argues that one of the main ontological differences between architecture and the other arts, is that images of art are 'external' to us and architectural images are 'integrated' in our own existence and our sense of 'identity'. Architecture, because it surrounds all of our existence, has an 'irrefutable' and constant presence, where as the other arts do not possess such a strong ontological value as strong. Pallasmaa defends that another core difference between architecture and the other arts, is that architecture defines our encounter with the world by being a mediator in space; whereas all of the arts deal with the fundamental existential dialectics, architecture structures those existential ideas into a 'way-of-life'. Scrutton (2009), like wise, points out aspects that are unique to architecture and that distinguish it from **painting and sculpture**: firstly, the fact that architecture is located in a specific place, attached to it, where as all other high art forms (sculpture, painting, music, etc.) are not; also, the fact that all art forms are intrinsically private whereas architecture is exclusively public[122]. Another main difference, is that architecture does not need to belong to the realm of the high art, but instead, belongs to the realm of the 'common practical wisdom' and an 'aesthetic of the everyday'. Another distinction is pointed out by Roger Scrutton (1979), when he emphasizes the fundamental idea of 'expression' as a characteristic, or even principal, aim of art, explaining that ''(…) expression cannot have the significance in such public arts as architecture as it may have in the private arts of poetry, painting and music.'' (Scruton, 1979, p. 13). Architecture, as a public art, features expressiveness in a different way: it consists of an '' (…) objective representation of style and manner, in impersonal and unspecific meanings that speak to us as though from far away and with a public voice.'' (Scruton, 1979, p. 13). Scruton considers that Modernism has not held this public realm of existence, as thus has been both self-conscious is choosing an

[122] On this issue Gordan Graham (2002), in his article 'Scruton on Architecture' (2012) clarifies: '' This fact about architecture's public character gives rise to what Scruton regards as 'the feature which serves most of all to give it a peculiar status and significance in our lives' namely 'its continuity with the decorative arts'.'' (Graham, 2012, p. 5).

audience and individualistic in its aims. They also differ in the fact that plastic arts have a more immediate capacity of realization and possess an innate creative freedom attached to their essence, that allows them to explore new conceptualizations and new ideas more freely; where as architecture is bound by all sorts of restraints and conditions.

… by Rudolf Arnheim: some differences between the arts

Rudolf Arnheim (1977) in his book 'The dynamics of architectural form' explains that one main difference between the art of architecture and the art of painting and sculpture is that although both forms of artistic creation create a display of character and likenesses to properties and symbolisms, in painting and sculpture, it is expected that they create '' (…) a valid image of human existence as a whole, (…).'' (Arnheim, 1977, p. 216). These works create complex comprehensive symbolisms that represent the whole world itself: examples can be named in the works of the cubists or in the abstract sculptures of Jean Arp whose loose vague evocative shapes create a sort of world view. A work of architecture, on the other hand, does not need to aspire to this comprehensive type of symbolism, partly because it is limited by its function of 'dwelling', housing human activity. In this way, the symbols and significances have to equally differ between these arts. Architecture, continues Arnheim, uses symmetry (promoting stability), whereas symmetry is rarely used in the other fine arts, because it would represent a limited world view. Arnheim adds another difference between them: '' Although a building is complete in itself as a formal design, it is an implement of physical utility and therefore reveals its full meaning only by embracing the presence of man.'' (Arnheim, 1977, p. 217). The other arts, do not have this need, and can be appreciated 'at a distance'. This is also the main difference that has to be noted between architecture and sculpture: the people that experience a building complete it, whereas sculpture is designed to be observed.

…. by Rudolf Steiner: spiritual differences between the arts

For Steiner (1992) the differences between the art relate to the spiritual experiences that each one can generate for man. The two arts of sculpture and architecture, the arts concerned with spatial forms, generate different ways in which our souls relate to the world through our bodies. However, they are distinct in their nature and in their purposes: architecture, having begun with tombs has always manifested the aspiration of creating the space for the soul's departure or union (Architecture provides a space for a the soul and the body to become one or separate, allowing for a spiritual dimension to come into being); whereas sculpture, also dealing with space, points to a connection between form and 'spiritual happenings' in a descriptive nature rather than an encasing in itself. The difference between these arts and painting is that painting creates an inner soul experience, rather than an external one, and is because of this associated with a sense of spacelessness. (Steiner, 1992)

> ***Synthesis:*** *What the arts don't have in common is their ontological values and their own individual spiritual essences; architecture has an 'irrefutable' and constant presence because it always surrounds us (Pallasmaa (2009)) and has a more public nature than the other arts (Scrutton (2009)); plastic arts, on the other hand have a more immediate capacity of realization and possess an innate creative freedom attached to their essence, that allows them to explore new conceptualizations and new ideas more freely. For Steiner (1992) the differences between the arts relate to the spiritual experiences that each one can generate for man: architecture creates the space for the soul's departure or union, sculpture creates examples of 'spiritual happenings' and painting creates an inner soul experience.*



Photo: Barcelona Pavillon Barcelona Arquitecto Ludwig Mies van der Rohe; Source: https://pt.pinterest.com/pin/251075747955026462/

PLATE 14: SCULPTURE AND ARCHITECTURE IN COMPLETION OF EACH OTHER

3.2.4. NEW PARADIGMS OF ART AND ARCHITECTURE: EXPANDING SIGNIFICANCE

Contemporary art has witnessed an expansion of the forms of artistic and architectural creation, where it is not longer only possible to understand the traditional artistic distinctions of architecture, painting and sculpture, but new views need to also be taken into consideration. These contemporary artistic creations merge all of the fields trying to create a new means of significance. What all of these new contemporary art forms have in common is a merging of the artistic fields: drawing principles and values from painting, from sculpture and from architecture; they see these three arts not as bound within their own sphere but merging together. In doing so, they enhance the user's experience in multiple ways: establishing a sort of combination of functions of the different arts in one single artistic creation. These new types of creations allow for meanings and significance to become revealed in new ways.

The origins of these new ideas of both art and architecture are hard to define and pin point: one can understand (as previously shown) that they might have their roots in the eighteenth and nineteenth century tradition of the Beaux-Arts school system, and that they have been in a constant evolution in all the art forms, simultaneously, through the last decades; however it is possible to identify some artists that articulated some principled that define these new approaches to a new type of artistic paradigm and union of the arts. The first main reference that should be identified is the artist Donald Judd *(see Glossary)* and his essay Specific Objects that freed sculpture into space, making the artist statement be all about the object itself (these theories will be analysed further in the Donald Judd case study). Of reference is also the sculptural elements proposed by Richard Serra *(see Glossary)*, that on the one hand begun to question and change the architectural space in which the sculptural pieces belonged to, on the other hand the sculptural forms create a sort of architectural space within themselves.

It is possible to organize these new art forms in three types: (a) Transforming architecture through art in public space; (b) Spatial Experiences through new art forms in architecture, (c) Spatial Narratives through new forms of architecture, (d) Architectural Narratives through new art forms in nature. These will be analysed individually bellow:

(a) Transforming architecture through art in public space…

One of the main ways in which art is expanding into the domain of architecture is pointed out by the author Mitrache (2012) *(see Glossary)*. He emphases that the merging of the artistic fields (painting, sculpture and architecture) is occurring through public space itself, and the traditional relationship (architecture, sculpture and subject) has shifted: architecture no longer serves as a background for art, or is an artistic object in itself, but allows for a continuous re-definition of the artistic realm. This is what the author identifies as the third type of connection between architecture and the arts, entitled 'Architecture as built environment reclaimed and enhanced by art'[123]. One main example can be found in the artists

[123] **The Three types of connections between art and architecture in the pulic realm:** According to the author, architecture and the arts can relate in three ways: '' (…) as a built setting for the showcasing of art, as built object of art, and as built environment to be reclaimed and enhanced by art.'' (Mitrache, 2012, p. 2). The first type, 'Architecture as built backdrop for showcasing art' can be found in the example of Trafalgar Square, and the creation of a sort of anonymous background for art; the second, 'Architecture as an object of art' of which is an example Gehry's Bilbao, where architecture is an art object itself: it is emphasized the visual impact, evocative inclinations for the viewer, it's symbolic nature, and other features that allow for aesthetic values to be understood first,

Greyworld artistic creations: an art group that specializes in works of art that uses architecture's public space in order to create social interactions with the viewers; an example is their intervention in the Dublin's Millennium bridge in 2000[124]. These 'new' art forms use public spaces and the architectural elements that define it, promoting social engagement and a new understanding of life. They use different materials, architectural ideas and forms, sculptural interactions, and the visions and ideals of paintings, in order to create and communicate a new type of interaction. Of reference are also the artists Christo Vladimirov Javacheff and Jeanne-Claude, more commonly known as Christo and their installations in public spaces and in nature: that either transforms architecture or generates a new 'architectural' essence to be understood from the viewers. One example that can be announced is Pont Neuf in Paris, that was wrapped up as an art installation (1985). It is also of reference to claim that although these artistic creations intervene in architecture, they do not approach the main essence of architecture itself: which is the aspect of 'living in' a space. They are temporary creations, meant to be experienced in a short duration of time.

(b) Spatial Architectural Experiences through new art forms in architecture….

These new art forms that are architectural in their essence (stairs, geometry, arches, etc.) in private spaces (rooms of galleries), promote a new type of experience for the user. These encounters use the principles of the arts of painting and sculpture, through the forms and vocabulary of architecture, creating new significances for the viewer. They use light, colour, perception, the idea of space and transforming space, and are led by the overall desire to establish an 'embracing' spatial experience for the user. These art forms use light, movement, space, colour, perception and three dimensionality, throughout the whole space in which they are immersed in in order to create engaging architectural experiences. One main example of this type of art is the artwork of Yayoi Kusama *(see Glossary)*. Her artistic progression can be traced from painting to spatial engagement (from the studio to space), moving towards a three dimensionality. Her work is characterized by a diverse use of artistic practises and expressions and throughout her artistic career she has worked in a wide variety of media (she's created large paintings, soft sculptures, environmental sculptures using mirrors and lights, happenings, and collaborative creations with multiple other artists and fashion designers). She is known for her obsessive repetition of circular forms (both in paintings and in spatial encounters) and for embodying a continued exploration of form, subject matter, and space. One example of her work can be ' *The obliteration room'* (2011), which was an interactive children's project developed by the artist for the Queensland Art Gallery's; another art installation of reference is the *'"Infinity Mirrored Room - The Souls of Millions of Light Years Away" (*2013), an installation that echoes the cosmos and the universe. Other contemporary examples can be identified as the use of light to create architectural forms: examples of this are the works of the artist

rather than architectural ones; architecture as a work of art is used for redevelopment strategy; thirdly, 'Architecture as built environment reclaimed and enhanced by art' can find an example in the artists Greyworld.

[124] **Greyworld's intervention in the Millenium bridge:** '' In 2000, Greyworld transformed Dublin's Millennium Bridge from a drab, strictly functional means across a body of water into one of the city's most popular promenade and rendezvous points by decorating it with a blue carpet equipped with motion, speed and pressure sensors. As people walked across the bridge, the sensors transmitted data to a computer whose algorithm-controlled feedback consisted of various sound effects: walking through puddles of water, snow, on gravel, leaves, etc. The blue rug converted the bridge into a highly interactive soundscape which the passers-by could manipulate by varying their gait.'' (Mitrache, 2012, p. 5)

James Nizam *(see Glossary)*, such as the work '*Archetype*' (2014), the work of Jeongmoon Choi, such as *Room in Room* (2011) and the works by Antony Gormley *(see Glossary)*, such as *'Matrix'* (2014).

(c) Spatial Narratives through new forms of architecture….

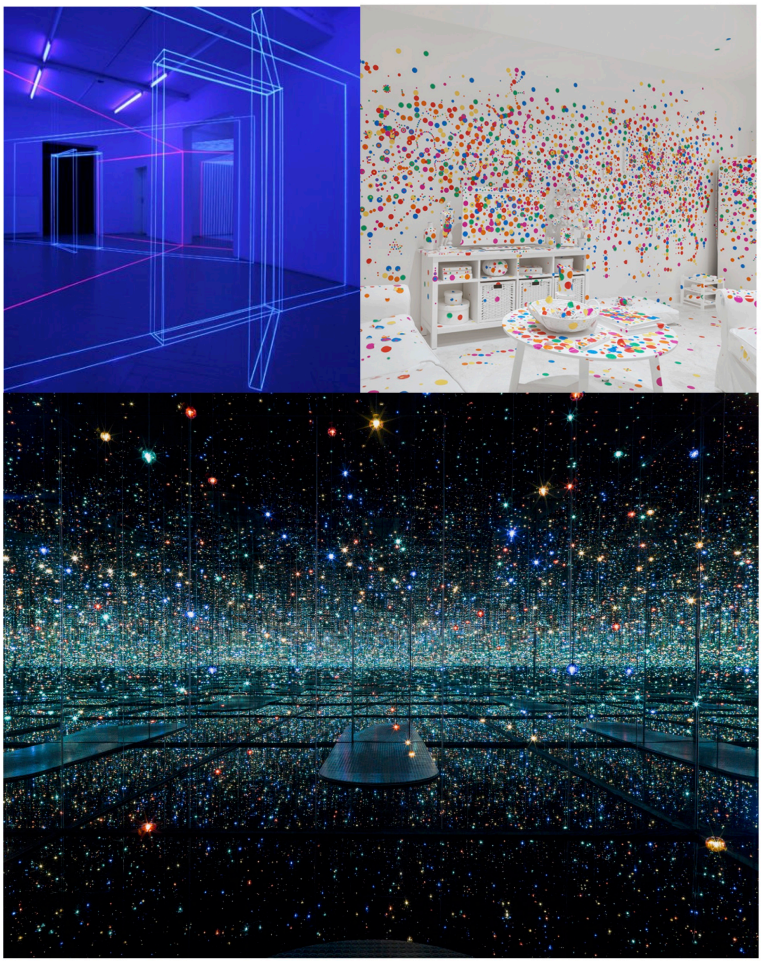
Architecture itself has also expanded its boundaries and merged with other fields, using values and tools from painting and sculpture to construct a more atmospheric and enhanced experience. It has defined a new field of spatial architecture. Simon Marchán Fiz (1986) explains that the creation of environments was a new artistic tendency (which began in the 60's) which expanded the fields of painting and sculpture and culminated in architecture and architectural space. Early example of this can be found in the pop movement, or the psychadelic environments of Earl Reiback such as the electric circus, 1967, a night club in New York City. These spatial experimentations extend and expand even further with the use of technology such as light installations.

Authors Zélia Simões and Maria João Durão in their article '*New materialities of light and colour in spatial allegories'* (2008)**,** define this new form of expanded architectural understanding, as a combination of the elements of materiality, perception of colour and light within a space, that uses both natural and artificial elements. In this concept, space is understood as 'a vehicle of representation', generating complex visual associations where the observer becomes a participant and is integrated within the experience. It is a quest for the poetics that uses light, colour, textures and materials, (as a complex mechanism), which act in a 'sensitive reason', and acquire a sense of 'transcendence' and 'intemporality', and these are sustained by the overall aesthetic experience. It is important to accentuate, that these creations are ephemeral, creating experiences that are lived for a short duration of time. The same authors in another paper entitled 'Contemporary Architecture: Real and Virtual Narratives' (2008), clarify the concept of '***spatial narratives'***, as this new field of architecture that defines a new paradigm in architecture and in art; they explain that '' Spatial narratives are a new expression form whose transformation depends on the share of information, construction of memories and other activities involving one or a group of users of a space.'' (Simões and Durão, 2008b, p. 1). These types of spaces reflect cultural, economic, social, emotional, and psychological associations; as such, ''The space image helps to delineate the nature of narratives as well as the function of actions and atmospheres.'' (Simões and Durão, 2008b, p. 2). In order to possess this kind of narrative, spaces need to communicate to the five senses, allowing for different signs to mix. A first example they present is Markos Novak (1991) as '*liquid architecture'*, that explains this type of architecture as a complexity that: '' (…) represents a temporal identification and the subject's projection on things revealing personal and cultural experiences connected to collective and cultural experiences.'' (Simões and Durão, 2008a, p. 2). Such is the case with the Pavillion H20 Expo by Architects Lars Spuybroek & Kas Oosterhuis. It is also possible to announce the atmospheric architectural spaces of Peter Zumthor (one of the case studies that will be analysed later on in the study). Zumthor, has the opposite direction of the previous examples in the creation of spatial narratives: while the first examples use technology and digital means, Zumthor is opposed to these virtual dimensions and sustains a quest for the essence of architecture as a lived immersive space, rather than an ethereal temporary condition.

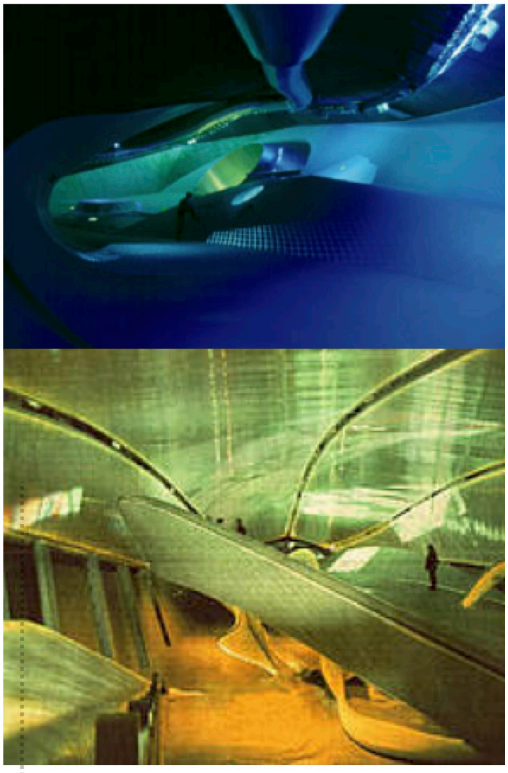


(a) Transforming architecture through art in public space…

(b) Spatial Architectural Experiences through new art forms in architecture….



(c) Spatial Narratives through new forms of architecture….



LIQUID ARCHITECTURE AND ATMOSPHERES

Photo: Greyworld's Trafalgar Sun (2012) artwork; Source: https://en.wikipedia.org/wiki/Greyworld#/media/File:Trafalgar_Sun_photo.jpg; ; Photo 2: Pont Neuf wrapped by Christo (Paris, 1985); Source: https://en.wikipedia.org/wiki/File:Pont_Neuf_emballé_par_Christo_(1985).jpg ; Photo: Pavillion H20 Expo by Architects Lars Spuybroek & Kas Oosterhuis; Source 1: http://www.archined.nl/en/news/h2o-expo-6c/; Source 2: http://synworld.t0.or.at/level3/text_archive/testing_ground.htm; Photo 4: Antony Gormley, 'Matrix' (2014); Source: https://pt.pinterest.com/pin/251075747955036208/; Photo 5: The obliteration room, by Yayoi Kusama, 2011; Source: http://www.designboom.com/art/yayoi-kusama-david-zwirner-obliteration-room-new-york-05-26-2015/ ; Photo 6: Yayoi Kusama "Infinity Mirrored Room - The Souls of Millions of Light Years Away" 2013.; Source: http://design-milk.com/45-seconds-infinity-yayoi-kusama/;

PLATE 19: NEW FIELDS OF ARCHITECTURE AND THE ARTS

(a) Transforming architecture through art in public space…

(b) Spatial Architectural Experiences through new art forms in architecture….

(c) Spatial Narratives through new forms of architecture….

(d) Architectural Narratives through new art forms in nature….

Another type of artistic creation that blends the artistic spheres in order to allow for the generation of significance to emerge can be characterized as 'architectural narratives through new forms in nature', which can also be understood as land art or environmental art. This art form uses the landscape and nature as the 'space', and transforms it by adding elements that create visual emotional and psychological associations. Elements that transform nature can be added at multiple levels, however for the purpose of the present research, it is of interest the elements that are added, that create an architectural experience: producing a sense of space, and generating a cosmos within the infinite 'nothingness' of the landscape. These artists and these temporary installations echo both architectural and artistic principles and use tools and values form all the artistic spheres.

Of relevance is the artist Nancy Holt *(see Glossary)*, with the installation '*Sun Tunnels'* (1973), that is comprised of four large cylinders of concrete (architectural forms with the dimensions of the human being), placed in a vast arid landscape that face the movements of the sun, creating different experiences throughout the day. Also of reference is Artist Louis Le Roy *(see Glossary)*, considered the founder of *environmental art*; his art echoes an immaterial language and creates mystical environments within nature, with the aim of generating awareness to the protection of nature.

Another reference could be made to the work of Nicola Yeoman, specifically the work a *'T falls in the woods'* (2010), which used ephemeral materials such as cloths and sticks to create architectural (and not only architectural) forms placed within spaces and nature. The installations create a 'space' within the undetermined nature of landscape. Overall the artist is known for his atmospheric object installations, making temporary installations with everyday and discarded objects in unexpected locations. One last example can be announced with the works of Martin Hill, a land artist that uses geometry and simple forms to trigger significances associated with nature.

(e) Architecture as Sculpture and Sculpture as Architecture ….

Another type of artistic creation that blends the artistic spheres in order to allow for the generation of significance to emerge can be defined as 'architecture as sculpture and sculpture as architecture'. This type of art is probably the easiest to understand for it's simplistic character: artists make sculptures that use architectural language and architects produce architectural elements that are sculptural in their essence and that do not respond to any program requirements but that act exclusively as a sculptural element. One example of this second type is the NEXT Architects with their sculptural staircase titled *The Elastic Perspective* (2014) where an architectural staircase is placed in an open landscape defining an elevated path. The architects use sculpture to establish architectural connections.

Another example is the work of Richard Serra *(see Glossary)*, that creates forms that continue the expand the meaning of the architectural space. His sculptures are so intrinsically connected to the architectural space in which they belong to that they use the architectural proportions and dimensions to be accurately defined. But also, the sculptural piece itself creates a sort of architectural experience, sheltering and protecting and simultaneously questioning experience and existence itself. Some of Richard Serra's works are located in interior rooms, others are located in public space and other are located in the

open landscape: an example of this last type of location is the work *'East-West / West-East'* (2014) that acts as dolmen (reference to primal forms of architectural expression) in the landscape. With Richard Serra the sculptural artistic object establishes architectural functions.

Another example can be made with the works of Donald Judd *(see Glossary)* such as his sculptural architectural forms made of concrete, located in his Marfa complex in Texas (analysed in the case study) and with the works of Anselm Kiefer such as his towers and the rooms also in his artistic complexes (also analysed in the case studies).

Ending remarks notes ….

Thus far, we have analysed multiple forms of interaction between the arts, that create a field of exploration for both artists and architects. They blend and blue the frontiers between the multiple artistic practises, creating new experiences, communicating new ideals and conveying principles in new ways. However, it is important to accentuate that it is not a foundation of a new discipline, but a blurring of existing ones. The three arts maintain their own independent value, identity and core essence: painting as a two dimensional creation that can use three dimensional means, sculpture as a three dimensional creation that can use spatial experience and time (traditionally architectural means), and architecture as a three dimensional creation that not only creates experience and uses time and movement, but that also creates a space to live in. This creation of a space for living in, for dwelling (as previously analysed) is the deepest difference between architecture and art in general.



(d) Architectural Narratives through new art forms in nature….

(e) Architecture as Sculpture and Sculpture as Architecture ….



Photo 1:Nancy Holt, Sun Tunnels, 1973; Source: https://pt.pinterest.com/pin/251075747955033993/; Photo 2 and 3: Eco Cathedral by artist Louis Le Roy; Source: https://degroenegeus.wordpress.com/2012/01/03/green-screen-louis-le-roy-on-friday-20th-the-hub-amsterdam/; Photo 3: A 'T falls in the woods' by Nicola Yeoman ; Source: http://www.nicolayeoman.com/new-york-times-t/; Photo 4: Land art installation by Martin Hill (n.d.); Source:http://www.thisiscolossal.com/tags/land-art/page/2/; Photo 5 Richard Serra, East-West / West-East, 2014; Source: http://thomortiz.tumblr.com/post/137280618436/contemporary-art-blog-richard-serra; Photo 6:Donald Judd Sculpture, Marfa, TX; Source:https://pt.pinterest.com/pin/251075747955033989/; Photo 7: One of Anselm Kiefer's rooms as artistic objects, in his art complex in Barjac; Source:http://www.theguardian.com/artanddesign/2014/sep/12/anselm-kiefer-royal-academy-retrospective-german-painter-sculptor

PLATE 16: NEW FIELDS OF ARCHITECTURE AND THE ARTS

(d) Architectural Narratives through new art forms in nature….
(e) Architecture as Sculpture and Sculpture as Architecture ….

Summary:

3.2. Defining and understand the arts (a shared significance)

1. *The traditional distinction between fine arts (painting and sculpture) and functional arts (architecture) is not valid anymore because function doesn't define a determining factor in art but rather a requirement that needs to be satisfied (Scrutton (2009)).*

2. *For Kant (1976) architecture, painting and sculpture are Formative Arts (expressive through sensible intuition and to the creation of figures in space); these could be further subdivided in two: in sensible truth that uses touch and sight (sculpture and architecture) or in sensible illusion that uses only sight (painting).*

3. ***Architecture** (as an art and as significance):*

    - *Just like other art forms has a lower type (construction and building) and a higher type or art (which is Architecture in it's real essence).*
    - *is defined by the function of dwelling and creating a space to live in.*
    - *Begins with the adding of elements, which are useless in terms of its construction, beyond functionality, but that add other values, principles, dimensions and significances (Ruskin (1849) and Scruton (2009)).*
    - *Is a creation that is intrinsically significant and meaningful in itself, just like any artistic object (Scrutton (2009)).*
    - *Creates poetical and cosmological values (Perez-Gomes (1994)),*
    - *Is based on the duality of both 'use' and artistic freedom (Kant (1976))*
    - *Is the result of a poetic understanding of the world, allowing man to 'dwell poetically' and implies the embodiment of a way of being in the world (Norberg-Schulz (1985)).*
    - *Makes the place be what it already is, giving a thing or a place, the world, a presence. (Norberg-Schulz (1985)).*
    - *Consists in of the gathering of world and establishing a mode of dwelling between earth and sky. (Norberg-Schulz (1985)).*
    - *Creates insights, understanding and truth (poetry) that affect the viewer (Zumthor (2006))*
    - *Communicates beauty and is a sensuous expression of divine and human freedom, just like any other art (Hegel).*
    - *Communicates cosmological, ontological and existential values and principles that allows man to understand his place in the world, by providing a 'cosmic and mental' space for man's existence (Pallasmaa (2009)),*
    - *Creates the possibility of dwelling which implies the establishment of meaningful relationships between man and a given environment; it is in 'dwelling' that man finds himself, and a sense of being-in-the-world is established. Dwelling implies an act of identification (the establishment of a sense of belonging to a place), and orientation (spatial interrelationships) through which significance emerges. (Norberg-Schulz (1985)).*
    - *Is defined by the principles it incorporates into itself (Ruskin (1849) and Scrutton (2009)).*
    - *Is the ability to transform the merely functional and practical into something beautiful that both 'shelters' and 'reminds', allowing for different associations and meanings to emerge (De Botton (2008));*
    - *Is the definition of an ideal way of life (De Botton (2008));.*
    - *Is the creation of a space for the encounter and departure of the soul (Steiner (1992)),*

- *Addresses the human spirit, and allows for a connection with the soul (Steiner (1992))*

4. ***Painting*** *(as an art and as significance) is:*

   - *A two dimensional creation that uses a semi-liqud medium, and is focused on capturing, expressing and portraying an essence: be it of a person, a space, an atmosphere, or of an idealized world of geometries.*
   - *A form of alchemy that uses basic materials (water and stone) to create spiritual significances: it creates a bridge between the spiritual world and the physical world, trying to create the materia prima (James Elkins (2000)).*
   - *A communication of 'substances' (thoughts, ideas, and feelings), through the use of a process of discovery (insight and intuition) (James Elkins (2000)).*
   - *An 'organ of the spirit' that recreates an interior world, by drawing from a 'fabric of meaning' through expression (rooted in a sense of genesis). (Merleau-Ponty (1991))*
   - *An art of space and colour with accurate connections and relations from which meanings occur Nadir Afonso (2010);*
   - *An 'alchemical process' and a sort of 'psychic container' in which a deep process of transformation occurs Maria João Durão (2012);*
   - *The representation of the concrete expression of spiritual freedom, (just like the other art forms), however only painting, can grant us 'the face of spirit' (Hegel);*
   - *The creation of the sensible illusion combined with ideas (the field it can dwell in better than any other art, through the expansion of intuition) (Kant (1976)).*
   - *A moving towards spacelessness: moving away from three-dimensions towards an inner dimension, generating an inner soul experience (Steiner (1992))*
   - *Is a soul experience that is felt by the painter and by the viewer, in the deepest aspects of the being and thus shouldn't be concerned with naturalism, perspective or space, but instead should focus on colour alone (Steiner (1992));*

5. ***Sculpture*** *(as an art and as significance) is:*

   - *That which creates multiple sensations on the viewer, derived from it's mass, volume and form that use light, and it is an object, in space, that uses gravitational force and other physical properties and qualities (Robert Morris (1966)).*
   - *The creation of that which could have existed (Kant (1976))*
   - *That which 'embodies' spirit (Hegel).*
   - *That which creates 'spiritual happenings' in a descriptive nature (Steiner (1992)).*

6. ***The collaboration and union between the arts, has the main aim of enhancing significance, and can be understood in four ways:***

   - *The interaction of plastic arts within architecture (shared significance),*
   - *The search for significance through the other art forms (drawing inspiration from each other),*
   - *The development of the artistic self and significance through various art forms (the artist that is also an architect).*
   - *Lastly, the* ***merging of the arts as a new art form that uses specific attributes from each art in order to enhance and explore new***

significances; *the value of this new art form occurs when each one maintains their own specific ontological essences (Rendell (2006) and* Pallasmaa (2011)).

7. ***The separation between the arts allowed each art to explore their own fields of significance. Even if it goes against the very essence of what art is.***

8. ***The commonalities between the arts are****:*
    - *The significance and the creation of significances, as their essence.*
    - *The communication of that significance to the human being on a physical, emotional and a spiritual level, allowing him to understand his ontological, metaphysical and spiritual existence. (Pallasmaa (2011)).*
    - *They are all defined by their 'inutility', possessing value as an artistic object in itself (Rudolf Arnheim (1966)).*
    - *they all use the same means of creation (conceptualization, creativity, etc.) and the same levels of experience (the establishment of a communication between the object and the self).*

9. ***The difference between the arts are****:*
    - *Their ontological values and their own individual essences and concerns;*
    - *The 'irrefutable' and constant presence that architecture has because it always surrounds us where as other arts are more fragmented (Pallasmaa (2009))*
    - *The more public nature and character that architecture possesses in regards to the other arts that are more private (Scrutton (2009))*
    - *The degree of freedom and immediacy of realization that the plastic arts possess, attached to their essence, that allows them to explore new conceptualizations and new ideas more freely, whereas architecture is more constrained by multiple conditions and requirements.*
    - *For Steiner (1992) the differences between the arts relate to the spiritual experiences that each one can generate for man: architecture creates the space for the soul's departure or union, sculpture creates examples of 'spiritual happenings' and painting creates an inner soul experience.*

10. ***The new types of art forms:***
    - *Don't see distinctions between the different art fields, using different concepts, goals and values from each of them merging them into a creation that is able of generating new significances.*

11. ***The three arts maintain their own independent value, identity and core essence: painting as a two dimensional creation that can use three dimensional means, sculpture as a three dimensional creation that can use spatial experience and time (traditionally architectural means), and architecture as a three dimensional creation that not only creates experience and uses time and movement, but that also creates a space to live in. This creation of a space for living in, for dwelling (as previously analysed) is the deepest difference between architecture and art in general.***

Summary Chapter 3:

In the present Chapter 3, the artistic phenomena as significance was analysed. ***In part 3.1. the artistic phenomena as significance was observed and defined, understanding that*** *Art, as the contemporary world comprehends it, is a very recent idea and concept, traditionally it was simply associated to 'skill' or the 'craft' of making something. However, we also defined that Art, is not craft, representation, magic and not amusement: these are lower art forms as described by Collingwood (1938). These lower art forms, are designed to entertain and amuse (bringing about fantasies that 'pollute the world' (Scrutton (2009)), whereas* ***higher art is that which contains significance*** *and meaning and generates an aesthetic experience.* ***As such, the real work of art, communicates and creates significance, content and meaning*** *(Scrutton (2009), Cary (1984) Pallasmaa (1996) and Saarinen (1984).* ***The significance of the work of art*** *is a content 'presented' as a whole, inseparable from form and style, exposes and dwells on the 'riddle of existence' (Pallasmaa (1996)) and connects to the senses and the sensibility of the whole man (Carey (1984)). In part 3.2., it was seen that the traditional distinction between fine arts (painting and sculpture) and functional arts (architecture) is not valid anymore because function doesn't define a determining factor in art but rather a requirement that needs to be satisfied (Scrutton (2009)). We defined and understood the art of Architecture (as significance), as that which is based on the duality of both 'use' and artistic freedom (Kant (1976)), to summarize all the different ideas proposed; we understood the art of painting as the representation of the concrete expression of spiritual freedom as the 'the face of spirit' (Hegel); and the art of sculpture as that which creates 'spiritual happenings' in a descriptive nature (Steiner (1992)). The different connections between the three arts were also verified: where as on the one hand we have authors, artists and architects that sustain a mutual dependence and collaboration between the arts (Rendell (2006),* Pallasmaa (2011) and other), *on the other, we saw those architects and artists that sustained independence between the multiple art forms, sustaining their individuality such as Scrutton (2009). Lastly it was understood that new art forms were emerging and understood that don't see distinctions between the various art fields, using different concepts, goals and values from each of them merging them into a creation that is able of establishing new significances.*

BIBLIOGRAPHIC REFERENCES: Chapter 3

Afonso, N. (2010). *Time does not exist: Manifesto.* Lisbon: Dinalivro.

Ando, T. (1995). Acceptance Speech: Tadao Ando [WWW Document]. Available at: http://www.pritzkerprize.com/1995/ceremony_speech1 [Accessed 16 Jul. 2014].

Ando, T. (1989). *Tadao Ando: The Yale Studio & Current Works*. New York: Rizzoli Publishers.

Arnheim, R. (1969). *Visual thinking*. California: University of California Press.

Arnheim, R. (1966). *Toward a psychology of art: Collected essays*. California: University of California Press.

Arnheim, R. (1977). *The Dynamics of Architectural Form*. California: University of California Press.

Ball, P. (2003). *Bright Earth: Art and the Invention of Color*. Chicago: University of Chicago Press.

Beuys, J., Harlan, V. (2004). *What is Art?: Conversation with Joseph Beuys*. London: Clairview books.

Cary, J. (1984). A*rt and reality: ways of the creative process*. London: Ayer Company.

Collingwood, R.G. (1938). *The Principles of Art.* Oxford: Clarendon Press.

Corbusier, L., Cohen, J.L. (2007). *Toward an Architecture.* Los Angeles: Getty Publications.

Cronon, W. (1994). Inconstant Unity: The Passion of Frank Lloyd Wright, in: *Frank Lloyd Wright Architect*. New York: The museum of modern art. Available at: http://www.williamcronon.net/writing/cronon_inconstant_unity_passion_of_frank_lloyd_wright_1994.pdf [Accessed 1 Nov. 2015].

Danto, A.C. (1998). The End of Art: A philosophical defense. *History and Theory: Art History, Historiography and After the End of Art*, 37 (4), pp. 127 – 143. Available at: http://www.jstor.org/stable/2505400 [Accessed 12 Dec. 2015].

Danto, A.C. (1981). *The Transfiguration of the Commonplace: A Philosophy of Art*. New York: Harvard University Press.

Danto, A.C. (2014). *What Art Is*. New Haven and London: Yale University Press.

De Botton, A. (2008). *The architecture of happiness*. London: Random House Digital, Inc.

Durão, M.J. (2012). Colour as Pathway of Light: Searching the Shadow in Luis Barragán. *JAIC - Journal of the International Colour Association*, 5.

Elkins, J. (2000). *What Painting Is*. New York: Routledge Publications.

Franzini, E. (1999). *A estética do século XVIII*. Lisbon: Editorial Estampa.

Freeland, C. (2002). *But Is It Art?: An Introduction to Art Theory*. Oxford and New York: Oxford University Press.

Graham, G. (2012). *Scruton on Architecture*. New Jersey: Princeton Theological Seminary. Available at: http://www.academia.edu/2384787/Scruton_on_Architecture [Accessed 15 Apr. 2015].

Hofstadter, A., Kuhns, R. (1976). *Philosophies of Art and Beauty: Selected Readings in Aesthetics from Plato to Heidegger*. Chicago: University of Chicago Press.

Holl, S., Pallasmaa, J., Gómez, A.P. (1994). *Questions of perception: phenomenology of architecture.* 2nd edition. New York: a + u Publishing Company and William Stout Publishers.

Houlgate, S. (2014). *Hegel's Aesthetics*. The Stanford Encyclopedia of Philosophy, Zalta, E.N. (Ed.). Available at: http://plato.stanford.edu/archives/spr2014/entries/hegel-aesthetics/ [Accessed 08 Sep. 2015].

Johnson, G.A., Smith, M.B. (1993). *The Merleau-Ponty Aesthetics Reader: Philosophy and Painting*. Evanston, Illinois: Northwestern University Press.

Johnson, P.A. (1994). *The theory of architecture: Concepts, themes & practices*. New York: Van Nostrand Reinhold.

Kemp, G. (2012). Collingwood's Aesthetics. The Stanford Encyclopedia of Philosophy, Zalta, E.N. (Ed.). Available at: http://plato.stanford.edu/archives/fall2012/entries/collingwood-aesthetics/ [Accessed 08 Sep. 2015].

Marchán Fiz, S. (1986). *Del Arte objectual al arte de concepto*, 2nd edition. Madrid: AKAL Arte y Estética, Ediciones AKAL S.A

Marchán Fiz, S. (1986). *Contaminaciones Figurativas*. Madrid: Alianza Editorial

Merleau-Ponty (2009). *O olho e o espírito*. 7th ed. Lisbon: Editora Vega.

Merleau-Ponty, M. (1991). *Signos.* Lisbon: Martins Fontes.

Mitrache, G. (2012). Architecture, Art, Public Space, in: *Procedia: Social and Behavioral Sciences*, 51 (2), pp. 562–566. Available at: http://www.sciencedirect.com/science/article/pii/S1877042812033447 [Accessed 29 Oct. 2013].DOI:10.1016/j.sbspro.2012.08.206

Morris, R. (2005). Notes on Sculpture, in: *Art in Theory 1900-2000 by Charles Harrison & Paul Wood*. Malden: Blackwell Publishing, pp. 825–35.

Norberg-Schulz, C. (1985). *The concept of dwelling: on the way to figurative architecture*. New York: Electa Rizolli International Publications.

Pallasmaa, J. (2011). *The embodied image: imagination and imagery in architecture*. Chichester: John Wiley & Sons.

Pallasmaa, J. (1996). *The Eyes of the Skin: The Architecture and the Senses.* London: Academy Editions.

Pérez-Gómez, A. (2008). *Built upon Love.* Cambridge, Massachusetts: MIT Press.

Pimlott, M. (2009). *Natural Antagonism: Notes on Colour or Architecture*. Tu Delf, Netherlands: Tu Delf Architecture University. Accessed at: http://www.tudelft-architecture.nl/uploaded/files/Interiors/Mark%20Pimlott/pimlott_v2.pdf [Accessed12 Sept. 2015]

Pinto, J.C. (2007). *Ver, Desenhar, Imaginar, Projectar*, Colecção didáctica, temas e ideias em arquitectura, urbanismo e design, Centro Editorial da Faculdade de Arquitectura da Universidade Técnica de Lisboa, Lisboa

Pinto, J.C. (2007). *O espaço limite*, Volume 2, Colecção Arquitectura e Urbanismo, Edição ACD Editores, Lisboa.

Rendell, J. (2006). *Art and Architecture: A Place Between*. London: I.B.Tauris.

Ruskin, J. (1903). *The Seven Lamps of Architecture*, in: *The Works of John Ruskin*. London and New York: Longman, Greene and Co.

Saarinen, E. (1948). *The search for form in art and architecture*. New York: Courier Dover Publications.

Scruton, R. (2009). *Beauty*. Oxford, England.: Oxford University Press.

Scruton, R. (1979). *The Aesthetics of Architecture*. Princeton, New Jersey: Princeton University Press.

Simões, Z., Durão, M.J. (2008a). New Materialities of light and colour in spatial allegories, in: *Proceedings AIC 2008*. Presented at the Interim Meeting of the Internatonla Colour Association, Sweedish Colour Center Foundation, Stockholm, pp. 1–4.

Simões, Z., Durão, M.J. (2008b). Contemporary Architecture: Real and Virtual Narratives, in: *Proceedings of ICDHS 08*. Presented at the 6th Conference of Design History and Design Studies, Japan Society for the Promotion of Science & Osaka University Communication Design Center, Osaka, pp. 430–433.

Steiner, R. (1992). Color. Great Barrington: Steiner Books.

Toussaint Alves Pereira, M. (2009). *Da arquitectura à teoria e o universo da teoria da Arquitectura em Portugal na primeira metade do Seculo XX*. PhD Thesis. Faculdade de Arquitectura da Universidade Técnica de Lisboa. Lisbon, Portugal.

Zevi, B. (1977). *Saber ver a arquitectura*. Colecção Artes e Letras. Lisbon: Editora Arcádia.

Zumthor, P. (2006). *Thinking architecture.* Basel, Swizterland: Birkhäuser.

CHAPTER 4

THE CREATION OF SIGNIFICANCE

Introduction:

In the present chapter it is defined both the creation and the experiencing of significance: in 4.1. Creation answers the questions of how the artwork (as significance) is made and how it creates and incorporates significance. In 4.2 Experience, defines how significance is experienced, answering the questions of: what occurs within the aesthetic experience and what is needed for the experience of significance. Both creation and experience bring about two requisites for all significance to emerge and to be lived or perceived.

4.1. CREATION

… introduction: the design process in general

Geoffrey Broadbent (1971) in his article for the book 'Metodologia del deseño arquitectonico' explains (making a reference to Christopher Jones' ideas) that the design process in general can be understood in a two fold way: it can either be viewed as a black box or as a crystal box. To view the design process as a black box, is to comprehend it as a mysterious process, based on creativity and other faculties that cannot be completely explained: in this view, the design process cannot be described or created a set of rules that can be followed. To view it as a crystal box, on the other hand, is to comprehend it as something that can be clear, easily understood and thus, can be systemized in criteria's that can be followed[125] (Broadbent and Ward, 1971).

Following Broadbent's (1971) idea, it is possible to understand that the first group sustains a design process based on creativity and other faculties that are somewhat mysterious and ambiguous because they have not been fully understood by science; where as the second group sustain the definition of a methodology that can be followed: which comprise the definition of methods, parameters and guidelines that should be met.

However, it is possible to understand that the contemporary understanding of the design process, is situated somewhere between both: it does not consider it to be completely unknown and mysterious, and it is not consider it to be completely clear. Bert Bielefeld and Sebastian el Khouli (2007) echo this idea, in their book 'Design ideas' where they explain that the design process is hard to systemize and typologize because it is the result of different approaches, influences and of a trial-and-error process; it combines inspiration, discovery, concept generation, ideas, and methods. They summarize that it is possible to understand that '' Every design begins with a search for an idea or for an intuitive understanding of how an assignment should be solved.'' (Bielefeld and el Khouli, 2007, p. 7). Design itself, the authors continue, '' (…) is a complex, often contradictory, non-linear process.'' (Bielefeld and el Khouli, 2007, p. 11); even if the details of the assignment or of the goal are clear, the process itself and the end result are always unknown. However it is possible to define guiding aspects and an overall understanding of the design process itself.

The design process in general, the authors continue often starts unconsciously, it may be triggered by an experience or an event that stimulates the imagination; it also involves understanding that the initial idea might suffer multiple changes during the design process itself, and that the process of transformation makes the design richer and more complex; it entails overlapping multiple principles and idea that supplement and enhance each other; the main challenge of design itself is in '' (…) developing new solutions based on existing principles and design approaches.'' (Bielefeld and el Khouli, 2007, p. 73). Thus, thee authors summarize that design, '' (…) is always a creative process that produces new totalities under a variety of conditions and draws on diverse sources of inspiration.'' (Bielefeld and el Khouli, 2007,

[125] Reference to: '' (...) muchos partidários de la 'caja de crystal' creen que el diseno puede ser sistematizado y analizado.'' (Broadbent and Ward, 1971, p. 22); Free translation: '' (...) many defenders of the 'crystal box' sustain that design can be systemized and analysed..'' (Broadbent and Ward, 1971, p. 22);

p. 79). However, the significance of the design itself, they continue, depends on individual experience and insights.

Thus, the present chapter aims to clarify the various core faculties and principles that are involved in the creation process, with a focus on the aspects that contribute to the significance of the work itself. But firstly, it is important to contextualize and understand the design process in architecture, painting and sculpture.

… Historical Contextualization of the design process in architecture

Alexander Tzoni (1977) in his book 'Hacia un ambiente no opresive' (translated from the original title which is Towards a non oppressive environment), claims that the design process in architecture is based on the desire to create a non oppressive environment. He explains that it is possible to understand the design process in architecture in two different categories: the pre-rational system and the rational system. The pre-rational methodological system encompasses the architectural processes of the Renaissance and of the Medieval ages; this methodology is characterized by a following of the divine model; although there are many differences between the Medieval cathedrals and the churches of the Renaissance, they follow the same design process: '' In both periods, it was demanded that buildings were designed in order to follow the precise rules created and determined by God.'' (Tzonis, 1977, p. 28)[126]. The design process, thus, aimed to create forms that followed the patterns and proportions of nature (specially the human body), and sustained the idea that architecture, through proportions and harmonies could contribute to the divine order. The rational system, on the other hand, corresponds to the methodological processes that begun in the eighteenth century and continue until the present day; there was not only a drifting apart from the divine order ideal, but an approximation to functionalist as the main principle of architecture: '' For the rationalist tradition in architecture, the structural efficiency was the first important principle that it should define and promote.'' (Tzonis, 1977, p. 28)[127]. Both functional and structural efficiency, thus because the primary component of the design process, and it echoes the urgent appeal for utility; another main aspect that defines rationalist approach to architectural design is the resolution of problems, which also became a central aspect of architecture, specially after the world wars.

… Historical Contextualization of the design process in painting and sculpture

It is possible to create the same distinction defined by Tzoni (1977) in design process of the arts of painting and sculpture. The pre-rational methodology, corresponding to the Renaissance and the Medieval ages, that followed the divine principles and order, and the rational methodology, that begun in the eighteenth century and continues until today. However, in the arts of painting and sculpture, the design methodology didn't follow a functionalist approach, aiming to solve problems and understand functional criteria, but instead followed a set of principles that they aimed explore and define. This is very clear from all the art movements such as cubism (emphasized deconstruction), abstract expressionism (emphasized expression) and the impressionists (emphasized the impression of an atmosphere). The design process,

[126] Free translation from: '' En ambos periodos se exigia que los edificios se hicieran seguiendo unas reglas precisas creadas y determinadas por Dios.'' (Tzonis, 1977, p. 28)
[127] Free translation from: '' Para la tradicion racionalista de la arquitectura, la eficiencia estrutural era el primer principio importante que había que definer y promover.'' (Tzonis, 1977, p. 93)

thus, was a process of discovery and experimentation, in order to find the adequate visual language to express the desired ideals.

… the contemporary design process in architecture

Bert Bielefeld and Sebastian el Khouli (2007) in their book 'Design ideas', analyse and explain the contemporary design process in architecture, defining a set of design parameters that are essential. One of the main aspects, they explain, that defines the design process in architecture is (1) the context (the first parameter) in which it is built, which includes both architectural context such as surroundings and natural settings, such as climate topography, interaction with existing buildings, historical factors, (axes, forces, orientation, interior and exterior relationships, and accesses), links to other references such as other disciplines, and the urban planning that defines the site; secondly, is (2) the functions that it aims to solve, which includes the internal spatial organization of the space, responding to the user needs, considering the user's interaction with other users, circulation, lighting, and other functional aspects such as comfort; the function can define both a starting point of departure or a main framework that needs to be adhered to, depending on the design perspective, and it is from the function and the context that an overall expressive style and formal vocabulary can be defined; following is the parameter of (3) gestalt, which as a basic design element, involves all the aspects connected to form (the body, the space, the order, the proportions, the use of geometry, volumes, shapes, free forms, the idea of bionics, the use of slabs) and is developed by a process of both addition, subtraction (joining elements) and transformation of the volume of form; lastly, the parameter of (4) the materials and structure, which is composed of the physical aspects of the form itself, (it's materiality, its textures, structure, construction, atmospheric considerations and sensory perception). Architects, they continue, combine all these parameters in their own way, with their own knowledge, personal experience, spatial imagination and creativity.

Another approach, they continue, consists on searching for inspiration for an idea at the very start of the process. This initial idea can be derived from multiple sources, '' As the work continues, other requirements and levels of design are gradually integrated into the concept. As a result, the design evolves in an on-going transformative process.'' (Bielefeld and el Khouli, 2007, p. 12). Another approach can be to use function as the central aspect from which all other parameters are developed; this approach, this authors explain, has been used since the modern movement, and aims at creating a design that reflects and expresses the function of the building as the main objective of the architecture. Yet another approach, which was used historically, is to use structure (materials parameter) as the main starting point of the design. The method applied depends from design to design, but all of the methods use combine personal knowledge with creativity. Overall, the authors continue, the design process is highly personal for each architect, and is always in constant evolution: '' Developing a design perspective is thus part of an individual maturation process and cannot be forced or artificially produced.'' (Bielefeld and el Khouli, 2007, p. 14).

… introduction to the creative process

From the above ideas, it is possible to understand that contemporary architectural design process is based not only on specific aspects of the design itself such as the four elements announces above (context, function, gestalt and materials) but also on aspects related to creativity and personal

understanding such as intuition and imagination. It is these aspects that are also vital to the creation processes of painting and sculpture. Although they seem to be subjective and not so clear (as for example contextual understanding of site in architecture), they are of the essence for the understanding of significance itself and the creation of significance; thus, the present work will thus analyse and define them further. But firstly, we must start from the very beginning and understand what creation itself is and how it relates to the creation of significance.

What does it mean to create?

Defining creation…

Art (significance) possesses it's own sense of 'making', that (as we previously became aware) can be neither a fabrication, a reproduction nor a representation. Instead, it is dictated and launched by something else altogether. There are multiple theories that define this process of creation: some of the most common theories define the process of creation as being commanded by 'genius', others, by an artistic impulse and creativity, whereas others, mention the importance of instinct and imagination. These theories are analyzed as follows.

It is important to accentuate at a first level, that cultural and social factors are part of the creative process, however, none of the authors investigated propose that these factors are a central of the creation of significance itself. Rather, these are conditions that are common to all creators, and neither contribute nor produce significance itself; the thesis will consider these factors as a background, upon which all creator's belong to. At a second level, likewise, the role of reason; although it also plays a central role and aspect in creation (all types of creation) it is announced only by some, (such as Kant in experience) as a central aspect for the understanding of significance. This does not mean that reason is not part of creation and of significance itself, merely that the authors analyses, as the work will show, do not consider it the main determining factor.

According to Collingwood (1938) the real process of artistic creation is firstly and foremost, associated to the word 'create' in its most significant meaning. To create, Collingwood (1938) explains, means: '' (…) to make it non-technically, but yet consciously and voluntarily. Originally, create means to generate, or make offspring, for which we still use its compound 'procreate,' (…) . '' (Collingwood, 1938, p. 128). This definition of 'creation', defines the process of creation in it's most valuable sense: not only as the 'bringing something into existence' which is the most common definition of creation, but as a generation that is 'non-technical' and that is associated to 'procreation' in the sense of an extension of the self. Creation then, for Collingwood (1938) can be defined as the act of conscious generation of something, in a 'non-technical' way, as an extension of the self.

It is also of the essence to understand that creation, in a broader sense of the word (not related to art as significance as defined just above) can encompass a much sense. It can be connected to everything that is humanly created: ideas, concepts, theories, things, ways of doing something, and the creation as part of a field, such as the creation of science, of philosophy, of technology and of architecture, for example. In general, this broader idea of creation that encompasses everything created by man, can also be related to technique (can also be technical) and it doesn't have to be an extension of the self but instead defines everything in our surrounding, from the most basic object to the most complex thought. However,

creation, as related to significance, which is the object of the present research, is thus understood as Collingwood (1938) proposes: the act of conscious generation of something, in a 'non-technical' way, as an extension of the self. These ideas will further be explored in the following pages.

But before understanding the creation process, we must first understand that every creation, then, needs a creator.

Who creates this 'high art'?

Understanding the artist as the creator…

Traditionally, the artist was associated to the quality of 'genius', as something that was unexplanable. Author Freeland (2002) states and this word and quality was also evoked by Kant in his Critique of Judgment, to define the mysterious quality of an artist that enabled him to create works with beauty. Genius, then, for Kant, '' (…) is what 'gives the rule to art', meaning that an artist somehow can make materials come together into a form that is recognizably beautiful to viewers, setting the example for later artists to follow.'' (Freeland, 2002, p. 130). The quality, the author continues, describes an illusive characteristic of artists, that doesn't respond to rules; although it was most associated to men, Kant reversed this idea and claimed that genius obeys a law or an inner duty, granting it transcendental qualities. In the contemporary world, the author points out that the word is still used to describe artistic qualities, however it is loosely applied; 'genius' is applied to describe works that are 'path-breaking' (defining and reshaping our ideas and perceptions) and that somehow, cannot be completely explained by reason ('' Genius was now seen as something 'primitive', 'natural', and unexplained by reason.'' (Freeland, 2002, p. 131)). In other words, 'genius' is applied to describe something that reason cannot completely comprehend.

However, this view, according to the author is limiting and segregates the artist. This segregation of the artist, Collingwood (1937) continues is not helpful, true or even correct, it is damaging to his role as an artist, and even 'fatal' for art, because it creates a distance between art and real life and that is incorrect. Equally, the 'skill' mindset that accompanies representational art, or 'low art forms', also creates a distance between the 'ordinary man' and the 'artist', which is, just like the idea of 'genius' incorrect and detrimental.

For Collingwood (1937) **everyone has this ability to 'create'**. In High Art, the art conveys significance and the viewer or observer 'feels' it in the same (and particular) way as the artist created it; thus, in this process, the viewer or the reader is an artist as much as the artist is[128]. Collingwood (1937) thus sustains a basic understanding of the artist, where the only thing that sets him apart from the non-artist, is the fact that he employs his faculties in creating art rather than employing them for contemplation.

This notion is not general to all authors, and some sustain that the artist does have to **develop unique skills** in order to create art; but when really perceived, neither theories exclude one another.

This is the idea also defended by Umberto Eco (1989), to whom the artist, in order to create such works of art, needs to exist 'outside' of the world, so that it is possible to define a new meaningful

[128] Reference to: '' As Coleridge put it, we know a man for a poet by the fact that he makes us poets. We know that he is expressing his emotions by the fact that he is enabling us to express ours.'' (Collingwood, 1938, p. 118).

connection with the world. As such, he is seen as an outsider, as detached, but in fact, it is not so[129]. He creates, in order to externalize himself, (as defined by Hegel), and in doing so, he alienates himself in it; this alienation is part of 'modern life' not only of the life of the artist: '' To modern man, alienation is as much a given as weightlessness is to an astronaut: it is a situation in which we have to learn how to move, how to acquire new autonomy, and how to devise new ways of being free.'' (Eco, 1989, p. 136). However, this alienation and detachment from the world, is a way to incorporate within themselves the new visions and knowledge. This way, through its own creations, the artist understands and comprehends both himself and the world (the work is a sort of reflexion of himself).

Saarinen (1948), likewise, defines **a unique skill that needs to be developed by the artist: the ability to** project himself, who he is as 'man' and 'person', his 'aura' into his artwork. For him, this understanding of the artist as that which projects himself into the art, is the answer to all the problems of art, for instead of an understanding of art, we should be focused on the understanding of man (as the creator). In his words: '' (…) the answer to all the problems of human art must be found in man himself: man is the stage-manager.'' (Saarinen, 1948, p. 122). Therefore, he claims that to answer the questions 'What is Art?' first one must ask 'What is Man'. Thus, he explains that man is a living organism that 'radiates its influence', his 'aura'; the artist, then, is a man that has developed the skill to project his 'aura' into an 'aura of form', into his creations[130].

4.1.1. THE ARTISTIC CREATIVE PROCESS

Where as traditionally, the artist was considered to create by a means of inspiration, contemporary theories define the creation process, as that which is creative, in the sense that it uses creativity. This is sustained by multiple authors such as Betti Edwards (1987) *(see Glossary)*.

What was creation process in history?

The creative process in history…

Traditionally, although there was not an understanding of the artist as there is today, the creator that created valuable things, was generally known to create his art by means of 'inspiration'; the word inspiration comes from the Latin **'***inspirare'*, meaning 'to breathe into', referring to the sudden burst of creativity that defines the artistic creation. For the ancient classical Greeks (the time of Plato and Aristotle), inspiration came directly from the muses or from the Gods; as such, the artist would go into a kind of ecstasy, named '*furor poeticus', (*translated to a form of 'poetic madness'), where a transcendence would occur and the artist would be transported beyond his own self and led into the mind or thoughts of the Gods that she/he should embody and recreate as an artistic expression. The creation process, then,

[129] Reference to: '' Though it is commonly believed that avant-garde artists are out of touch with the human community in which they live, and that traditional art remains in close contact with it. the opposite is true. In fact, only avant-garde artists are capable of establishing a meaningful relationship with the world in which they live.'' (Eco, 1989, p. 142).

[130] '' Originally, aura meant breeze. It meant ''gentle breeze'', often personified in Greek Art and literature. In such an understanding, aura symbolizes something ethereal radiating from one's personality and having a distinct influence on one's surroundings.'' (Saarinen, 1948, p. 123). In this way in creating, the artist projects his aura into the creation into an 'aura of form'; through art, man transposes his ''aura'' into his creations: '' (…) an individual, in creating art, ''is subconsciously bound to do it in accordance with that 'individuality' he represents. In other words, an individual transposes his ''aura of man'' into his ''aura of form''.'' (Saarinen, 1948, p. 126).

associated to 'inspiration', meant a translation of knowledge from the Gods and therefore required a technique or skill, in the sense that without those tools, the creation could fail to represent the so-called inspiration. The artist, was the communicator of those messages and thoughts through the work of art onto the viewers. This traditional view of creation finds echo in other cultures and religions, throughout time. An example is the Nordic tradition, Norse Religions, that believe inspiration comes directly from the Gods (such as Odin), or in Christianity that considers inspiration a gift from the Holy Spirit and creation is thus a form of revelation. In the Renaissance, the '*furor poeticus'* described by Plato was revived by the translations and commentaries of Marsilio Ficcino *(see Glossary)*.

This view of the creation process changed with time, however, as we saw previously, for some, the creation process is always associated to a form of intangible knowledge ('genius'). But with the development of science and psychology, new theories emerged that tried to define what that mysterious process of creation entailed. In the 20th century, for example, Sigmund Freud *(see Glossary)* located inspiration in the psyche of the artist (artistic creation was derived from unresolved issues, traumas or from the subconscious). Carl Jung *(see Glossary)*, in a deeper way, believed that inspiration was a result of the understanding of the archetypes beyond the personal identification of the artist; the artists were tuned to some form of universal truths, which were portrayed in the creation process. Simultaneously, multiple other theories occurred that tried to define the creation process in a more complex way. What these theories have in common is the idea that the creation process is associated with creativity and involves multiple faculties in a complex way. These theories are analyzed as follows.

… by Perez-Gomez (2008): Artistic Inspiration

Author Perez-Gomez (2008) explains that the origin of inspiration (in a traditional context), was a transcendental other, either from the Gods in the classic antiquity, or in the mediaeval God of Christianity. The nineteenth century struggled with this problem, either denying it or associating it with religion. However, in the early twentieth century, surrealism placed inspiration at the centre of a 'world vision', considering it to be connected to poetic endeavours; it is the poet in love that creates, the only one capable of revealing the truth: '' According to Breton, inspiration is given in man and is part of his very being.'' (Pérez-Gómez, 2008, p. 27), and despite their interest in Freud's theories, Breton claimed that inspiration can never be explained by psychoanalysis. In contemporary architectural praxis, inspiration has almost disappeared in detriment of design methods, programs, diagrams, functions and completed projects. Although he considers inspiration to be a fundamental of the creative process of art. For the author, this inspiration is usually derived from other 'beautiful works': '' Beauty incites the act of replication; it brings copies of itself into being. (Pérez-Gómez, 2008, p. 29). Inspired work, the author continues, needs to retain a playful attitude towards creation, which is at odds with the: '' (…) logical prediction, which is standard in contemporary building production.'' (Pérez-Gómez, 2008, p. 29).

So, is the creation process a creative process?

…by Betti Edwards: The Creative Process and Creativity

Author Betti Edwards (1987), in her book entitled *'Drawing on the artist within: An Inspirational and Practical Guide to Increasing Your Creative Powers',* summarizes the evolution of

these theories that define the creative process, aiming to define a new approach to understanding creativity. She explains that although creativity still cannot be defined and understood as a cohesive whole[131], it is possible, through the various theories that have emerged across time since the nineteenth century, to identify five stages that comprise the creative process. It was in the late nineteenth century that the German physicist Herman Helmholtz identified three stages: saturation, incubation and the sudden solution, and later the French mathematician Henri Poincaré, in 1908, added the stage of verification. Many other theorists contributed to the overall understanding, arriving at the final idea of five stages, that has generated overall consensus: first insight (finding new problems, and imagining new solutions), saturation (the search for solutions and multiple sources of inspiration), incubation (the inner development of ideas), illumination (the flash of insight) and verification (checking for errors and usefulness). These stages, progress independently (over varying lengths of time), and can repeat themselves cyclically until the final creation is considered to be finished. Overall, researchers agree on these distinct and individual stages, with the exception of the Gestalt psychologists *(see Glossary)* for whom creativity is an 'unsegmented process'. On this issue, she claims: '' With the notable exception of Gestalt psychologists, for whom creativity is an unsegmented process, a single consistent line of thinking for the purpose of solving a whole problem, researchers have generally agreed on the basic concept that creativity involves progressive stages which occur over varying lengths of time.'' (Edwards, 1987, p. 4).

It is important to add, to this five stage process another key aspect: which is the recollection and gathering of knowledge. This can either be accentuated by the stage of saturation, where the creator searches for multiple sources and knowledge and inspiration, or it can be comprised as a stage prior to the cycle, where the creator is merely studying and gathering knowledge rather than beginning the stage of creation. This foundation of knowledge is of great importance for the creative process, specially in the field of architecture that needs to be founded in an understanding of multiple fields.

The Evolution of the Stages of the Creative Process:

The author explains that the steps of the creative process were not categorized until the late nineteenth century, by the German physicist Herman Helmholtz, where he described his own scientific discoveries in terms of three stages: *Saturation*, *Incubation* and the sudden solution, *Illumination*. The French mathematician Henri Poincaré, in 1908, suggested a forth stage, *Verification* (checking errors and usefulness). In her words: '' Poicaré described the forth stage of verification as one of putting the solution into concrete form while checking the error and usefulness.'' (Edwards, 1987, p. 3). In the 1960's, Jacob Getzels, an American Psychologist, added another stage to the creative process: the first of all stages, *finding and formulating* the problem. Getzels focus was on pointing out that creativity wasn't only solving problems, but in was also about finding new problems, and imagining new solutions. Later, another American Psychologist, George Kneller, named Getzels phase as *First Insight.* As such, the author continues, the creative process progresses in these five stages: First insight, Saturation, Incubation, Illumination (the Ah-Ha!) and Verification. In the development of the creative process, each stage progresses with it's own time span, except for the Illumination, the so called Ah-Ha moment, that is always constant and short in time, like a spur of insight; it is always reported to be brief and succinct, like a flash of light. The cycle can repeat itself for one single project, and some phases may be longer or shorter

[131] Reference to: '' Cognitive scientists, fascinated by creativity have produced volumes of bits and pieces, offering tantalizing glimpses and hints, but have not put the parts together into a valuable whole. To date, we still have no generally accepted definition of creativity – no general agreement on what it is, how to learn it, how to teach it, or if, indeed, it can be learned and taught.'' (Edwards, 1987, p. 2)

> according to each person or even each stage, however the stages all occurs in their own accord.

Edwards (1987) further identifies another aspect that defines creativity and the creative processes as the fact that the human brain is organized in halves that differ in style, function and capabilities: the right brain hemisphere thinking (R-mode), which is visual, spatial and relational thinking, non-verbal, synthetic and intuitive, and the left brain hemisphere thinking (L-mode), which is linear, logical, language-based thinking, analytical and symbolical. Despite their differences and independence, they function cooperatively and establish a reconciled view of reality. The author further explains that recent researches indicate a less clear division between the hemispheres than was initially thought in earlier investigations; however, the terms R-mode and L-mode, designate a specific 'style of thinking' rather than the specific locations of functions in one or the other hemisphere. This idea of man being defined by two types of activities, this duality of the brain, has been ongoing throughout the ages, in language and in philosophy[132]. This dual-side of brain activity contributes to various understanding regarding creativity. One of the main contributions, is that it explains, that each stage occurs as a result of shifting between each cognitive function: each phase of the creative process may be associated to a specific kind of brain function. Edwards (1987), further described each stage, in relation to each of the brain functions: the stages of Saturation and Verification, the second and last stages, are both easy to understand. Saturation is information gathering, where the most amount of research and collecting data is conducted. Verification, is where the new idea needs to be verified and put into a form that is accessible and understood; the process can either be time consuming and arduous or it can be quick and easy. These two fit into the type of conscious thought: logical and analytical thinking. Insight, Incubation and Illumination are the stages that need most clarification in the creative process, because these are mysterious and somehow 'elude human understanding'. Insight, is where the question is defined and implies an intuitive leap; Incubation, after saturation, is when the brain is working on all the data collected; and illumination is the flash of inspiration. The subconscious stage of Incubation can go on for weeks or months; the problem solver usually comes in or happens during the course of actions that are mundane, away from conscious thought. These three stages fit into a kind of subconscious thought, defined by both imagination and intuition; '' (…) more like seeing and visualizing in an artistic way.'' (Edwards, 1987, p. 42).

According to the author, accompanying the creative process and creativity is the need to understand and exercise the visual vocabulary (or other vocabulary associated with each specific art) as a skill; these visual and perceptual skills (similar to thinking skills) are deeply rooted in the five stages of the creative process and in the duality of the brain. For Edwards (1987), learning to draw is an efficient way of developing these visual skills and it requires an awareness of which brain function is active or dorment, thus learning to control 'mental shifts of the brain'. Therefore she proposes multiple drawing exercises that develop a 'creative' point of view. Traditionally, this echoes the ideas sustained by Giorgio Vasari (1511- 1574), *(see glossary)*, that understood drawing as the ground for the fields of architecture, painting and sculpture, in terms of their creation process.

[132] The author explains it ''seems to be harbored deep in human consciousness, surfacing, like an iceberg's tip, in language itself. For example, philosophers through the ages have purposed two ways of knowing the external world: through the intellect or through the emotions; through logical analysis or through metaphorical synthesis. '' (Edwards, 1987, p. 13).

> ***Synthesis:*** *Author Edwards (1987) summarized the overall consesus that the creative process is defined by five stages: first insight (finding new problems, and imagining new solutions), saturation (the search for solutions and multiple sources of inspiration), incubation (the inner development of ideas), illumination (the flash of insight) and verification (checking for errors and usefulness), and that these stages, progress independently (over varying lengths of time), and can repeat themselves cyclically until the final creation is considered to be finished. She further added that these stages are related to the fact that the human brain is organized in halves that differ in style, function and capabilities: the right brain hemisphere thinking (R-mode), which is visual, spatial and relational thinking, non-verbal, synthetic and intuitive, and the left brain hemisphere thinking (L-mode), and that each creative stage involves it's own type of reasoning. For her, creativity is something that needs to be developed through exercises that enhance visual understanding and develop the skills to execute creatively.*

But what defines the artistic creative process?

This brief introduction to the creative process defined the creative process at it's most basic level. In order for significance to grow, there needs to be other considerations within the creative process itself, which will be analyzed as follows.

… by Pinchas Noy: Artistic Creativity and Artistic Talent

One first contribution to the comprehension of the artistic creation process is specified by Pinchas Noy *(see Glossary)*, in his research paper *'About Art and Artistic Talent'* (1972), where he defends that the 'gift of artistic creativity' is dependent on two distinct factors: firstly the drive and desire to create, and secondly a talent to materialize the creative urge, or 'artistic talent'; the first defines the drive to create, the second, the ability to do so. These two factors are independent in their nature, (a person can possess one and lack in the other and thus fail at creating a successful work of art). Noy (1972) defines the artistic talent as '' (…) a special ability to use such 'specific kinds of communication'; (…).'' (Noy, 1972, p. 2). For him, artistic talent cannot be taught or grown, it needs to spring from an inner understanding that exists in the artist; as such, it is a personality trait and can be considered as one to the cognitive functions of the ego. This relates to the idea of 'genius' previously defined by Kant. However the author defines what this 'artistic talent' entails. Although teaching might be necessary in order to enhance innate tendencies and talents, what Noy (1972) is accentuating is that there is indeed something that is related to the personality that is innate and that cannot be taught.

But what is this artistic talent?

Accordingly, to the author, artistic talent uses two types of communication: a primary one (that expresses feelings, emotions and experience in a direct way) and a secondary one, (that uses symbols and other tools to create a sort of language). He explains that these two levels of communications determine the difference between various artistic creations (some might use secondary levels to clarify the first

levels, for example)[133], and the means by which they are created defines the experience of aesthetic beauty and greatness. Art is defined by this multi-level quality, and the fact that: '' No kind of communication can be regarded as art if it does not use the primary levels of expression and perception.'' (Noy, 1972, p. 4). It is the primary level that is superior in communication of feelings, emotions and generating significant experience, it fulfill a vital role in human lives and allows for a 'growing of the self', and it is this ability that defines artistic talent. The talented artist, then, is characterized by this primary means of communication, which allows him to express things that transmit an emotional experience (rather than an exchange of information). The author summarizes: '' So that what characterizes the gifted artist is not merely his ability to use his extra medium to express himself better than others, but his power to express the depths of human experience, inexpressible by the ordinary means of communication. '' (Noy, 1972, p. 11).Therefore, the artistic creative process involves a specific type of talent that can be understood as a form of specific communication, that 'expresses the depths of human experience'. Although the author's theories are of value, they do not describe what else defines the creative process, but simply announce a quality that explained artistic ability (an artwork is not only a matter of communication). Thus, only a first quality of artistic creation has been identified: the aspect of communication.

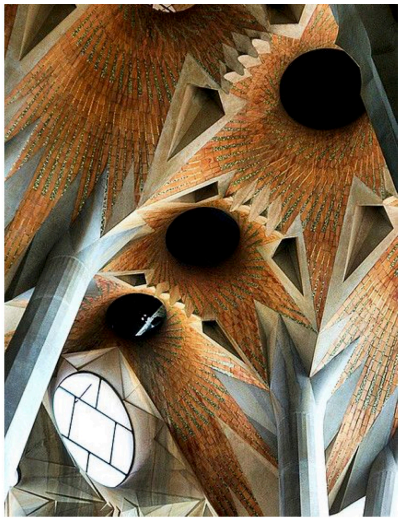
> ***Synthesis:*** *For the author Pinchas Noy (1972) it is artistic talent that has the ability to create; it is special ability to use such 'specific kinds of communication': a primary one (that expresses feelings, emotions and experience in a direct way) and a secondary one (that uses symbols and other tools to create a sort of language). The talented artist, he summarizes, is gifted in the primary level, and in it is his ability to express the depths of human experience.*

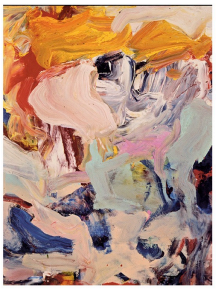
… by Pallasmaa: automatism

Juhanni Pallasmaa (2010) *(see Glossary)*, associates the artistic creative process to another property: the idea of 'automatism'. Pallasmaa (2010) says that the creative impulse seems to spring out of the artist in a 'semiautomatic' way, independently from the desires of the artist; the artist many times feels like the creative process is a way of revealing what is already there. This is the case for example, Pallasmaa emphasizes, with the works of Jackson Pollock *(see Glossary)*, when he talks of an automatic 'trance' way of creating. This is explained by psychoanalytic theories of the creative process as a 'phenomenon', between 'conscious and unconscious' faculties. During the creative process, unconscious processes and experiences (memories and dreams) become part of the work of art; thus, the work is a 'struggle' or 'cooperation' between the conscious 'ego' and the unconscious 'repressed in the mind'. This does not mean that reason doesn't also a central role, post automatism and unconscious faculties in analysing and understanding what has been created or even during the process itself, it merely means, that there is indeed, during the creative process, unconscious faculties at work.

[133] Art uses these primary means of communications, and as such, '' The difference between the various fields of art lies in the specific medium of communication whose primary level is utilized.'' (Noy, 1972, p. 3). Some art might use secondary means to clarify the primary means.











PAINTINGS: Photo 1: Senecio, 1922, oil on gauze, Paul Klee; Source: http://en.wikipedia.org/wiki/Paul_Klee#mediaviewer/File:Senecio2.JPG; Photo 2: Willem de Kooning, painting from 1975 – 1978; Source:http://www.dominique-levy.com/publication/willem-de-kooning_1; Photo 3:Edvard Munch, The Scream; Source:https://pt.pinterest.com/pin/251075747955052555/; ARCHITECTURE: Photo 1:Park Guell. Antoni Gaudi. Barcelona, Spain. 1900-14; SOurce:https://pt.pinterest.com/pin/251075747955043036/; Photo 2: La Sagrada Familia, by Gaudi; Source: https://pt.pinterest.com/pin/251075747955043031/; Photo 3: Casa Batillo, Barcelona, Spain. 1904-6. Antoni Gaudi.; Source: https://pt.pinterest.com/pin/335307134736376846/

PLATE 17: THE FACULTIES OF INTUITION, INSTINCT AND IMAGINATION IN PAINTING AND IN ARCHITECTURE

Synthesis:
The author Juhanni Pallasmaa (2010) believes the artistic creative process is associated to 'automatism': a process that reveals what is already there, in a sort of uncovering of unconscious processes and experiences.

What else defines the artistic creative process?

… by Eliel Saarinen: The creative instinct and creativity

It is with the author Eliel Saarinen (1973 – 1950) *(see Glossary)*, that we arrive at a deeper understanding of how the artistic creative process occurs. For him, artistic talent is not of the essence, but instead the 'creative instinct' (the use of specific faculties): all Art is created through the creative instinct of the artist, and although the creative process might occur, the value that defines art is defined by the 'creative instinct' itself.

This creative instinct is composed of three faculties, the so-called 'intangibles': the intuition, the imagination and the instinct. These three faculties, collaborate with each other in order to create artistic creations. Next is a brief description of Saarinen's views on each of those faculties. The first one, intuition, is a 'plain' and elusive matter and so it is enough to claim that it ''(…) establishes direct contacts with the primary facts and truths, (…)'' (Saarinen, 1948, p. 109); the second one, the faculty of instinct, is that which infuses art with the 'creative' quality, for art, in order to 'come into being' needs to be 'instinctively felt' [134]; it is the ability ''to transmute vibrations of life and to transmute these vibrations into corresponding form.'' (Saarinen, 1948, p.25); this, the author explains, is a fundamental phenomenon and principle of both 'man's art' and 'nature's art' (the credit of nature's ability to live sustainably and efficiently naturally is because of its 'transcendental instinct'). And the third one, imagination, the faculty that creates associations; the ability '' (…) to produce mental ideas and pictures that have no relationship to previous concept, knowledge or experience.'' (Saarinen, 1948, p.25). Without them there would be no art and no culture, for they are the instruments of apprehension that allows man to '' (…) penetrate into the mysteries of nature.'' (Saarinen, 1948, p.25). They allow us to gain knowledge and apprehend the laws of nature (the laws that define our sacredness).

It is the 'creative instinct', composed of these three faculties, (which can also be found in nature) that when associated to the desire to create art, becomes an 'artistically creative faculty'. For Saarinen, the mathematician, the poet and the artist all search for what is 'true' and 'beautiful' in nature through instinct, which is the only faculty that can discover: instinct captures 'number' and 'vibration' (things that cannot be perceived by the mathematical 'mind') and re-creates them in their art[135].

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[134] Reference to: '' In the course of our analysis we have often referred to art as something ''creative'', where the ''creative'' quality is infused into art by means of instinct. Likewise, we have said that art cannot come into being unless it instinctively felt.'' (Saarinen, 1948, p. 109)

[135] Vibration, the author continues, needs to be understood as 'number', for the 'world of number' underlies all that exists – connection to mathematics; although this is the case, '' Intellect, thus, has to admit its limitations and is compelled to cede further discussions to instinct.'' (Saarinen, 1948, p. 114). Mathematics in this sense, the author explains, is understood as mathematics of the higher order, and it is this mathematics, underlying all creation, that defines the 'rhythm' as a 'universal phenomenon'. Thus '' (…) It is a language of number, which the creative instinct – and only the creative instinct - is able to employ by infusing meaning into rhythm, thus making rhythm manifestation the ''means'' of art-expression.'' (Saarinen, 1948, p. 117); and: '' Moreover, when Goethe maintains that ''the mathematician is only complete insofar as he feels **within himself the beauty of the true**,'' the poet reveals the close relationship between mathematical instinct and artistic instinct. Here, we meet the mathematician and the artist on a common place, both wondering what it is all about.'' (Saarinen, 1948, p. 114).

The author further clarifies, that the creative instinct acts as a mediator between two interdependent things: the 'meaning to be expressed' and the 'means of expression'. The creative instinct senses the principles of 'organic order' and manifests them through his creation; it is the artist, through creation that is sensitive to the inherent underlying principles, but when those principles are observed and transformed into a theory, a rigid system, it becomes 'empty' and devoid of 'truth'. Furthermore, theories can also create 'problems' for the artist, for: ''When theoretical theories conduct art creation, the creative instinct is strangled and made mute.'' (Saarinen, 1948, p. 261). Art, Saarinen argues, is not strong because of theories, but because of the driving 'instinct' that's sustains the creation. Thus, for art to be art, it has to be 'creative' and use the creative instinct; when the 'creative instinct' is lacking, it can neither be art, neither can it be true. Saarinen emphasizes: ''(…) art cannot come into being without the creative instinct.'' (Saarinen, 1948, p. 119). In creation, then, the artist has be faithful to the 'spirit' of tradition (continuing the legacy of the past) and to 'the creative instinct' (staying true to instinct, intuition and imagination)[136].

In such a way, Saarinen (1948) defends that the creative instinct both discovers (order and vibrations) and expresses those discoveries in the artistic creation process. Two new main ideas are therefore demonstrated: the three faculties that define the creative instinct and the idea that it expresses.

It is important to note, that Saarinen (1948) like Pallasmaa (2010) previously, do not exclude reason from the creative process, they merely claim, that it is not reason that defines the core of the creative process itself. Reason as a human faculty has a central role in everything man does, therefore it is the central faculty of the creative process itself, but rather, as both the authors suggest, the faculties that define the creative instinct, which will be analysed as follows. These faculties, can define what we previously saw as the R-Mode type of brain activity; however, as we also saw, this distinction is not longer valid, and as we will see, these faculties involve multiple aspects that are still being understood by science.

> ***Synthesis:*** *The author Saarinen (1948) states that what really defines the artistic creative process, is not a sense of automatism, neither an innate artistic talent, but instead the combination of three faculties defined as 'creative instinct' (which combines instinct, intuition and imagination). The creative instinct, thus, is that which creates art (lower art forms don't use the creative instinct) and is responsible firstly for the understanding of 'organic order' and 'vibrations' (that which sustains nature and the universe) and secondly, the conversion of those perceived orders into a creation.*

4.1.2. THE FACULTIES OF INTUITION, INSTINCT AND IMAGINATION

As it was seen, with Saarinen (1948) two new ideas were defined as being the root of the artistic creative process: the three faculties that together define the creative instinct; and the idea that it both discovers (order and vibrations) and expresses. Both of these will be analysed as follows.

Starting by further understanding the faculties, as mentioned before, for Saarinen (1948) intuition is that which '' (…) establishes direct contacts with the primary facts and truths, (…)'' (Saarinen, 1948,

[136] Reference to: '' He does so by approaching his work in the same sincere spirit as did his father. In this way the constructive spirit of tradition goes from father to son, from generation to generation. And only in such a spirit can we look upon tradition with high veneration.'' (Saarinen, 1948, p. 273).

p. 109); instinct, is that which infuses art with the 'creative' quality and imagination is the faculty that creates associations. Saarinen (1948) defends, there is not a necessity to understand the faculties in itself, but instead the need for an '' Increasing sensitiveness to these mysteries by means of intuition, instinct and imagination, is the essential thing in the search for form.'' (Saarinen, 1948, p.25); it is the instinctive 'communication' with nature that is vital in order to understand and apprehend.

However, because they have such a central role in the understanding of the creation of art, they need to be understood more deeply. As will be shown, various other authors sustain their importance in multiple ways, and believe that without the incorporation of these faculties art could not be created and there would be no art. The theories presented below place intuition (which includes instinct) and imagination as the fundamentals that can create expression; expression, then, emerges as the ultimate principle that defines the artistic creative process as art.

What is instinct?

Defining instinct….

Instinct is generally understood as a natural ability to know without learning or without thinking about it. It can be defined as: '' A way of behaving, thinking, or feeling that is not learned : a natural desire or tendency that makes you want to act in a particular way.'' (merriam-webster.com, 2016). It further relates to behaviors and ideas that are mediated by reactions below the conscious level. It is a faculty that is common to all living creatures, but as Saarinen (1948) suggests, it is linked to the artistic creativity in a specific way.

Saarinen (1948) says that it is instinct that infuses art with the 'creative' quality. It is a very specific view that is not sustained by other authors. However it is possible to associate the idea of instinct to intuition (which is sustained by many authors), that as will be demonstrated, have various aspects in common. It is possible to understand that intuition includes instinct: in the sense that what is intuited is also instinctively felt.

What is intuition?

Defining intuition….

Intuition, like instinct, is generally understood as a phenomenon that occurs without the implication of reason, occurring without conscious understanding. According to the Merriam-Webster Dictionary, intuition is defined as: '' A natural ability or power that makes it possible to know something without any proof or evidence.'' (merriam-webster.com, 2015b). Further definitions include quick insight, immediate cognition or grasping of ideas without rational through[137]. Author Betti Edwards (1987) explains that the root of intuition is '*intuitus'*, the past participate of the Latin verb '*intueri',* meaning to look at; the term itself, the author continues, is defined as seeing something directly without having to figure it out. Contemporary uses of the word associate it to instinct, truth or meaning; it's connotations

[137] Reference to: '' 1. quick and ready insight; 2. a : immediate apprehension or cognition; b: knowledge or conviction gained by intuition; c : the power or faculty of attaining to direct knowledge or cognition without evident rational thought and inference.'' (merriam-webster.com, 2015b).

imply breakthrough, innovation, or deep understandings; however, etymologically the word intuition is derived from the Latin verb '*intueri'*, meaning to consider or to contemplate.

The faculty of intuition has been the focus of study in multiple cultures across times and in multiple fields of practice; it finds its roots in Ancient Philosophy, more specifically with Plato in the Republic, where he defines intuition as the human capacity to comprehend the true and real nature of things. Plato further describes it as a ''pre-existing knowledge that resides in the soul of eternity.'' (Pust, 2016); intuition for Plato was the means by which those universal truths could be attained, in a process that he described as anamnesis (the rediscovering of universal knowledge). Descartes also describes Intuition as a 'pre-existing' knowledge (Pust, 2016). It is also found in multiple Religious Texts, such as in Hinduism and Buddhism, where it is associated to developing one's own intuitive responses as a way to enlightenment. Contemporary Hinduism sustains that man's evolution into consciousness is a growing from animal instinct into the ways of intelligence and intuition.

… by Bergson: intuition

Author Flam (1995) describes that Bergson considers intuition as the establishment of a 'sympathetic communication between us and the rest of life, by the bringing about the expansion of our consciousness in an understanding of the 'endless creation'. In his words, he claims: Reference to: '' (…) '' sympathetic communication which it establishes between us and the rest of living, by the expansion of our consciousness which it brings about, introduces us into life's own domain, which is reciprocal interpenetration, endlessly continued creation.''.'' (Flam, 1995, p. 31).

… by Betti Edwards: Intuition and Insight

Betti Edwards (1987) sustains that intuition has indeed a great part in the creative process, more specifically to the stage of 'illumination' which '' (…) is defined in the dictionary as 'throwing light on a subject in order to see better'.'' (Edwards, 1987, p. 39). Both intuition and insight play a vital role in this creative stage. Intuition is thus related to insight, which also refers to both seeing and vision, and means 'seeing something that is not necessarily visible', such as 'apprehending' something (to grasp, to understand).

But how does intuition relate to the creation of Art? And why is it so important?

… by Benedetto Croce: Art is pure intuition and manifests as expression

One of the aesthetic philosophers that places a great importance on intuition for the creation of Art is the Italian Benedetto Croce (1866 – 1952) *(see Glossary)*. Croce's views on art, aesthetics and beauty, which were summarized in his work *The Essence of Aesthetics* (1912), place intuition at the centre of artistic creation. It was through intuition that art could be a manifestation of the spirit, and therefore be more important that any other subject or discipline in life. According to the authors Albert Hofstadter and Richard Kuhns (1976) his philosophy of art was the most influential for the twentieth century aesthetics: his ideas deeply influenced the replacement of the concept of beauty with that of expression.

As far as Croce (1912) is concerned, art is 'pure intuition', therefore distinguishing it from any other form of mental production; he claims that art is not philosophy, history, natural sciences, a play of

fancy, feeling 'in its immediacy', instruction or oratory, and it is not to be confused by a form of simple action[138]. For Croce, there is a close relationship between art, intuition (what creates art), feeling (what defines intuition) and consciousness (that which is developed by intuition). He believed that Art, because it is created by intuition, that proceeds all concepts, is at the basis of all human knowledge and is a manifestation of the human spirit, belonging to the 'circle of spiritual activity'.

It is through this intuition (a product of feeling and images) that the artist develops consciousness, which makes him claim as a summary: '' With this achievement, art becomes a symbol of feeling.'' (Hofstadter and Kuhns, 1976, p. 556). One of the first problems to define, in order to understand art, Croce continues, is the relation between 'intuition' and 'expression'. It is possible to summarize Croce's views on this matter by one of his sentences, where he claims: '' The soul is only a soul in so far as it is a body; (…) intuition is only intuition in so far as it is, in that very act, expression.'' (Hofstadter and Kuhns, 1976, p. 565). An image that does not express, thus, is not art. **And art is art, insofar as it expresses through intuition the artist's consciousness or spirit.** As a summary, art is pure intuition as developed by man's consciousness through feelings and images, and therefore, art is expression, for intuition expresses the artist's consciousness or spirit.

> ***Synthesis:*** *Croce's (1912) views, place intuition at the centre of artistic creation and also define art is 'pure intuition'. It is through this intuition (a product of feeling and images) that the artist develops consciousness: art is art, insofar as it expresses through intuition the artist's consciousness or spirit. Art, then, is a manifestation of the spirit or consciousness, through intuition by expression.*

… by Joyce Carey: Art as pure Intuition

Another author that also considers art (in a general way) to be pure intuition and that intuition is the core of the creative process is Joyce Carey (1984) *(see Glossary)*. He explains that the artist's creative process is about fixing down the intuition and finding a way**,** with tools and paints, to express the sensation or the feeling that is there contained[139]. Carey (1984) in this way, understands intuition as a reaction of a person to the outside world, an 'impression of feeling' on memory, '' (…) emotion directly intuited and recorded.'' (Cary, 1984, p. 42) Carey, emphasizes that there is always a gap between the intuition and the expression of that intuition in the creation process, and that the artist struggles to express that 'feeling' into the work; it is something every great artist has to struggle with, a fundamental problem part of the creative process. Intuition is the one thing that allows the artist to understand the qualities and the essence of that which he wishes to create. He understands and explains Intuition in relation to expression in art, as: '' Intuition, the recognition of the objective real in its own quality, is, of course, an essential function.'' (Cary, 1984, p. 47) Aesthetic intuition, he asserts, is so frail that conceptual thinking and standard education can ruin it. Supporting the intuition, in every great artist, is a guiding 'theme'. This theme, similar to an 'idea of life' that is felt in a personal way, finds 'validation' in new

138 Reference to: '' The 'negations here made explicit are obviously, from another point of view, 'relations'; for the various distinct forms of mental activity cannot be conceived as separate each from the rest and acting in self-supporting isolation.'' (Hofstadter and Kuhns, 1976, p. 561).

139 In his words, he explains: '' He has somehow to translate an intuition from real objects into a formal and ideal arrangement of colours and shapes, which will still, mysteriously, fix and convey his sense of the unique quality, the magic of these objects in their own private existence.'' (Cary, 1984, p. 17) .

'intuitions', and accompanies the development of the artist [140]. However, Carey emphasizes that symbols and concepts are the enemy of the intuition, for they contain it and limit it; it is through a free expression that intuition can find it's place in art. But, because intuition is free and always elusive, whenever an artist creates something, he is immediately dissatisfied, but this cycle keeps him creating in a constant search: '' The moment the artist expresses his intuition in any formal terms, this expression tends to destroy for him the force of his intuition.'' (Cary, 1984, p. 101)

As we have seen, Joyce Carey defends the same principles as Croce, claiming that art is 'simply intuition', and that intuition expresses that which it absorbs as sensation or feeling. The main difference between the two authors is that Carey considers intuition to express feelings and sensations (intuition itself) while Croce sustains that intuition captures the spirit and consciousness.

> ***Synthesis:*** *For Joyce Carey (1984) art is also pure intuition and that intuition is the core of the creative process. Intuition is a free essence (conceptual thinking, standard education, symbols and concepts destroy it), understood as a reaction of a person to the outside world, as 'impression of feeling'; thus, artistic process through intuition expresses that which it absorbs as sensation or feeling. The main difference between the two authors is that Carey considers intuition to express feelings and sensations (intuition itself) while Croce sustains that intuition captures the spirit and consciousness.*

… by Schelling: intuition above all other forms of knowledge

Another author that greatly contribute to the understanding of intuition as a vital faculty of art, is author Friedrich Wilhelm Joseph Schelling (1775 – 1854) *(see Glossary)*. Schelling defined an aesthetics that sustains art as a unity of intuition, freedom, consciousness and unconsciousness. For him, it is art, created from intuition and freedom, that can create a harmony between man and nature, consciousness and unconsciousness and so promote advances in knowledge and wisdom. These views are summarized by authors Hofstadter and Kuhns (1976), when they explain that Schelling's 'intuition' in art is associated to a transcendental philosophy of art. In brief, Schelling defends that art led the way for all other knowledge such as philosophy because of it's manifestation of the aesthetic intuition; it is art, through intuition and freedom, that can create a link between man and nature, consciousness and unconsciousness.

> **Transcendental Philosophy of Art:** Schelling was deeply influenced by Kant and Fichte, yet he defined his own views on aesthetics. Authors Albert Hofstadter and Richard Kuhns (1976) explain, that Schelling defined a transcendental philosophy for art, where the artistic object and the aesthetic experience has a central role. The highest stage of Transcendental philosophy is Aesthetics because it is the work of art that is a harmony of object and subject, nature and freedom, unconsciousness and consciousness. Where as philosophy is reflection, intellectual intuition, it waits upon art to create the consciousness of unity of nature and freedom; it is art that can advance prior to philosophy: '' Art is therefore the general organ of philosophy, (…).'' (Hofstadter and Kuhns, 1976, p. 346). It is through art that advances in knowledge and intuition can occur, and then and only then, can philosophy follow.

> ***Synthesis:*** *Schelling (1976) believes, it is art, derived from intuition and freedom, that can create a link and a harmony between man and nature, consciousness and unconsciousness and thus promote advances in knowledge and wisdom. Art led the way*

[140] Reference to: '' (…) all great artists have a theme, an idea of life profoundly felt and founded in some personal and compelling experience. This theme then finds confirmation and development in new intuition. The development of a great writer is the development of his theme – the theme is part of him and has become the cast of the mind and character.'' (Cary, 1984, p. 123)

for all other knowledge such as philosophy because of it's manifestation of the aesthetic intuition.

But how from intuition does the artist create art?

… by Nadir Afonso: intuition and the creative process

Another author that sustains intuition's central role in the creation process is artist and author Nadir Afonso (2010). According to him, intuition is the one vital key through which art is created. He claims: '' I say: the sensitive being creates the work of art through pure intuition.'' (Afonso, 2010, p.60) and emphasizes '' (…) truly creative artistic creation is the fruit of perspective intuition and never of rational faculties.'' (Afonso, 2010, pp.45, 46). In this sense, the artist, he continues, works by so called 'leaps' of intuition, establishing 'harmonies' with only a few reference points; the geometries, for example, are felt by the 'perceptive intuition' although the actual 'form' that is not there[141]. The artist thus relies exclusively on his intuitive understanding of forms, geometry and space.

Synthesis: *Nadir Afonso (2010) reports that intuition is the only thing that defines art and its creation; it is through intuition that the sensitive being creates art. Intuition absorbs the harmonies, geometries, and things that are 'not there', using those leaps of understanding in his art.*

Synthesis of instinct and intuition:
Instinct is generally understood as a natural ability to know without learning or without thinking; it is not generally associated to art, unless as a form of insight that is included into intuition (what is intuited is also instinctively felt). Intuition on the other hand is a central faculty to multiple artistic theories: they all consider intuition to be at the centre of both the creative process and of what defines art. Intuition is the one faculty that allows art to become art; it guides the artist in his creation process, allowing him to discover (above all other forms of knowledge) (Schelling). Intuition then can be defined as: a free essence that creates an 'impression of feeling' on memory (Carey), that which expresses the artist's consciousness or spirit (Croce), that which establishes direct contacts with the primary facts and truths (Saarinen), that which absorbs the harmonies, geometries, and things that are 'not there' (Afonso). Art, then, is pure intuition (Croce and Carey), and art, through intuition and freedom creates a link between man and nature, consciousness and unconsciousness (Schelling). Another aspect that all the authors have in common is the idea that intuition expresses that which it perceives: it expresses feelings and sensations (Carey), it expresses spirit and consciousness (Croce) and it expresses the harmonies and geometries (Afonso).

What is imagination?

Defining imagination….

For Saarinen (1948) believes that imagination is the faculty that creates associations and it can be defined as the ability '' (…) to produce mental ideas and pictures that have no relationship to previous concept, knowledge or experience.'' (Saarinen, 1948, p.25). Various authors (below analysed) not only consider imagination to be a vital faculty to the creation of art, like Saarinen, but also consider it (like intuition) to be one of the determining factor that defines Art and it's essence, and the one thing that can express. Some of these theories will be analysed in the following sections. But, at this preliminary

[141] In his words: ''It is perceptive intuition that composes equidistance. In the work of art that elementary circle is not there, although the same harmony is.'' (Afonso, 2010, p. 46).

understanding of imagination, it is also important to accentuate that it is a faculty that is vital to various fields such as science (not only art).

… by Pérez-Goméz: contextualizing imagination

Pérez-Goméz (2008) also reiterates the importance of imagination in creation. This author, considers that imagination is associated to love and to desire, and this idea is deeply rooted in ancient tradition; he explains that in the Rhetoric, Aristotle associates desire with imagination: the mind reaching out for knowledge, requires imagination, and that path is always led by desire. This connection between imagination and erotic space (desire) is thus perceived as a condition for knowledge. (Pérez-Gómez, 2008). Despite this deeply rooted understanding of imagination, the author remarks that in the contemporary architectural context, imagination is disregarded and perceived with scepticism. Despite this disregard, the status of cultural masterpieces (works of art) cannot be seen as a mere product of hard work or an instrumental application of theories and ideologies (although those might also exist), but instead, as being associated to the imagination (a vital essence for the creation of art). He clarifies that contrary to the logic of materialism and deconstruction, George Steiner and Elaine Scarry '' (…) argued that such differences are indeed real, pointing to our primary human capacity to experience beauty as meaning, which enables such masterpieces to reveal our own purpose as human beings within and across our cultures.'' (Pérez-Gómez, 2008, pp. 25, 26). It is imagination that has a vital function in the creation of art.

… by Roger Fry: Art as Imagination and the Imaginative life

One of these authors is Roger Fry, that in his essay '*An Essay in Aesthetics'* (1961), writes that what defines man (and his art) is the ability to recreate in his 'imagination' events and moments of life that were perceived and understood in his consciousness[142]. Therefore, he possesses a kind of double life, one in reality and another 'in imagination' where he is free to choose experiences and '' (…) the whole consciousness may be focussed upon the perceptive and the emotional aspects of the experience. '' (Fry, 1961, p. 22). Because of this fact, it is in through the 'imaginative life' that one gets a 'different set of values' and a completely different 'perception'. As such, Fry (1961) claims: '' (…) arts are the expression of the imaginative life rather than a copy of actual life (…).'' (Fry, 1961, p. 23), just like children's creations (that represent with 'freedom and sincerity' their imaginative lives). Associated to art as a manifestation of the stimulus of the 'imaginative live', is freedom from responsive actions (that dictate normal life)[143].

The 'imaginative life' Fry continues, or simply imagination, possesses it's own set of characteristics: firstly, one of it's main reasons '' (…) is to indulge recklessly the emotion of self-aggrandisement.'' (Fry, 1961, p. 23); secondly, it can grow and expand human growth (leading the individual from little whims and desires to 'highest aspirations'); also, (it's main characteristic) is it's

[142] Objects provoke an instinctive reaction, that provokes a state of consciousness and 'understanding' of the adequate emotion that is being surfaced. He claims: '' the whole of animal life, and a great part of human life, is made up of these instinctive reactions to sensible objects, and their accompanying emotions.'' (Fry, 1961, p. 22).

[143] Reference to: '' Art, then, is an expression and a stimulus of this imaginative life, which is separated from actual life by the absence of responsive action. (…) In art we have no such moral responsibility—it presents a life freed from the binding necessities of our actual existence. '' (Fry, 1961, p. 23).

total freedom and independence from 'necessary external conditions'; fourthly, it is stimulated and controlled within us by art; fifthly, it is distinguished by a clearness of perception (discovered in the process), and by '' (…) the greater purity and freedom of its emotion. '' (Fry, 1961, p. 24). And finally, emotions have a central role in the imaginative creation: the emotions of the imaginative are generally weaker than those of actual life (however, they are experienced more sharply and more accurately).

The author goes on to describe multiple aspects that define art as a result of the imaginative life (such as relating to a heightened perception, possessing order or creating a sense of beauty), but these will not be considered for they define overall aspects of art in general.

> **Art as a result of the imaginative:** Fry then, identifies the qualities that define art as an expression of the imaginative: foremost, it relates to a heightened perception and a disinterested intensity of contemplation and therefore demands order (a system) and variety (stimulation)[144]. Objects that possess these qualities (order and variety) provoke a kind of aesthetic attitude of disinterested contemplation (the example of a landscape or a flower). Also, there exists a 'revelation of purpose' (relation of sympathy towards the creator), and an understanding of the message within ourselves[145]; the higher or better the art form, the deeper these sensations are created from the artist to provoke specific and intense emotions within the viewer and a higher 'recognition of purpose' occurs; this is understood as 'beauty'. Another idea is that order is defined by the concept of unity, without which our perceptions do not understand the work; unity is: ''(…) a balancing of the attractions of the eye about the central line of the picture.'' (Fry, 1961, p. 27). This idea of beauty, through recognition of purpose, is both a 'sensuous order' and an 'arousing of emotions'. In order to achieve this, art relies on: rhythm (the rhythm of the line of the forms), line (a record of the gesture shaped by the artists feelings), mass, character (communicating its movement or stillness), space (concerns of spatial dimensions such as scale), light and shade, colour, (has a direct emotional effect) and lastly, a joint element of mass and space, that Fry names as 'Inclination of the Eye', referring to whether it is impending over something or coming towards. All these elements of emotional design, Fry explains, are connected to 'essential conditions of our physical existence'; the artists uses them, in the creation of form, depending on which emotions he wishes to arouse.

The author further clarifies that there are some theories that view this idea of art (as imagination and a reflexion of the imaginative life) as negative, sustaining imagination as a 'narrowing' view and a life of 'pleasure' as reprehensible. Other views, sustained by Ruskin and other moralists *(see Glossary),* consider the imaginative life a necessity, (partly because it does subverse morality). This imaginative life, can indeed, continues Fry, connect with the religious life, and, as such the artist can possess a mystical attitude. On this issue, he emphasizes: '' (…) I think the artist might, if he chose, take a mystical attitude, and declare that the fullness and completeness of the imaginative life he leads may correspond to an existence more real and more important than any that we know of in mortal life.'' (Fry, 1961, p. 23). Imaginative life, then, does indeed possess a nobility and a morality that guides the artist and the viewer into deeper (even religious) ways of existence.

> ***Synthesis:*** *Roger Fry (1961) states that man is defined by the dual nature of real life and an imaginative life (which is free from the restraints of reality). Art then, is manifests this imaginative life into the creation; art is an expression of the imaginative*

[144] Firstly, '' It must in the first place be adapted to that disinterested intensity of contemplation, (…). It must be suited to that heightened power of perception which we found to result therefrom.'' (Fry, 1961, p. 26). As such, the first quality 'our emotions' demand is that of order, without which '' (…) our sensations will be troubled and perplexed, and the other quality will be variety, without which they will not be fully stimulated.'' (Fry, 1961, p. 26).

[145] Note: '' there is the consciousness of purpose, the consciousness of a peculiar relation of sympathy with the man who made this thing in order to arouse precisely the sensations we experience.'' (Fry, 1961, p. 26). As such,: ''We feel that he has expressed something which was latent in us all the time, but which we never realised, that he has revealed us to ourselves in revealing himself. And this recognition of purpose is an essential part of the aesthetic judgment proper. ''(Fry, 1961, p. 26).

life. Imagination is defined as an indulgence, that possesses total freedom, is associated to the emotions and to consciousness, and can expand human growth (leading the individual to 'highest aspirations'); imagination in art, possess a nobility and a morality that guides the artist and the viewer into deeper (even religious) ways of existence.

…by Collingwood: imagination and consciousness

Another author that defines a central role to the imagination in both the creation stage and in the understanding of art itself is Collingwood (1938). He defends that a work of art is not a 'real' thing, (as most 'real' objects that can be created), it is an imaginary thing, that lives first in the mind of the artist where it is created; the artist then proceeds to create a fixed material version of it on paper or canvas, in order to make it accessible to himself and to others. Because the work of art is not the form (the physical) it is the imaginative thing in the artist's head, ('something imagined'[146]), all formalist theories *(see Glossary),* wrongly address what art is.

Imagination, Collingwood (1938) continues, is distinct from both actions of thinking (relates to itself) and feeling (connects to the psychical level, to the psyche and the soul); both derive from sensations and both exist in the aesthetic experience, yet, imagination is something different: imagination is active and involves consciousness and the development of consciousness. High art uses imagination in this deeper sense of the word, because for the artist there is no distinction between imagination and reality[147]; so the value of imagination, is that it exists as a real entity. The artist creates an imaginary world, and expresses it in his art through the creation process[148].

> **The Distinction between Thinking and Feeling:** Collingwood demonstrates the differences between thinking and feeling in relation to art: '' First, there is a special kind of simplicity about feeling) in contrast with what may be called the bipolarity of thought.'' (Collingwood, 1938, p. 158); secondly, there is a privacy about feelings that contrasts the publicity of thoughts; thirdly, feelings cannot contradict each other where as thoughts can. Feeling, connected to emotions, '' Feeling appears to arise in us independently of all thinking, in a part of our nature which exists and functions below the level of thought and is unaffected by it.'' (Collingwood, 1938, p. 163). This level of feeling, relating to the experience of sensations and their emotional charges, Collingwood calls a 'psychical level', relating to 'psyche' and 'soul' and to the word 'psychology'; feeling is associated to this level of experience, the 'psychical level': '' This level contains indeed a vast variety of emotions; but only those which are the emotional charges upon sensa.'' (Collingwood, 1938, p. 164). Thinking, in a basic level, seems to derive from our feelings, thereby we think to become aware of what it is we are feeling; at a second level thought relates to itself, but for Collingwood it is in its primal level that it matters most, '' (…) concerned with the relations between sensa.'' (Collingwood, 1938, p. 169).

Art, according to Collingwood, expresses the imagination (an expression of emotions, thoughts and feelings) and is an act of consciousness that is always original[149]. Hence, there is a very close relationship between imagination, consciousness (that which is developed by the imagination) and emotion (that which is felt by the imagination); which implies an innate empathy from the artist. A bad

[146] Collingwood summarizes: '' The work of art proper is something not seen or heard, but something imagined.'' (Collingwood, 1938, p. 143).
[147] '' Imagination is indifferent to the distinction between the real and the unreal.'' (Collingwood, 1938, p. 136), in imagination there is no distinction between both at all and in this fact is its value.
[148] In summary: '' By creating for ourselves an imaginary experience or activity, we express our emotions; and this is what we call art. '' (Collingwood, 1938, p. 151).
[149] Reference to: '' Every genuine expression must be an original one. However much it resembles others, this resemblance is due not to the fact that the others exist, but to the fact that the emotion now being expressed resembles emotions that have been expressed before. The artistic activity does not 'use' a 'ready-made language', it 'creates' language as it goes along.'' (Collingwood, 1938, p. 275)

work of art occurs, when the artist corrupts his own consciousness in an unsuccessful attempt to become conscious of the emotion he is feeling in his imagination[150]. The artistic creation then, says Collingwood, is an artist's attempt to state the truth through an imaginative act; through the act of creation, the artist comes to know and define himself; but what he expresses and communicates (the imagination) is related to the collective whole and not only to himself, and in this way he prophesizes and is a prophet.

> ***Synthesis:*** *For Collingwood (1943) imagination has a central role in the creative process and is in itself that which defines art. For him, a work of art is an imaginary thing that exists in the mind of it's creator at it's most pure form. Imagination, is different from both actions of thinking (relates to itself) and feeling (connects to the psychical level, to the psyche and the soul); imagination is active and involves consciousness and the development of consciousness; is considered to be a real thing by the artist; involves both consciousness (that which is developed by the imagination) and emotion (that which is felt by the imagination). The creative process expresses the imagination (and the emotions that define it) and is an act of consciousness allowing man to define himself and the collective whole (for imagination expresses universal ideas and expands consciousness).*

… by Ruskin: the faculty of imagination in art

It is Ruskin, which not only designates a central role to the faculty of imagination in both the creation stage and in the understanding of art itself, but also adds other ideas that describe the process more accurately. He affirms that, the faculty of imagination is associated both to Art and to the making of art: it is imagination that is at the root of every great conception of art or poetry; likewise, the absence of imagination in unimaginable artists leads to a 'dead' or insignificant art. Imagination in art, is an intuitive manifestation that can never repeat itself[151]: acts intuitively (without reasoning), selecting that which comes through intuition. The highest manifestation of imagination are found in nature, therefore man needs to 'imitate' nature, understanding the means by which it creates, and create in the same means. The real life of the imagination is a kind of discovering of truth. In an excellent artist, the imagination is vivid, alive, and awakens the viewer. Imagination, thus, is contemplative in nature, and it acts on the artist allowing him to create freely: form and colour, then, are servants of the faculty of imagination. It uses the properties of abstraction and selection. Ruskin continues explaining that there is a connection between the imaginative faculties and the intellectual ones: the intellectual ones absorb everything that is beautiful, where as the imagination absorbs everything that the intellect rejects, the imperfect, rough and true. Further, every excellent artwork is imaginative in a two folded way: as a result of the imagination of the artist, secondly the creation of an opening to imagination of the viewer. Imagination is therefore also associated to emotion, (all deep emotions are imaginative), which is present in creation and in the expression transmitted to the viewer[152].

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[150] He claims: '' A bad work of art is an activity in which the agent tries to express a given emotion, but fails.'' (Collingwood, 1938, p. 282). For to express an emotion, is the work that concerns the artist, and therefore, to fail to do it is what defines bad art: it is the unsuccessful attempt to become conscious of the emotion. As such, bad works of art, are what Collingwood claims to be 'corruptions of consciousness', for the artist corrupted his own sense of that emotion.

[151] In Ruskin's words: '' the imagination is never at a loss, nor ever likely to repeat itself; nothing comes amiss to it; but whatever rude matter it receives, it instantly so arranges that it comes right; all things fall into their place, and appear in that place perfect.'' (Ruskin, 1903, p. 241).

[152] Ruskin claims: '' We have seen, that (…) all true and deep emotion is imaginative, both in conception and expression; and that the mental sight becomes sharper with every full beat of the heart: and, therefore, all egotism, and selfish care, or regard are, in proportion to their constancy, destructive of imagination.'' (Ruskin, 1903, p. 287).

In short, the power of imagination depends on the ability of the human spirit to enter the things around it, and the real life of the Imagination, and only then, is in the discovering of truth.

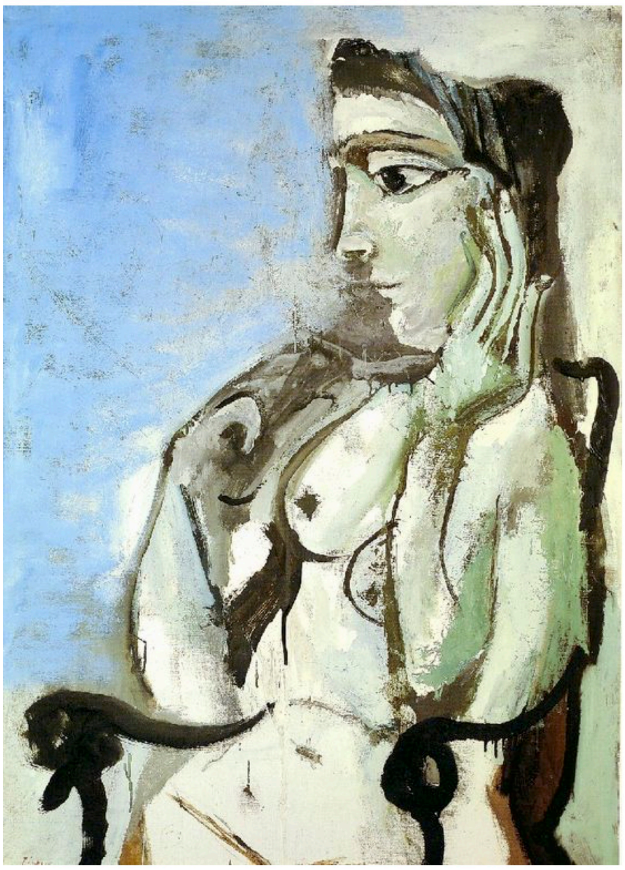
> ***Synthesis:*** *Ruskin (1903) conveys that it is the use of the faculty of imagination that allows art to be art. Imagination in art, is always unique (in a constant search), alive and vivid, contemplarive and free; it acts intuitively (without reasoning) selecting that which comes through intuition, awakens the viewer, uses the properties of abstraction and selection, absorbs that which the intellect rejects and is connected to emotion. The power of imagination depends on the ability of the human spirit to enter the things around it, and the real life of the Imagination, then, is in the discovering of truth. Every excellent artwork is imaginative in a two folded way: a result of the imagination of the artist, and as the creation of an opening to imagination of the viewer.*

… by Bachelard and Pallasmaa: Imagination as a link and Imagination in Architecture

Pallasmaa (2010) and Bachelard (2010), (upon whom Pallamaa's theories are deeply inspired by), draw attention to the importance of imagination as a unique creation faculty that is used by both the artist and the viewer (when he experiences the work of art). Pallasmaa (2010) explains that Bachelard distinguishes two types of imagination: the imagination of form and the material imagination (which transmits in more deeper ways than form does). This duality of the imagination (of form and matter) is a crucial part of the artistic creation and experience, for as he suggests, we live in a dual world: the world of 'spirit, ideas and intentions' and the world of 'matter', the physical world and these two worlds, characterize a 'singular existence', just like the work of art is defined by one single entity. Therefore, for the authors, the imagination (of both form and matter) has the power to create a link between human consciousness (the world of spirit) and the physical world (matter). Pallasmaa (2010) continues explaining that for Bachelard, the material elements that possess a more 'evocative' power for the imagination are fire and water, but the imagination is equally triggered by things that are unclear and ambiguous. Both these forms of imagination sustain the creative process and the experience of art.

> **Examples of Imagination triggers in Architecture and Art:** Pallasmaa (2010) and Bachelard emphasize matter and substance as a 'trigger' for the imagination. Materiality and Erosion were the themes elected by Art Povera, and the works of Anselm Kiefer. In architecture, water is used in the works of Luis Barragan and the works of Carlos Scarpa. Pallasmaa (2010) further explains that what is unclear and ambiguous also enhances the imagination. The use of darkness and light, shadows and mysterious (ambiguous) environments, trigger the sense of touch, enhance the imagination and enhance the characteristics of closeness, intimacy and affection. As an example, Pallasmaa talks of the mysterious depth of shadows in the paintings of Caravaggio and Rembrandt[153]. *(see Glossary for further information on authors and artists).*

[153] Reference to: '' The art of the chiaroscuro is a skill of the master architect as well. In great spaces of architecture, there is a constant, deep breathing of shadow and light; shadow inhales, and illumination exhales, light. '' (Pallasmaa, 1996, p. 33)





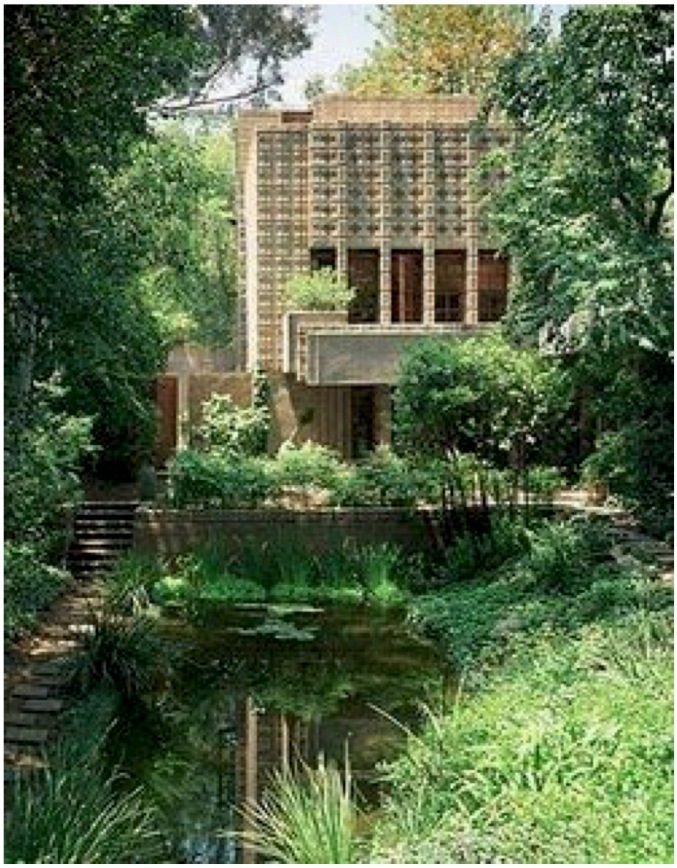


Photo 1: Pablo Picasso, Female Nude Sitting In The Armchair, 1964; Source: http://www.wikiart.org/en/pablo-picasso/female-nude-sitting-in-the-armchair-1964?utm_source=returned&utm_medium=referral&utm_campaign=referral; Photo 2: Edvard Munch, The Scream; Source:https://pt.pinterest.com/pin/251075747955052555/; Photo 3: The Millard House, also known as "La Miniatura," Frank Lloyd Wright. Millard House. Pasadena. 1923 ; Source:https://pt.pinterest.com/pin/2510757479550429

PLATE 18: EXAMPLES OF EXPRESSION IN PAINTING AND ARCHITECTURE

Pallasmaa (2010) considers Architecture, like other art forms, creates it's artistic force from a tension between the rational characteristics (that have to define the work, such as functionality) and the strength of imagination [154]; therefore, what defines a work of architecture as great, that gives it it's life force, is this tension between opposing forces, (conscious and unconscious intentions) that allow for the emerging of multiple emotional connections. Artists and architects create by hidden intentions that they are unaware of, and it is these hidden intentions that allow for the works real artistic value to emerge. In his words they operate by: '' (…) deeper unconscious intentions giving the work its life force.'' (Pallasmaa, 1996, p. 18). In his view, this is where the life force springs from. It is the imaginative quality, as well as the other unconscious forces at play in the creative process that allows for architecture to possess it's real value. Although imagination doesn't necessarily have to oppose reason, they belong and possess different ideals, values and ways of conceiving and understanding the world, thus, it is the tension between both that results from the creative process, that grants architecture it's significance.

> ***Synthesis:*** *Pallasmaa (2010) and Bachelard (2010) believe that, the imagination is a unique faculty that is used by both the artist and the viewer (when he experiences the work of art). It has the power to create a link between human consciousness (the world of spirit) and the physical world (matter), as it embodies those two essences in the work of art. There are two types of imagination (of form and of matter), two types of evocative strength of imagination, that sustain both the creative process and the experience of art. The creative process and the resulting artistic force in all art forms (including architecture) is derived from the tension between rational characteristics and the strength of imagination.*

> ***Synthesis of imagination:*** *The various theories sustain that imagination is that which defines art and that the creative process expresses the imagination (Roger Fry (1961), Collingwood (1943), Ruskin (1903)). Art, then, is an imaginary thing that exists in the mind of it's creator at it's most pure form. (Collingwood (1943)) and it is the use of faculty of imagination that allows art to be art (Ruskin (1903)). The creative process and the resulting artistic force in all art forms (including architecture) is derived from the tension between rational characteristics and the strength of imagination (Pallasmaa (2010) and Bachelard (2010)). Imagination is defined as: that which creates another life for man (Roger Fry (1961)), a free indulgence associated to the emotions and to consciousness, leading the individual to highest aspirations (Roger Fry (1961)), a different faculty that the actions of thinking (relates to itself) and feeling (connects to the psychical level, to the psyche and the soul) (Collingwood (1943)). The power of imagination depends on the ability of the human spirit to enter the things around it, and the real life of the Imagination, then, is in the discovering of truth (Ruskin (1903)). Imagination in art: is active, involves consciousness (that which is developed by the imagination) and emotion, that which is felt by the imagination (Collingwood (1943)), possesses a nobility and a morality that guides the artist and the viewer into deeper (even religious) ways of existence (Roger Fry (1961)) and allows man to define himself and the collective whole (Collingwood (1943)). Imagination in art, is always unique (in a constant search), alive and vivid, contemplative and free; it acts intuitively (without reasoning) selecting that which comes through intuition, awakens the viewer, uses the properties of abstraction and selection, absorbs that which the intellect rejects and is connected to emotion (Ruskin (1903)); is defined by the artist and is experienced by the viewer (Ruskin (1903), Pallasmaa (2010) and Bachelard (2010)); has the power to create a link between human consciousness (the world of spirit) and the physical world (matter), as it embodies those two essences in the work of art (Pallasmaa (2010) and Bachelard (2010)).*

[154] Reference to: ''Architecture (…), its artistic content lies on this distance and tension between these characteristics and the rational autonomous architectural imagination, not the reductive views.'' (Pallasmaa, 2011, p. 98); Free translation from: ''A Arquitectura (...), mas seu conteúdo artístico esta na distancia e na tensão entre essas características racionais e o imaginário arquitectónico autónomo, não na fusão redutiva.'' (Pallasmaa, 2011, p. 98)

4.1.3. THE PRINCIPLE OF EXPRESSION

As previously said, in Croce's views, the expression derived and created from intuition, was the 'essence of the work of art'. According to Umberto Eco (1989), for Croce, this was the only thing that mattered in creating art, every other aspect, such as themes, context or narratives were 'irrelevant'[155]. As stated by Carey (1984), for Croce intuition and expression are the same thing [156].

This idea that only expression is important, through intuition, was also sustained by Carey (1984), whom sustained that art is also created through pure intuition and that intuition expresses that which it absorbs and perceives. The union between expression and intuition was also found through multiple authors. Roger Fry (1961), Collingwood (1943) and Ruskin (1903) all sustained that the creative process expresses the imagination, and that in this imaginative expression is the essence of the work of art.

Although expression is at the basis of human existence, expression related to intuition and to the artistic process, gains a specific understanding, which will explained as follows.

What is this expression from an artist point of view?

…. by Matisse: Art as expression

> '' The artists, working toward an ideal, understood intuitively, is a person of extremely fine perceptions who is able to translate these perceptions into tangible form. The most important aspect of painting is not the imitation of nature, but the transfiguration of perceptions into and enduring image. This more lasting interpretation was to be achieved by balancing the total structure of the picture rather than by dwelling on specific emotion. '' (Flam, 1995, pp. 36, 37).

For Henri Matisse (1908) art is was all about Expression. His views on the matter, defined in *Notes of a Painter*' (1908), have common ideas with Benedetto Croce's Aesthetics (1902) and Henry Bergson's Creative Evolution (1907) (explains author Henri Flam (1995)) and they deeply influenced expressionist painting and the **Fauve movement** *(see Glossary),* that followed.

> **Contextualization:** Henri Flam (1995) in his book '*Matisse on Art'* explains that Matisse's essay '*Notes of a Painter*' (1908), written when Matisse was 39 years old (when he already noticed by the main art circles and collectors of Europe) is a clarification of his artistic views (that were still in development), his theoretical approach and foundation principles, in order to assert status and contribute to the on-going debate on painting: there was an over emphasis in the Impressionists and Cubists, that led to a new idea of a conceptual art as expression. At the time, views on art were changing, and '' Of particular interest is the general consensus that the artist must rely on his feeling and ideas rather than upon nature as the basis of his art. Taken together, these elements indicate the desire for a more conceptual kind of art.'' (Flam, 1995, p. 31). Matisse's essay, Flam continues, '' (....) seems to have had a defining influence on later conceptions of both Fauve and Expressionist painting, descriptions of which often follow quite closely the ideas expressed in Matisse's essay. '' (Flam, 1995, p. 31).

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[155] Reference to: '' The intuition/expression which constituted the essence of the work of art was thus an unchanging entity; it also necessarily possessed unity, which Croce tended to speak of as a dominant lyrical feeling or sentiment. The material medium of the artistic work was of no real significance; it merely served as a stimulus to enable the reader to reproduce in him- or herself the artist's original intuition. Equally, the material historical circumstances in which the artist lived, the artist's biography, the artist's intentions—all were irrelevant to the proper understanding of the work, since they were the concern of human faculties quite distinct from those that generated artistic expression. To all of these principles, Opera aperta is completely and radically opposed. '' (Eco, 1989, p. ix)

[156] Reference to: '' Croce probably the most interesting of the aesthetic philosophers, says that art is simply intuition. But he says, too, that intuition and expression are the same thing.'' (Cary, 1984, p. 16)

Matisse (1869 – 1954) conceived existence as energy, and desired to create forms that expressed the 'elusive present', in the search for what Flam (1995) *(see Glossary),* defines as 'the essential character' of things; as such, the goal of the process was to reach or arrive at an absolute (ideas also brought forth by Bergson's 'Introduction to Metaphysics'). These absolutes, that could only be reached by intuition and imagination, were achieved by the complex artistic process of expression. It was expression that reached '' (…) ' that state of condensation of sensations (…)''. (Flam, 1995, p. 33), in which consciousness and meaning could emerge. This expression was found in the '' (…) primacy of personal expression over objective vision.'' (Flam, 1995, p. 31). and in the '' (…) creation of intuitive symbolism through personal experience.'' (Flam, 1995, p. 31). In this way, Matisse uses symbols, for he believed them to be a 'record of intuited perceptions'[157]. In doing so, art would be elevated to a 'higher ideal of beauty', exist at the level of 'philosophy' (that ''(…) 'gives to reality a more lasting interpretation'.'' (Flam, 1995, p. 34)) and while rooted in everyday life, elevate the spirit 'above and beyond'[158].

For Matisse art as expression relied on 'honesty' and 'sincerity' of perception and life and on both nature and imagination (the two sources that should be used by the artist, for nature was the ultimate source of art). It was made clear in the act of creation itself (Matisse's focus) as expression (derived from perception, intuition, nature and imagination); this act itself could define art and it's significance. This being, the formal aspects of the work weren't important at all only the feeling was[159]. He underlines that expression, changes according to the surface in which it is painted and each work must define its expression in itself (amplifications of drawings or reductions should not happen because the drawing or study looses its expressive nature). In short, Flam (1995) claims: '' The act of painting is an act of belief, a synthesis (or 'condensation') of 'sensations into perceptions' and of perceptions into significant form.'' (Flam, 1995, p. 36). Matisse was interested in the specific sensations of charm, lightness, freshness, serenity and harmony; on this issue, he claims: '' What I dream of is an art of balance, of purity and serenity, devoid of troubling or depressing subject matter, (…) ''. (Flam, 1995, p. 42). He wished to elevate the human spirit to a real of tranquility and stillness.

As a synthesis, the creative process as expression, for Matisse, starts from the very beginning, in which all the expressive essence and the qualities of the artwork need to already exist as a clear vision ('' For me, all is in the conception. It is thus necessary to have a clear vision of the whole right from the beginning.'' (Flam, 1995, p. 40)). The artist then proceeds from the copying of nature , without it truth cannot be understood ('' Those who work in a preconceived style, deliberately turning their backs on nature, miss the truth.'' (Flam, 1995, p. 42)), and from imagination[160]. Only in this way can a significance

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157 Reference to: '' It is in this special sense that Matisse's paintings become symbols; they are like a cinematographic record of the intuited perceptions of the duration of his lifetime, transformed into an almost Proustian ensemble of self-referring images.'' (Flam, 1995, p. 32).

158 Reference to: ''Matisse is not advocating an art of superficial decoration or entertainment, but stating his belief in art as a medium for the elevation of the spirit above and beyond, yet rooted in the experience of, everyday life. '' (Flam, 1995, p. 35).

159 For Matisse, when he sees an Art object, it is the feeling that emerges that is important, not the details or the figures in itself: it is the feeling, the lines, the composition, the colour. Thus, he claims: ''A work of art must carry within itself its complete significance and impose that on the beholder even before he recognizes the subject matter.'' (Flam, 1995, p. 41). This is achieved through expression.

160 ''A distinction is made between painter who work directly from nature and those who work purely from imagination. Personally, I think neither of these methods must be preferred to the exclusion of the other. Both may be used by the same individual, (…). '' (Flam, 1995, p. 42).

and a meaning unravel through the process of painting, which according to Flam (1995), achieves the status of an almost religious experience[161].

> ***Synthesis:*** *Matisse describes art as expression worked from both intuition and imagination, in the search for the condensation of sensations and the real absolute of all things. The formal aspects of the work aren't important at all only the feeling that emerged through expression. For Matisse, it was the sensations and feelings of serenity and calmness (filtered and perceived by intuition and imagination) that should be expressed in the work of art. In this way, the act of creation would approximate an almost religious experience.*

What is this expression for aesthetics?

…. Contextualizing Expression in Aesthetics

Traditionally there are two distinct aesthetic theories in regards to how a work of art incorporates meaning (works can be meaningful in two distinct ways): '' (…) by presenting a world (whether real or imaginary) that is independent of themselves, as in prose narrative, theatre or figurative painting, or by carrying their meaning intrinsically within them.'' (Scruton, 2009, p. 113). The first relates to representation, and the second, to expression. Scrutton (2009) defends that the first way of conveying meaning, 'representation', implies a symbolic connection between the work and the world and is connected to the search for what is universal about the thing being observed[162]. Representation, then can be judged to be more or less realistic, more or less in conformity to the 'generality' of things. However, because representation can be accurate but the work might fail to be a work of art (by failing to convey significance and meaning)[163], Croce dismissed representation as non-essential to aesthetics believing it to be '' (…) at best a frame upon which artists compose, but never in itself the source of the meaning of their work. '' (Scruton, 2009, p. 114). As we previously stated, Collingwood also dismissed representation as the one thing which defined low art forms and not Art.

The second is that there is the view that sustains that significance is conveyed through expression. Scrutton (2009) says that according to Croce, expression is the 'vehicle of the aesthetic value'; it deals with intuitions, emotions, particular experiences and what is unique about them[164]; art in this sense, communicates that uniqueness[165] through expression. Expression as a consequence becomes an important value of art, and all works of art express things or thoughts; it is regarded as the one thing that

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161 Reference to: '' the process of painting has an almost religious experience because it involves a restructuring of time and space, a penetration into Reality itself.'' (Flam, 1995, p. 37).

162 Reference to: '' Representation, whether in words or images, is a relation between a work and a world, and the work applies to its world in the same way that concepts apply to the things that fall under them, by describing those things in general terms.'' (Scruton, 2009, p. 116)

163 Scrutton continues: '' An accurate representation may also be meaningless as a work of art—either because what it represents is meaningless, or because it fails to convey anything meaningful about its subject-matter, like the nymphs of Bouguereau.'' (Scruton, 2009, p. 114).

164 Reference to: '' Expression does not deal in concepts but in intuitions—particular experiences, that are conveyed by communicating their uniqueness.'' (Scruton, 2009, p. 116)

165 Reference to: '' Two works of art can represent the same thing; but they cannot express the same thing—for a work expresses an intuition only by presenting its individual character, (…). That is what is going on in art—the communication of individual experiences, in the unique form that identifies their individuality. And that is why artistic expression is so valuable—it presents us with the un-conceptualized uniqueness of its subject-matter.'' (Scruton, 2009, p. 116)

defines the aesthetic experience and that which can conveys significance and meaning[166].

Besides the theories presented above, there are further numerous aesthetic theories that sustain and defend expressionism as the one criteria that can create meaning in art. Merleau-Ponty (1960) *(see Glossary),* clarifies that it is the expression that 'metamorphoses' and creates a 'genesis' of an 'interpretation' of the world, and thus, only expression can convey meaning and significance. Scruton (1978), in a similar way, explains that expression does not have to be a form of personal emotion but rather is a 'display of atmosphere and character'; the ideal of expression is a 'reference without description', without a 'structure' [167].

Author Freeland (2002) argues that Sigmund Freud also sustained art as expression, however for Freud, art expressed unconscious feelings, derived from biological desires. She claims: '' Freud saw art as a form of 'sublimation', a gratification that substitutes for the actual satisfaction of our biologically given desires (such as the desire for oral or genital pleasure).'' (Freeland, 2002, p. 157), as such, the artist creates fantasies and day-dreams in order to avoid neurosis; for Freud, the author continues, sublimation is of great value, because it leads humans to create magnificent things, such as art and science. The sublimation that occurs through art, expresses both unconscious and universal desires, which Freud explains through psychoanalysis (repressed emotions from childhood or from past events).

So, what does expression express?

… Expression in Art: a contemporary understanding

As we have seen, most theories place expression as the one true value of art.

Some contemporary authors such as Scrutton (2009) and Freeland (2002) say that expression does possess some fragility when it is associated only to the expression of emotion. The fragility pointed out by the authors relates to the fact that expression can be associated to only the expression of emotions. For Scrutton (2009) it is not only in the expression of emotion that the meaning of the work of art exists (On this issue, he continues: '' Most works of art are not created in a sudden heat of passion; nor do we have the knowledge that will enable us to say what passion (if any) motivated the artist. Even when artists refer to the emotion that is allegedly conveyed by their work, we may not believe that their description is the correct one.'' (Scruton, 2009, p. 115)) ; and likewise, Author Freeland (2002) explains that it is limiting to understand art only as an expression of emotions and feelings. However, none of the theories presented above sustained expression as just the expression of emotion but rather as the expression of intuition and imagination in a complexity that understood universal ideals, 'spirit' and values. The significance of art relates to the expression of many more things.

Author Freeland (2002) considers that artworks express more than just emotions, they express '' (…) belief systems, views of the cosmos and its order, ideas about abstraction in art, and so on. One way to put this objection is to say that art can express or communicate not just feelings but also ideas.'' (Freeland, 2002, p. 60). Which defines what the author describes as an enhanced expression theory,

[166] Expression has been the study of focus of multiple theories: to show why it is important and '' (…) and how it captures that element of the aesthetic experience that we are inclined to describe in terms of meaning.'' (Scruton, 2009, p. 117).

[167] In his words: '' Characteristic of expression is the presence of 'reference' without predication: sadness is expressed by the sculpture but nothing is said about sadness; eternity is made present in Michelangelo's brooding figures, but it is not described there. In this notion of expression, therefore, we seem to be approaching that ideal of 'reference' without description (reference without semantic structure) which the semiologists look for in their over-generalized 'science' of signs.'' (Scruton, 1979, p. 187)

developed by a variety of people such as Benedetto Croce (1866–1952), R. G. Collingwood (1889–1943), and Suzanne Langer (1895–1985), *(see Glossary),* whom sustained that art can express ideas along with feelings. For Langer, the author explains, there is not a big difference between expressing ideas and feelings, for feeling should be taken in the most broad sense.

Freeland (2002) continues to demonstrate that this defined two main theories in art, related to two types of expression: the expression of feelings and emotions (the expression theory) and the expression of ideas and cognitive aspects (the cognitive theory). Both theories have at their basis the fact that art communicates and expresses: in the first feelings and emotions and in the second place, thoughts and ideas.

Interpretation, then, according to the author, in this contemporary understanding of art and expression, is an explanation of how the work expresses those emotions, thoughts and ideas; some of those interpretations are better or more 'true' than others[168]. For a good interpretation, both the cognitive theory and the expressionist emotional theory, should be analysed and considered. In other words, both feelings and emotions, thoughts and ideas need to be understood as things that are expressed in the work of art.

The Expressionist theory and the Cognitive theory:

The Expressionist Theory sustains that art communicates feelings and emotions (defined by Leo Tolstoy and Sigmund Freud), and a more enhanced version that combines emotions and thoughts, (defined by Benedetto Croce (1866–1952), R. G. Collingwood (1889–1943), and Suzanne Langer (1895–1985)). In the art movements, Abstract Expressionism explored this idea greatly, aiming to create specific feelings through their art. This theory will be further developed in chapter 3. **The Cognitive theory** which sustains art as a communication of ideas and thoughts. The author classifies Dewey's theories as cognitive, because '' He emphasized art's role in enabling people to perceive, manipulate, or otherwise grapple with reality.'' (Freeland, 2002, p. 166). As such, for Dewey, art can in fact be a source of knowledge, just like science. Art conveys knowledge at multiple levels. However what we learn from art, depends on our aims and purposes. Nelson Goodman also sustains the experience of art, and did not confine the definition of knowledge or cognition to a specific list of statements, clarifies the author. For Goodman, to understand art one must apprehend both through feeling and in the mind: as such, art communicates through structures of symbols and achieves meaning in that way. Art thus allows for a better understanding of the world, and in doing so, allows us to develop our cognitive systems. Freeland (2002) also explains that in all theories '' (…) there are also disagreements about how audiences 'receive' the feelings or thoughts of an artist: by direct transmission (Tolstoy), by recognizing a common fantasy (Freud), by sharing an episteme (Foucault), or by a process of language-like interpretation (Goodman).'' (Freeland, 2002, p. 174). However, what all theories do have in common is that art '' (…) is a branch of meaningful human activity through which people with minds can communicate.'' (Freeland, 2002, p. 174). Both theories have at their base expression as the means by which art communicates.

[168] Reference to: '' A good interpretation must be grounded in reasons and evidence, and should provide a rich, complex, and illuminating way to comprehend a work of art.'' (Freeland, 2002, p. 150).

Summary:

4.1. Creation

1. ***The act of creation*** *can be defined as the act of conscious generation of something, in a 'non-technical' way, as an extension of the self.*

2. The artist as a creator shouldn't be understood as 'genius', for it segregates the artist and **everyone has this ability to 'create'** (the act of observing is also creation) (Collingwood (1937). Then, the unique skills developed by the artist are an ability to externalize himself through creation (Umberto Eco (1989)), and to project his aura (Saarinen (1948)).

3. Where as traditionally, the artist was considered to create by a means of inspiration, contemporary theories **define the creation process, as that which is creative**, in the sense that it uses creativity and is organized in five stages: first insight (finding new problems, and imagining new solutions), saturation (the search for solutions and multiple sources of inspiration), incubation (the inner development of ideas), illumination (the flash of insight) and verification (checking for errors and usefulness) that act as continuously as a cycle and involves the duality of the brain and its two types of reasoning (Edwards (1987)).

4. **The artistic creative process can be further understood as:**

    - possessing *artistic talent the ability to express the depths of human experience through a primary means of communication (feelings and emotions) (Pinchas Noy (1972));*
    - *being a sort of automatism that reveals what is already there, in a sort of uncovering of unconscious processes and experiences (Pallasmaa (2010));*
    - *using creative instinct witch is the union* ***of three faculties: intuition, instinct and imagination*** *(*Saarinen, 1948);
    - that **which expresses** through the three faculties (Saarinen, 1948).

5. ***Instinct*** *is generally understood as a natural ability to know without learning or without thinking; it is not generally associated to art, unless as a form of insight that is included into intuition (what is intuited is also instinctively felt).*

6. ***Intuition is a central faculty to multiple artistic theories: they all consider intuition to be at the centre of both the creative process and of what defines art. Intuition then can be interpreted as:***

    - *a free essence that creates an 'impression of feeling' on memory (Carey),*
    - *that which expresses the artist's consciousness or spirit (Croce),*
    - *that which establishes direct contacts with the primary facts and truths (Saarinen), that which absorbs the harmonies, geometries, and things that are 'not there' (Afonso).*

7. ***Intuition related to art:***

    - *Art, then, is pure intuition (Croce and Carey),*
    - *is the one faculty that allows art to become art (Croce, Carey, Afonso),*
    - *guides the artist in his creation process, allowing him to discover (above all other forms of knowledge) (Schelling).*
    - *through intuition and freedom creates a link between man and nature, consciousness and unconsciousness (Schelling).*

- *expresses that which it perceives: it expresses feelings and sensations (Carey), it expresses spirit and consciousness (Croce) and it expresses the harmonies and geometries (Afonso).*

8. ***Imagination** is a central theme in various theories that sustain it **as that which defines art and that the creative process expresses the imagination** (Roger Fry (1961), Collingwood (1943), Ruskin (1903)). Art, then, is an imaginary thing that exists in the mind of it's creator at it's most pure form. (Collingwood (1943)) and it is the use of faculty of imagination that allows art to be art (Ruskin (1903)). The creative process and the resulting artistic force in all art formsis derived from the tension between rational characteristics and the strength of imagination (Pallasmaa (2010) and Bachelard (2010)). **Imagination is revealed as**:*

   - *that which defines another life for man (Roger Fry (1961)),*
   - *a free indulgence associated to the emotions and to consciousness, leading the individual to highest aspirations (Roger Fry (1961)),*
   - *a different faculty that the actions of thinking (relates to itself) and feeling (connects to the psychical level, to the psyche and the soul) (Collingwood (1943)).*
   - *The power of imagination depends on the ability of the human spirit to enter the things around it, and the real life of the Imagination, then, is in the discovering of truth (Ruskin (1903)).*

9. ***Imagination in art is:***

   - *Active and involves consciousness (that which is developed by the imagination) and emotion, that which is felt by the imagination (Collingwood (1943))*
   - *possesses a nobility and a morality that guides the artist and the viewer into deeper (even religious) ways of existence (Roger Fry (1961)),*
   - *allows man to characterize himself and the collective whole (Collingwood (1943)).*
   - *is always unique (in a constant search), alive and vivid, contemplative and free (Ruskin (1903));*
   - *acts intuitively (without reasoning) selecting that which comes through intuition, awakens the viewer, uses the properties of abstraction and selection, absorbs that which the intellect rejects and is connected to emotion (Ruskin (1903));*
   - *is defined by the artist and is experienced by the viewer (Ruskin (1903), Pallasmaa (2010) and Bachelard (2010));*
   - *has the power to create a link between human consciousness (the world of spirit) and the physical world (matter), as it embodies those two essences in the work of art (Pallasmaa (2010) and Bachelard (2010)).*

10. ***Expression is what describes the creative process, and the means by which art communicates and possesses significance.***

11. *Art expresses, through intuition and imagination both cognitive (ideas and thoughts), and emotional (emotions and feelings) substances and in this duality, lies art's significance.*

4.2. EXPERIENCE

Once the creation of significance has been understood, it is now of the essence to determine what occurs in the experience of significance. From both the artist (as a rational and emotional observer of his own work) and from the viewer.

There are multiple authors that contribute to the understanding of the significant aesthetic experience. Firstly John Dewey (1859 – 1952) , with his views on art as experience and as a concentration of meanings and significances that are communicated to the viewer or observer; secondly, Immanuel Kant (1724 -1804), defines and explains what exactly occurs in the aesthetic experience, defining aesthetic judgment as emotional and cognitive connections; thirdly, Nelson Goodman (1906 - 1998), and lastly, Umberto Eco's views on the open work, that explain exactly how the occurrence of significance emerges in the aesthetic experience *(see Glossary)*. All these theories will define the experience of significance in art.

It is important to accentuate the notion of emotion (mentioned below various times) will be further developed in the following chapter; at this point, it is only of the essence to understand what occurs in the experience of significance within an artistic encounter. Another point that is of vital essence to refer to, is that just like the creative process, the experience of significance, is deeply rooted in social conditions and in culture; however, bellow, theories will be presented that describe a link that is universal rather than particular to cultures.

Why is the aesthetic experience important?

… by John Dewey: Art is experience and a concentration of meanings

John Dewey (1859 – 1952), published his ideas about aesthetics and about the aesthetic experience in his book *'Art as Experience'* (1934), where he describes the understanding of art as experience. For him it was the aesthetic experience, that allowed for the understanding of meanings and significances, that could qualify and define art. Dewey, writes the aesthetic experience represents the fullest type of experience that can be lived; thus, it is in the aesthetic experience that the philosopher can understand what experience is.

Authors Hofstadter and Kuhns (1976) claim: '' It is this conception of experience in its integrity that for Dewey is the great subject matter for aesthetics as he interprets it.'' (Hofstadter and Kuhns, 1976, p. 578). Dewey states that all art is experience: a dynamic, self-forming interaction between man and reality. It is the aesthetic experience in it's complexity, that allows man to understand and uncover multiple meanings and significances about his own existence, that otherwise could not have been perceived or understood, for they are week in every other field of life, except in art. Through the aesthetic experience, '' (…) the individual reaches a consummatory conclusion which is the building up of the total meaning of that experience in terms of immanent, i.e., qualitative, meaning.'' (Hofstadter and Kuhns, 1976, p. 579). Art then, according to Dewey, is all about the aesthetic experience and what it can generate

within the viewer: a concentration of meanings that can never occur in any other field of life, and that communicate specific significances to the viewer.

> ***Synthesis:*** *For Dewey (1976) all art is experience at it's most highest sense: a dynamic, self-forming interaction between man and reality. The aesthetic experience represents the fullest type of experience that can be lived for it allows man to understand and uncover multiple meanings and significances about his own existence. Art is all about the aesthetic experience that communicates the concentration of meanings and of significances to the viewer.*

4.2.1. THE AESTHETIC EXPERIENCE

What is the Aesthetic Experience comprised of?

… prior to Kant

The aesthetic rules from the ancient Greeks and the Romans to the Renaissance treatises, approached the experience of the arts in a specific way. Firstly in ancient tradition, they sustained that the creation communicated values and principles to the observer and to the person experiencing the works of architecture for example, in ways that were both direct and subtle; therefore, the whole creation needed to be an echo of ideals in order to elevate human understanding into a higher realm (analyzed in the following chapter as Beauty). These ideas gained a new light in the Renaissance, however with the same core foundation: artistic creation needed to echo an ideal of perfection in order to create an experience that portrayed an ideal world. It was in the eighteenth century in France, (as previously seen) that the traditional rules were questioned and put in doubt, opening a new discourse in European culture that expanded all the way into modernity and still continues to expand today.

For the purposes of the present thesis, and the understanding of the experience of significance, only some ideas regarded to the aesthetic experience and judgment are here accentuated.

… by Kant: the Aesthetic judgment and Art

Immanuel Kant's (1724-1804) views on the aesthetic experience greatly contribute to the overall thesis and the understanding of what it is to develop a significant encounter with a work of art, how and why it occurs.

> **Contextualization:** In Kant's views, the aesthetic experience is comprised of one thing, which is the aesthetic judgment; and this aesthetic judgment, is equivalent to other forms of knowledge. Albert Hofstadter and Richard Kuhns (1976), on this regard, explain that Kant's great contribution to aesthetics was precisely in going beyond an empirical analysis of art and identifying aesthetics as an equal domain to the other main fields of human knowledge: '' (…) to the identification of the aesthetics as a domain of human experience equal in dignity to the theoretical and practical (i.e. the cognitive and the moral).'' (Hofstadter and Kuhns, 1976, p. 278). Kant's ideas on aesthetics, brought forth in his *Critique of Judgment*, published in 1790, clarifies multiple issues on judgment, however, for the purpose of this investigation, only Kant's '*Critique of Aesthetic Judgment'* will be analysed, where Kant establishes an analysis of the aesthetic experience and judgment.

Kant concludes that what characterizes the experience is a set of *'a priori'* principles analysed by each critique[169]; to art corresponds the principle of purposiveness, the faculty of judgment and the cognition of pleasure or pain (he did not include architecture in this general understanding of art). The faculty of Judgment is characterized by 'reflecting', a finding of the universal within the particular[170]. As such, aesthetic judgment is characterized by this 'reflective judgment' from which results the feeling of pleasure or displeasure; this 'feeling' is what defines the aesthetic judgment and these can be of three kinds: agreeable, beautiful and sublime[171].

From Ginsborg's (2014) synthesis, it is possible to summarize judgments of beauty, and their four individual moments that characterize them, as follows: they are based on particular feelings of a disinterested pleasure (what distinguishes them from other judgments that are led by, for example, 'objective sensations' and define judgments of something that is pleasing); they possess a "universal validity" (that is not based on concepts, distinguishing them from other types of judgments); they do not presuppose an end or purpose (the object does not strive to satisfy something); they involve reference to the idea of necessity (it is "exemplary," in that one's judgment serves as an example). In brief, judgments of beauty are based on feelings, do not rely on concepts, cannot be proved, they do not create a desire in the viewer, and they make a general (universal) claim. These judgments of beauty can be made to both the natural world and the artistic world, however only the latter define the aesthetic experience.

Of reference are also Kant's judgments of the sublime, a different category than the judgments of beauty, however similar in character. In this case there are two types of sublime, the mathematically sublime and the dynamically sublime. Despite this, both cases imply a feeling of superiority of our reason over nature. This feeling involves both pleasure and displeasure from the awareness of the inadequacy of our capacities (either of imagination, in the mathematical case, or of physical limitations in the dynamical case). The judgments of the sublime are similar to the judgments of beauty, implying the universal validity of the judgment, and the basis on feeling.

Ginsborg (2014) claims that it is Kant's 'insistence' that there is both feeling and a universal validity that most defines the importance of his aesthetic theory[172]. Mirroring this same consideration, is author Mark Gage (2011), claiming that this fact, the subjective part relating to feeling and the universality part relating to the work itself, defines a 'subjective universality', that establishes a union between Platonic universality with Aristotelian subjective pleasure, and defines the core of Kant's contributions to aesthetics.

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[169] The three great domains of philosophy identified as nature, freedom and art, were each governed by their own set of those principles: '' (…) to nature belongs the principle of conformity to law, to freedom the principle of final purpose, and the art the principle of purposiveness.'' (Hofstadter and Kuhns, 1976, p. 278). To these, the authors continue, correspond a cognitive faculty: understanding, reason and judgment, and to faculties of the mind itself: cognition, desire and pleasure or pain. As such, each critique analyses these sets of *a priori* principles.

[170] Reference to: '' Judgment in the *Critique of Judgment* is described as having two roles or aspects, "determining" [*bestimmend*] and "reflecting" [*reflektierend*] (Introduction IV, 5:179 and FI V, 20:211).'' (Ginsborg, 2014). However the more distinctive role is that of reflecting, of finding the universal within the particular; thus a sort of 'reflective judgment' is understood as just 'judgment'. Reflective judgment is responsible for aesthetic judgments (judgments about the beautiful and the sublime). The feeling of pleasure in a beautiful object is felt in virtue of an exercise of reflective judgment.

[171] Ginsborg (2014) explains: '' An aesthetic judgment, in Kant's usage, is a judgment which is based on feeling, and in particular on the feeling of pleasure or displeasure. According to Kant's official view there are three kinds of aesthetic judgment: judgments of the agreeable, judgments of beauty (or, equivalently, judgments of taste), and judgments of the sublime.'' (Ginsborg, 2014).

[172] '' Kant's insistence that there is an alternative to these two views, one on which judgments of beauty are both based on feeling and make a claim to universal validity, is probably the most distinctive aspect of his aesthetic theory.'' (Ginsborg, 2014).

Kant goes on to demonstrate how these two combine, which is as follows: '' (…) pleasure in the beautiful depends on the "free play" or "free harmony" of the faculties of imagination and understanding. (Ginsborg, 2014). As such, not only is there a correlation between both the faculties of emotions and reason (feeling and universal), but also, they act together in a 'free play' or harmony.

Two further clarifications are in order in regards to aesthetic judgments. Kant's contribution in the concept of 'disinterestedness' that always accompanies it, where all acts of aesthetic judgment are 'disinterested' in nature, meaning that they are appreciations that do not have a motive force (below is a further summary of this idea). And the fact that the judgments are not necessarily moral but they contribute to the account of moral feeling, playing a role in grounding morality for human beings[173].

In regards to Kant's aesthetics, Scrutton (2009) claims that although Kant's theories are highly controversial, there is one thing which is surely right: '' (…) which is that the experience of beauty, like the judgment in which it issues, is the prerogative of rational beings.'' (Scruton, 2009, p. 33).

> **'Disinterestedness' a condition of aesthetic judgment:** Kant, Scrutton (2009) states, built an aesthetic theory around this principle of disinterested attitude. However, Shaftesbury (a pupil of Locke) with the work *Characteristics* (1711) *(see Glossary)* prior to Kant explained the judgment of beauty by the 'disinterested' attitude of the judge, which means that in order for one to be interested in beauty, one must set all other interests aside and focus exclusively on the thing itself. One sign of this type of attitude, Scrutton underlines is that no other object would satisfy, the focus of the attention, the beauty, is unique and intrinsic to that and only that object. The 'disinterested' attitude in the judgment of beauty defined by Kant, can be summarized by Scrutton as set out: '' (…) I am purely disinterested, abstracting from practical considerations and attending to the object before me with all desires, interests and goals suspended.'' (Scruton, 2009, p. 29). However, Scrutton emphasizes that because from beauty derives pleasure, there needs to be a clarification on the types of pleasure that exist and our connection in terms of interest to them: there is pleasure that is derived from something (like drinking or other addictions) which is interested in the outcome, and there is pleasure that is found in something, which is the aesthetic pleasure, a disinterested pleasure. Scrutton continues explaining that the 'disinterested pleasure' of beauty and art has a specific 'intentionality' ('' (…) is focused on its object and dependent on thought: it has a specific 'intentionality'.'' (Scruton, 2009, p. 30)), for it belongs to the cognitive life, associated to the intellect, to cognitive and emotional powers[174] and is 'contemplative' '' (…) feeding upon the presented form of its object, and constantly renewing itself from that source.'' (Scruton, 2009, p. 31).

From Kant's views on the aesthetic experience and the judgments of beauty, defined in his *Critique of Judgment* (1790), (summarized and analysed in Chapter 4, the aesthetic experience) Kant elaborates an understanding of what art is. He considers there is a universal factor that is communicated through art. This is explained by author Mark Gage (2011) and Albert Hofstadter and Richard Kuhns (1976) when they explain that for Kant, since the judgment of beauty is universal to all men, its ground must too, be identical to all men: which is the 'form'[175] of art (not the sensations, those are subjective). He alleges that 'form' has a deeper meaning: the artistic objects gains/maintains a universal consideration at various levels through its form. To outline his principle ideas: there is a universality to art that is communicated through form and understood through judgments of beauty.

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[173] Ginsborg (2014) ''Kant's view that judgments of beauty manifest the exercise of a more general faculty of judgment have inspired a number of philosophers to view aesthetic judgment as a model for judgment generally in both the cognitive and the practical domain.'' (Ginsborg, 2014).

[174] '' They are fully integrated into the life of the mind. They can be neutralized by argument and amplified by attention. They do not arise, as the pleasures of eating and drinking arise, from pleasurable sensations, but play a vital part in the exercise of our cognitive and emotional powers.'' (Scruton, 2009, p. 31).

[175] Further: '' (…) the only thing in experience which can be supposed to be the same for all men is the form and not the sensations of representations. With this position we first encounter modern formalism.'' (Hofstadter and Kuhns, 1976, pp. 278, 279).

In regards to the nature of art, according to Kant, the artist has to fulfil two purposes: that of satisfying the requirements of each art form and satisfying taste, being beautiful. In order to do so the artist cannot create a beautiful thing by applying or following rules, although rules still need to exist within the creation process. The artist creates through 'genius' (as defined previously). Like so, for a work to be beautiful firstly it resembles, or is like, nature and secondly it is guided by 'genius' (a 'disposition through which nature gives the rule of art'[176]).

Also needed is an analysis on the connection between nature, beauty and art. Firstly, for Kant, fine art must appear to us like nature: free and unstudied. As such, the artist is guided in his 'aesthetic idea' by means of an intuition that sustains genius, and this 'idea' is as beautiful inasmuch as it resembles or recreates the ideas that sustain nature. Kant claims: '' All intuitions which we supply to concepts a priori are therefore either schemata or symbols, of which the former contain direct, the latter indirect, presentations of the concept. The former do this demonstratively, the latter by means of an analogy, (…).'' (Hofstadter and Kuhns, 1976, p. 340). Therefore, art as a symbol, recreates nature, by intuition, through it's 'aesthetic idea', in terms of an analogy; art should 'imitate' nature: repeating the capabilities of nature in relation to men and stimulating the mind in the execution of moral ideas; therefore, both art and nature are in equality[177].

Another point of interest is Kant's idea that beauty is an 'expression' of aesthetic ideas, which are a counterpart to rational ideas (representations that exist through experience or through imagination). Ginsborg (2014) explains: '' A work of art expresses or exhibits an aesthetic idea in so far as it succeeds in giving sensible form to a rational idea.'' (Ginsborg, 2014). This point is of the utter value, because here, beauty becomes, not only, an expression of nature and of genius, but also, it contains it's counterpart in reason.

Author Freeland (2002) presents a summary of Kant's contributions and their influence on modern art that is of value. She explains that Kant 'shows' that the judgments in aesthetics derived from the features of the artwork itself, and that **this judgment was a complex interplay between mental faculties such as imagination, perception, intellect or judgment**. Kant also explained that something **beautiful has 'purposiveness without purpose'**, '' We label an object beautiful because it promotes an internal harmony or 'free play' of our mental faculties; we call something 'beautiful' when it elicits this pleasure.'' (Freeland, 2002, p. 12), as such, **our response has to be disinterested**, independent of its purpose and the sensations that it brings. The author condensates it all: '' In summary, for Kant, the aesthetic is experienced when a sensuous object stimulates our emotions, intellect and imagination.'' (Freeland, 2002, p. 14), and these faculties are activated in a 'free-play', in a cool and detached way. Therefore, the objects design and form is of the utmost importance for the creation of a 'purposiveness without a purpose'.

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[176] They explain: '' Beautiful art is made possible only through genius, which Kant defines as the ''innate mental disposition through which nature gives the rule of art'' (section 46). '' (Hofstadter and Kuhns, 1976, p. 279).

[177] The genius creates in the imagination of the artist an 'aesthetic idea' (which is understood as '' (…) a representation of the imagination that arouses much though but cannot be encompassed by any body of concepts.'' (Hofstadter and Kuhns, 1976, p. 279)), and the artist creates an outward expression of it. This outward expression, a form (a reflexion of the aesthetic idea that exists in the artist's mind) is the object upon which judgments of taste will be applied; it is a symbol of the good, for there is a link between the feelings of the beautiful and that of goodness: On this regard, Kant explains: '' Now I say the beautiful is a symbol of the morally good, and that it is only in this respect (…) that it gives pleasure with a claim for the agreement of everyone else.'' (Hofstadter and Kuhns, 1976, p. 341).

***Synthesis**: Kant considers the aesthetic experience as defined by the aesthetic judgment (a sort of reflecting that finds the universal within the particular), from which results a feeling of pleasure (or displeasure); this 'feeling' is what defines the aesthetic judgment and it can be: agreeable, beautiful or sublime. Multiple aspects are of the essence:*

- *feeling (in aesthetic judgment) **possesses a universal validity**, defining a kind of 'subjective universality' that establishes a union between Platonic universality with Aristotelian subjective pleasure;*
- *there is a **universality to art that is communicated through form and understood through judgments of beauty.***
  - *the **aesthetic is experienced** when a sensuous object stimulates our emotions, intellect and imagination, activated together in a 'free-play'*
- *judgments in aesthetics derive from the features of the artwork itself, and **this judgment is a complex interplay between mental faculties such as imagination, perception, intellect or judgment**.*
  - *something **beautiful has 'purposiveness without purpose'** and our response is disinterested.*
- *for a work to be beautiful firstly it resembles, or is like, nature and secondly it is guided by 'genius' (a 'disposition through which nature gives the rule of art'; beauty then, is an 'expression' of aesthetic ideas, which are a counterpart to rational ideas*
- *art a symbol, recreates nature, by intuition, through it's 'aesthetic idea', in terms of an analogy.*

Concluding, for Kant the aesthetic experience is not only of the greatest importance but it also allows us to understand the artistic object in a more complex way.

Besides being composed of judgments, what else defines the Aesthetic Experience?

… by Goodman: The Aesthetic Experience as an Engaging, active activity

The aesthetic experience is also described by Nelson Goodman, however in a different approach. For Goodman (1976), the aesthetic experience, defined in his book *Languages of Art* (1976), first published in 1968, is composed of symbol, emotion and cognition.

Traditionally, he explains, the aesthetic experience is understood as a passive act of contemplation, however that is not the case: it is a dynamic act that involves conceptualization from the viewer, engaging his past experiences and bridging links between both emotive and cognitive faculties. On this aspect, he writes: '' It involves making delicate discriminations and discerning subtle relationships, identifying symbol systems and characters within these systems and what these characters denote and exemplify, (…).'' (Goodman, 1976, p. 241). The aesthetic attitude, then, is not only active, but engaging (restless, that entails 'searching' and 'testing') and it is an 'action' (a constant 'creation' and 're-creation' from the observer). What distinguishes this activity from other intelligent activities such as perception or scientific inquiry, are these aspects: (1) the fact that it is directed to a non practical end other than itself, it is inquisitive and is disinterested (rather than the acquisitive and self-preservation nature of science for example); (2) it possesses a particular type of emotion, the aesthetic emotion (that satisfies, gives pleasure and involves cognitive acts) that is the result of that inquiry rather than being a by-product of inquiry as in science (previously analysed); and lastly (3) the aim of the aesthetic experience is satisfaction. The aesthetic experience then can further be defined in a three folded way: (1) it acts as a gymnasium 'workout' where art is a the vehicle that allows for strengthening out intellectual muscles, and thus, '' Art, (…) is acclaimed as a universal servant of mankind.'' (Goodman, 1976, p. 257); (2) there is a compulsive and playful nature of art and its experience that allows man to play as much as understand; (3)

it functions as a communication, 'the purpose of symbolizing', through which art conveys messages, feelings and thoughts[178]. Three functions of the aesthetic experience are thus established: as a mental gymnastics, as play and as conversation. One other thing classifies the aesthetic experience only, and that is '' (…) the drive is curiosity and that the aim is enlightenment.'' (Goodman, 1976, p. 258). The principle aim, then, is cognition… the others result from it. All symbolization, in art, then, is to be judged fundamentally by how well it serves the cognitive functions. As such, Goodman (1976) stats that all the problems surrounding aesthetics in regards to taste, pleasure, beauty and judgment, all dissolve to ashes, because none of them define nor measure the aesthetic experience or the work of art.

> ***Synthesis**: For Goodman (1976), the aesthetic experience is an active and dynamic act that involves conceptualization from the viewer, engaging his past experiences and bridging links between both emotive and cognitive faculties. The aesthetic experience then: is engaging, inquisitive and disinterested, it possesses a particular type of emotion, the aesthetic emotion, and it's aim is satisfaction. Three functions of the aesthetic experience are appropriately established: as a mental gymnastics, as play and as conversation. The aim of the aesthetic experience is enlightenment.*

…by Collingwood: the aesthetic experience as imagination and consciousness

Collingwood (1938) alleges that what we call the aesthetic experience, the enjoyment of art, occurs is a two part or two level 'communication' from the artwork to the viewer: a 'specialized sensuous experience' (seeing or hearing) and the 'imaginative experience'[179]. In this dual experience, is not only the sensuous elements that compose the work of art that matter (these are objective and define a first level of imagination) it is the imaginative experience that is derived from it (the subjective experience that awakens in the viewer). The aesthetic experience is formulated by the second one, where the viewer must: '' (…) use his imagination, and so proceed from the first part of the experience, which is given in sensation, to the second part, which is imaginatively constructed.'' (Collingwood, 1938, p. 149). However, Collingwood accentuates, the proper work of art creates and generates at the same level of imagination making what is presented and what is imagined coincide, so that the viewer experiences exactly what the artist experienced.

What establishes itself in the imaginative aesthetic experience is consciousness. Consciousness dominates both feeling and thinking, by converting impression 'impression into idea' or 'crude sensation into imagination'. Collingwood further explains that at this type of level of experience, consciousness and imagination are synonymous. As such, '' Imagination is thus the new form which feeling takes when transformed by the activity of consciousness. '' (Collingwood, 1938, p. 215). Consciousness converts feelings, sensations and impressions into ideas, and as such, it is type of thought in its most basic form[180]. But at the base of this development of consciousness and imagination, of this psychical experience, is both

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[178] Reference to: '' Man is a social animal, communication is a requisite for social intercourse, and symbols are media of communication. (…) Works of art are messages conveying facts, thoughts, and feelings. '' (Goodman, 1976, p. 257)

[179] In summary: '' This suggests that what we get out of a work of art is always divisible into two parts. (I) There is a specialized sensuous experience, an experience of seeing or hearing as the case may be. (2.) There is also a non-specialized imaginative experience, involving not only elements homogeneous, after their imaginary fashion, with those which make up the specialized sensuous experience, but others heterogeneous with them..'' (Collingwood, 1938, pp. 147, 148).

[180] Reference to: '' (…) they are not the crude feelings of purely psychical experience which I am now calling impressions, they are these feelings as modified by consciousness and so converted into ideas. Intellect in its secondary function apprehends relations between acts of primary intellection or between what in such acts we think. (…) Consciousness is the activity of thought without which we should have no terms between which intellect in its primary form could detect or construct relations. Thus consciousness is thought in its absolutely fundamental and original shape. '' '' (Collingwood, 1938, p. 216).

sensation and emotion, through the experience of feeling. As a result, '' Every feeling is both sensuous and emotional. (…)'' (Collingwood, 1938, p. 222), and '' To form an idea of a feeling is already to feel it in imagination.'' (Collingwood, 1938, p. 224). Consciousness thus, is a level of experience intermediate between the psychic (emotional) and the intellectual, and it is the activity that generates the artistic experience. As such, for the artistic experience to occur, there has to be a psychical, or sensuous-emotional, experience that is then transformed '' (…) from sense into imagination, or from impression into idea. (…) they are all converted into ideas and incorporated into an experience which as a whole, as generated and presided over by consciousness, is an imaginative experience.'' (Collingwood, 1938, p. 274).

> ***Synthesis:*** *Collingwood (1938) considers the aesthetic experience, occurs is two parts: a 'specialized sensuous experience' (seeing or hearing) and the 'imaginative experience' (where the significance of art exists). The viewer, in the aesthetic experience, engages in an imaginative experience. What establishes itself in the imaginative aesthetic experience is consciousness: it dominates both feeling and thinking, by converting impression 'impression into idea' or 'crude sensation into imagination'. Consciousness thus, is a level of experience intermediate between the psychic (emotional) and the intellectual, and it is the activity that generates the artistic experience.*

What other qualities define the Aesthetic Experience?

… by Pinchas Noy: A Psychological Theory of Art and Aesthetic Experience

Pinchas Noy (1968), in his article '*A Theory of Art and Aesthetic Experience'* assures that the significance and pleasure derived from the experience of the work of art is derived from a union of both content (what is the meaning) and technique (how it is expressed); this echoes Freud's ideas of the significance derived from the dream[181]. In the work of art (as in Freud's analysis of the dream), both aspects work together in creating a significant encounter. Art finds meaning, in the experience, through both form and content. Noy (1968) states that there is yet another aspect that is important in the experience of the artwork and that relates to the psychological value of art: the experience (and the creation) of art allows firstly for the defining of unconscious processes (understanding of self) and secondly for the mastering of chaos (a defensive activity). Thus, all art varies between those two polls: '' (…) indirect gratification of a variety of unconscious wishes being found at one pole and the component of mastery, control and defense at the other pole.'' (Noy, 1968, p. 628).

> **Art as a defensive activity:**
> This idea is defined by the English school of Melanie Klein, that focuses on 'artistic experience and activity'. For her, Noy explains: '' (…) artistic activity is particularly valuable as a defense against aggressive-sadistic drives and wishes.'' (Noy, 1968, p. 626). It is through the work of art that the artist tries to 'restore and recreate inner images' and master control over 'destructive forces'. This idea, Noy continues is also echoed by authors Tarachow and Rickman. As a summary of these views: '' The ego, in its plight with the destructive inner forces, clings

[181] He explains that psychoanalysis (specially Freud), has joined philosophy in trying to define and understand 'the secret of the 'artistic experience'. In his words: '' The artist, with his innate gift of penetrating into the realm of the unconscious and representing it in his work, has appealed to psychoanalytic thinking since its first days. '' (Noy, 1968, p. 623). Freud, Pinchas explains, in his analysis of dreams sustained that the meaning derived from the experience of pleasure of the dream was based on content (what is the meaning) and technique (how it is expressed). As such, this analysis can be applied to the work of art, in the same way; pleasure is derived from content and technique, the meaning and the means by which it is achieved: '' The pleasure derived from art is linked to two aspects: (1) pleasure derived from the artistic contents which gratify needs and wishes, satisfy defensive needs, or represent attempts at mastering and control, (2) pleasure derived from the mental function of perceiving, organizing and working-through artistic precepts.'' (Noy, 1968, p. 624).

defensively to order, harmony and beauty.'' (Noy, 1968, p. 626). Art here is not an expression of unconscious desires but instead a desire for triumph of life over death, of order over chaos. As such, this Kleinian school of thought, Noy clarifies, defines artistic pleasure as a feeling of victory that has overcome chaos and destructive forces by unity, order, truth, harmony and beauty. Noy continues explaining that there is a certain correspondence between these views of artistic experience and the views defined by the Gestalt psychologists. These 'schools' of thought define the conception of art as a 'defensive activity'. Noy describes that both theories are not necessarily contradictory, but instead, approach the problem through different perspectives.

Only High Art or Real Art can grant this level of satisfaction through it's experience: which occurs as a result of the creation of 'complex tensions'[182]. Low Art forms grant satisfaction of 'latent wishes' whereas high art, on the other hand generates a rich experience, that grants satisfaction at a deeper level: '' (…) an experience of purity, beauty, goodness, an exaltation of the mind, a rising above 'the sensations of this world'.'' (Noy, 1968, p. 629). The nature of these satisfactions or the structural rules that define the work of art are multiple: an ambiguous comprehension (that allows for multiple interpretations), complex multi-leveled structures (that allow for deep levels to keep occurring), and the comprehension of 'unconscious life'. However, he concludes: '' The value of any work of art does not depend exclusively on either the specific meaning embedded in it or on its formal structure. It depends on the specific meaning presented in a specific structural vessel.'' (Noy, 1968, p. 643)

The nature of artistic satisfaction: 'The Means of Art', or as Noy details it: 'What structural rules govern the formal organization of works of art? What is the nature of satisfaction attained in perceiving these structures?' (Noy, 1968, p. 630). To answer the first question, Noy assumes: ''All authors share the analogy of art to dream and joke, the assumption being that works of art are multilevel structures in which the surface levels are organized according to the model of secondary processes and the deep levels according to the model of primary processes.'' (Noy, 1968, p. 630). In regards to the second question, Noy states that Kris's theories are most valid; Kris defines ambiguity as the main aspect of the work of art: '' (…) he assumes that ambiguity is the factor that accounts for the greatness of a work of art and makes it eternal.'' (Noy, 1968, p. 630); it is a high level of ambiguity that allows for multiple interpretations and a perpetuation of the work of art through cultures. According to Noy, another author of relevance is A. Ehrenzweig, with his theories and studies of artistic perception; he considers the works of art as a 'bi-levelled structures': '' he determines that the surface level is organized according to **gestalt principles** *(see Glossary),* whereas the deeper level has an "inarticulate," "gestalt-free" form that reflects symbolically unconscious contents, too dangerous and even prohibited to express directly.'' (Noy, 1968, p. 631). As such, there are two modes of perception: a surface perception and a deeper perception, or 'unconscious depth perception'.

Synthesis: *Pinchas Noy* (1968) *states that the experience of the work of art is derived from a union of both content (what is the meaning) and technique (how it is expressed). The experience of the artwork relates to the psychological value of art: allows firstly for the defining of unconscious processes (understanding of self) and secondly for the mastering of chaos (a defensive activity); both forms imply a high level of satisfaction. Only High art can grant this high level of satisfaction at a deeper level through it's rich experience: which occurs as a result of the creation of 'complex tensions', whereas low art forms merely creates satisfaction of 'latent wishes'.*

… by Joyce Carey and Scrutton: The aesthetic experience as an imaginative experience

Joyce Carey (1984) writes that the aesthetic experience is a complex experience that happens at multiple levels and engages multiple faculties, and involves an active participation from the viewer, and

[182] Where as popular forms of art can be defined by their 'repetitiveness and by minimal accumulation of tension', for Noy, Mature or High Art can be defined by the creation of richness, variations and complex tensions: '' Mature art is distinguished by its richness in variations (as against simple repetitive-ness), by the playful transformations, concealment and re-emergence in turn of the theme of gratification, and, moreover, by the tendency to delay the discharge of tension, whether by continuous accumulation or by subtle and partial discharge.'' (Noy, 1968, p. 629).

although it may seem that it is a passive activity, the viewer is engaged at 'three or four different levels'. The first level being that the subconscious is 'creating or reconstructing symbols' that define and compose the emotional content of the work; the second level is where his 'reflective judgment' is articulating what is being observed, creating connections and understanding flaws. It is a highly complex process that uses 'creative imagination', 'critical taste', and 'knowledge' of all kinds. It is this conceptual knowledge that enriches the aesthetic experience[183]. Scruton (1979), draws attention to the same ideas in regards to the architectural aesthetic experience. Scruton (1979) claims the experience of architecture is equally complex, because it needs '' (…) the active participation of the observer is required for its completion.'' (Scruton, 1979, p. 94). The experience of architecture is multiple and open for many interpretation and the user perceives with a kind of 'imaginative ordering of experience', beyond 'literal significances' of common perceptions. This 'imaginative experience', is firstly perceived from visual pattern and form (but it also involves all the other senses), creates a unity, borrowed from the object itself: '' Imaginative experience borrows its unity from the unity attributed to its object.'' (Scruton, 1979, p. 102).

… by Pallasmaa: the complete experience as permeating consciousness

Pallasmaa (1996), conveys the view that the experience of art or architecture, is a 'private dialogue' between the viewer and the art itself, that 'excludes' other relations and exchanges; this private dialogue and sense of 'alone' is deeply important in the artistic experience[184]. But it is also represented by another aspect; he reiterates that a memorable experience of art and architecture is when 'space', matter and time, fuse into 'one single dimension', thus permeating consciousness. In the process, he explains: '' We identify ourselves with this space, this place, this moment, and these dimensions become ingredients of our very own existence.'' (Pallasmaa, 1996, p.50). He also accentuates that in the experience of the artistic object occurs a sense of 'projection' and 'identification' from the viewer that communicates at a first level, as emotion: the artistic image 'touches' the sensory existential field, causing an impact on the bodily being, before it reaches the 'mind' and thus, a work of art can communicate and have a deep emotional impact, and still remain a mystery 'intellectually'. With every artistic experience, then, the 'viewer' projects both emotional content and mental significance; and in order for the emotional content to be understood there has to occur an identification with the object and a projection from the viewer, establishing a deep connection between object and subject.

…By Jorge Cruz Pinto: Appearance, Latency and Emergency

Jorge Cruz Pinto (2001) in his article '*A caixa, o espaço-limite, e a ideia de caixa nos momentos da arquitectura portuguesa*' explains that there are three independent and intertwining concepts or categories which emerge both in the creative process and in the understanding of an artistic object through experience. These are: Appearance, Latency and Emergency. Appearance refers to that which something appears to be, equivalent to the effects of the skin (decorative, stylistic and superficial like colour or texture). Latency corresponds to the

183 '' In this highly complex process, not only the creative imagination, the sympathies, the critical taste, are brought into play, but also knowledge of all kinds, of fact as well as art, of actuality as well as books. Conceptual knowledge, even when it has not sunk into the subconscious, is valuable to the reader as to all other creative artists; it enables him actually to compose for himself a richer expression, a deeper, more complex experience.'' (Cary, 1984, p. 143)

184 Furthermore: '' 'Art is memory's mise-en-scène', and 'Art is made by the alone for the alone', as Cyrille Connolly writes in The Unquiet Grave. Significantly these are sentences underlined by Luis Barragan in his copy of the book.'' (Pallasmaa, 1996, p.37) .

metaphysical essence, to the pre-form, and to the noetic depth, '' (…) corresponding to the interior space of the body which are invisible (the vital breath, the soul), (…)'' (Pinto, 2001, p. 30)[185]. The third aspect, emergency, corresponds to the bones, as that which goes beyond the physical aspects and manifests itself as an aura of presence; '' (…) it intercalates with the surroundings and with the perception at a generally unconscious level, (…)'' (Pinto, 2001, p. 30)[186] and corresponds to the perceptive truth (constitutional materiality, constructive and technical aspects). Between these three layers different synergies are established which regulate the physical, mental and spiritual cohesion. In this way, Pinto (2001) accentuates the fact that there are always aspects of the work which remain hidden, latent, and that connect to the unconscious level. This serves as an introduction of the properties of the experience which follows (the open work).

> ***Synthesis:*** *Joyce Carey (1984) argues that the aesthetic experience is a complex experience that involves multiple faculties, that engages the viewer in an active participation: reconstruction of symbols, reflective judgment and through creative imagination. Likewise, Roger Scrutton (1979) also sees the aesthetic experience of architecture as a complex experience that demands that the viewer uses his imaginative faculties in order to comprehend the multiple significances as interpretation. Lastly, Pallasmaa (2010) argues that the artistic experience is connected to both the emotional and cognitive fields; however, it is the emotional connections (projection and identification) that sustain and qualify the experience at a primary level. Also, that the aesthetic experience is a private dialogue that reveals the intensities of the world and permeates consciousness.*

4.2.2. PRINCIPLES AND CONDITIONS OF THE AESTHETIC EXPERIENCE

4.2.2.1. THE OPEN WORK

… by Umberto Eco: The Open Work as a condition for the aesthetic experience

Another great contribution to the understanding of the aesthetic experience, is Umberto Eco's (1962) theories on the 'openness' condition/principle that needs to exist within the work the art, in order for a significant and meaningful encounter to occur.

Umberto Eco (1932 – 2016), prior to the publications of his semiotic work, published the book '*The Open Work*' or '*Opera Aperta'*, in 1962, in which he addresses modern literature and art in a new way. The book elaborates an art and aesthetic theory that follows the views of Eco's mentor at the University of Turin, Luigi Pareyson, reflecting Eco's idealistic philosophy, and aiming to assert the role of 'poetics' rather than an exclusive approach to aesthetics (as in the case of Croce)[187]. David Robey (1989) in his introduction to the book, entitled '*The poetics of the open work'* writes that '*The Open Work*' theory is sill significant today because of the enduring concept of 'openness' and because it anticipated two major themes from the sixties onwards in art, the emphasis on the role of the reader and the plurality or

[185] Free translation from: '' (…) corresponde ao espaço interior invisível do corpo (o alento vital, alma) (…). '' (Pinto, 2001, p. 31).

[186] Free translation from: '' (…) intercala com a envolvente e com a percepção a um nível geralmente inconsciente (…). '' (Pinto, 2001, p. 31).

[187] According to Robey (1989) overall the book is more concerned with questions of 'poetics' rather than 'aesthetics': '' Eco argues that questions of poetics are central to the discussion of all modern works of art, although their treatment needs to be complemented by acts of aesthetic judgment (in connection with which he once again invokes Pareyson's theory of formativity).'' (Eco, 1989, p. xiv). The persistence of poetics in Eco's work emerges against the dominance of 'aesthetic criticism' inspired by Croce.

polysemy in art. Umberto Eco's theories developed in the book can be summarized in two distinct 'categories' that compliment each other and contribute to the aesthetic understanding of meaning in the work of art: firstly the definition of the condition of art entitled 'the open work' and secondly the understanding of the concept of 'poetry'. One cannot exist without the other, they are inseparable, however for a clarification purpose they are presented individually, each in their own analysis (the 'open work' is presented below, and the property of 'poetry' is presented in part 5).

In order to understand this condition or property of 'openness' of the artwork, Umberto Eco (1989) begins '*Opera Aperta'* or '*The Open Work*', by showing that that new pieces of instrumental music have been marked by an autonomy left to the individual performer. Eco considers this difference can be formulated and understood as a difference in 'creation': where as classical interpretations followed the instructions defined by the composer, contemporary creations reject definite approaches and so '' (…) offer themselves not as finite works which prescribe specific repetition along given structural coordinates but as 'open' works, which are brought to their conclusion by the performer at the same time as he experiences them on an aesthetic plane.'' (Eco, 1989, p. 3). Thus, Umberto Eco defines this new type of art as 'The Open Work', a condition that is transversal to all types of art and characterizes contemporary art.

Eco interprets 'open work' as a specific quality that differs from the traditional use of the word. In aesthetic theory, a works 'openness' or 'completeness' refers to the multiple interpretations that can be derived from a work of art by the viewer but in a closed way[188]. However, the property that Eco is describing, is more tangible, for '' (…) we can say that they are quite literally 'unfinished'.'' (Eco, 1989, p. 4). The creator of the work seems to hand the artwork over as an unfinished work, and the viewer, observer or listener thus creates his own 'ending'. Contemporary creators, continues Eco, instead of submitting to the 'openness' of interpretation, they incorporate that openness into the production of the work, '' (…) recasting the work so as to expose it to the maximum possible "opening.".'' (Eco, 1989, p. 5).

> **'Closeness' vs. 'Openness' in the work of art: Examples:** The theory highlights a radical difference between on the one hand traditional or classical art, that is unambiguous, directs a specific response and a one sided interpretation and on the other, modern art, that is characterized by its systematical ambiguity, connected to formal innovation, allowing for a great variety of different meanings to co-exist and thus demanding a deeper involvement from the public. The force of the subjective element of the interpretation of the work of art, Eco explains, was already noticed by classical writers; an example of this is Vitruvius, when he makes the distinction between 'symmetry' and 'eurhythmy', adjusting the perspective of the building in order to present itself to the observer in the correct way and even the development of the perspective technique in itself. However, these examples, although acknowledging the 'openness' of interpretation, they try to correct it in order to create a perfectly 'closed' work of art, adjusting it in order to ascertain only way of viewing the work. In Eco's words, there is a favoring of a ''closing out''[189]. One significant example, Eco continues, that acts as a sort of breakthrough with the conventions of the past and begins a new degree of 'openness' is the Baroque art and architecture, where '' (…) we can find one striking aspect of "openness" in the "open form". '' (Eco, 1989, p. 7). Baroque form

[188] In the traditional use of the word the work of art is presented by its creator as a closed entity, and its interpretations (multiple according to the viewers experience and background) allow for '' (…) different resonances and echoes without impairing its original essence.'' (Eco, 1989, p. 3). He summarizes: '' A work of art, therefore, is a closed piece and closed form in its uniqueness as a balanced organic whole. (…) Hence, every reception of a work of art is both an interpretation and a performance of it, because in every reception the work takes on a fresh perspective for itself.'' (Eco, 1989, p. 4).

[189] Expression used on page 5: '' Yet it is equally certain that this awareness has led to a tendency to operate against the "openness" of the work, to favor its "closing out." .'' (Eco, 1989, p. 5).

> aimed to be dynamic, with an indeterminacy effect, conveying the idea of space opening up, in a kind of kinetic excitement filled with illusory effects, making the observer shift in position constantly and allowing him to view the work in constant transformation. Eco continues: '' Now if Baroque spirituality is to be seen as the first clear manifestation of modern culture and sensitivity, it is because here, for the first time, man opts out of the canon of authorized responses and finds that he is faced (both in art and in science) by a world in a fluid state which requires corresponding creativity on his part.'' (Eco, 1989, p. 7). Despite the 'openness' quality of the work, these systems have been codified in aesthetic canons and serves only as an example of a type of openness rather than a theory of the ''open work''. Other literary and artistic movement contribute to the understanding of the ''open work'' such as the idea of 'pure poetry' defined by the tradition of **English empiricism** *(see Glossary)* defending the freedom of the poet, or some of the late-nineteenth-century Symbolic texts. The work of James Joyce on the poetics also is an example of the 'open work', because as Eco puts forward, it '' (…) deliberately seeks to offer an image of the ontological and existential situation of the contemporary world.'' (Eco, 1989, p. 10).

What exists in the differences between the 'closed' and the 'open' work of art, Eco indicates is: '' (…) a different vision of the world, which lies under these different aesthetic experiences. '' (Eco, 1989, p. 7). Within them is a search for 'suggestiveness', a deliberate choice to 'open' the work up, as a 'communicative channel' of the indefinite, allowing for multiple responses to occur. It is a sense of the 'unlimited' and the different sub-meanings, that allows for the work to be 'open' to new configurations and probabilities of interpretations. On this issue, author Robey (1989) further suggests that since traditional art followed conventions (rules of creation that followed specific limits), meanings that emerged were also conventional, and thus conventional views of the world were brought forth; traditional art is a closed system with a closed and limiting system of information and with one univocal meaning; whereas in modern art, unconventional means (no rules of expression), allow for unconventional meanings and new views of the world. This new type of art, characterized by the 'open work', modern art, aims to establish, by Eco's words: '' (…) ''a new way of seeing, feeling, understanding, and accepting a universe in which traditional relationships have been shattered and new possibilities of relationship are being laboriously sketched out''. '' (Eco, 1989, p. xv).

These new conditions or principles that sustain and detail the 'open work', thus, find their grounding in the conditions of the world. According to Umberto Eco, the principle of ambiguity[190] of the 'open work' finds its base as a moral disposition and a problematic construct that characterizes the world (associated to the ambiguity of science, knowledge and reason) and characterizes a new type of understanding of the world, just as past art expressions expressed the scientific views of their times[191]. It finds evidence in the perceptive ambiguities of Edmund Husserl's and the works of Merleau-Ponty *(see Glossary),* with his phenomenology theories characterized by an ambiguousness of our perceptions, and can also be associated to the dynamic theories of quantum physics and to the vastness and uncertainty of Einstein's metaphysics. All of these forms of study and knowledge, explains Eco: '' (…) proposes to the

[190] Ambiguity, Robey (1989) explains, for Eco, can be described as '' (…) the product of the contravention of established conventions of expression: the less conventional forms of expression are, the more scope they allow for interpretation and therefore the more ambiguous they can be said to be.'' (Eco, 1989, p. xi).

[191] Umberto Eco claims: '' In every century, the way that artistic forms are structured reflects the way in which science or contemporary culture views reality. The closed, single conception in a work by a medieval artist reflected the conception of the cosmos as a hierarchy of fixed, pre- ordained orders.'' (Eco, 1989, p. 13). The Baroque marks, with its openness and dynamic creations, a new scientific awareness: the subjective comes into play through vision, reflecting the interest in impression and sensation. With Symbolism, the same holds true; it reflects a cultural and artistic striving to unfold new ways of perceiving and understanding the world. In the same way, it is possible, continues Eco, to through the 'open' work and the 'work in movement' understand a new type of contemporary scientific thought; for Eco, these are associated with the indeterminacy of science, of knowledge and of reason. He claims: '' Perhaps we are in a position to state that for these works of art an incomplete knowledge of the system is in fact an essential feature in its formulation.'' (Eco, 1989, p. 15).

artist, as well as to the philosopher and the psychologist, a series of declarations which are bound to act as a stimulus to his creative activity in the world of form. '' (Eco, 1989, p. 17).

What exactly is an 'open work'?

The openness of the work of art is the condition for the aesthetic pleasure it generates. He writes: '' If, as I have shown, the openness of a work of art is the very condition of aesthetic pleasure, then each form whose aesthetic value is capable of producing such pleasure is, by definition, open (…).'' (Eco, 1989, p. 39). However, it is not an aesthetic value, says Eco.

Successful artistic forms, incorporate the openness into the form, allowing for a plural communication. These two act as an in-dissociable component: aesthetics and 'openness'. Another point described by Eco: the fact that in 'open works', the degree of openness is composed of a high degree of information[192]. This tendency toward openness, continues Eco, operates at the level of indefinite suggestion and at the stimulation of multiple emotional responses, however it is not limited to these two characteristics. The open work possesses an ambiguous entity, the possibility of drama through form and content and the possibility of half-perceived infinitudes or of mysteries. The open work is further characterized by a 'structural vitality' that sustains the 'openness' and the 'dynamism' of the work. And lastly, it defines an endless cycle of interpretation, (a 'crisis' and 'expectation' cycle), where the viewer reaches a conclusion, finds a meaning, and then the cycle begins all over again in a continuous type of 'incomplete experience'. He continues explaining that a cycle is defined in the observation/living of the open work of art, one where the viewer/listener follows a system of 'stimulus-crisis-expectation-satisfaction- reestablishment of an order' , and it is because it arrives at a conclusion that it acquires a meaning. Following these ideas as a syntheses of Leonard Meyer's work Emotion and Meaning in Music. Eco claims that Gestalt Theory satisfies the responses of how a work creates a crisis and an expectation. He explains that in Gestalt theory, '' The psychological dialectics of expectation and satisfaction is, in fact, determined by formal laws: laws of pregnancy, of the good curve, of proximity, of equality, and so on.'' (Eco, 1989, p. 75), running on a cycle of 'expectations-predictions'. Eco, thus claims that in order for a work of art to be an 'open work' it must satisfy the particularities of the discourse known as 'aesthetics' and it must satisfy the conditions of communication. In order to do so, it must incorporate the concepts of organic form (a 'controlled disorder' and an 'organic fusion of multiple elements') and artistic intention (or 'formative intention', as defined by Pareyson, that is manifest in the interpretive process). All these concepts are closely intertwined, and specifies 'qualifications' of the work, that allow for a distinction between good art and bad art as levels of openness. The openness of the work is as shown, also associated to its 'poetics', (a property that is described in part 5).

> **Examples and types of Open Works: Movement and Informal Art:** Eco writes that there is a specific form of 'openness', a category within the 'open work', entitled 'works in movement'. These possess an inherent form of mobility, constantly presenting themselves in renewed ways, changing in form. The 'work in movement' associates to the **Einsteinium universe** *(see Glossary).* An example is Alex Calder's *(see Glossary).* sculptures whose forms move with the air, continually creating new space and new connections. He also suggests that the 'informal' is a general characteristic of contemporary painting, and a type of open work. 'Informal art', it's formal stimuli and indeterminacy, allows for a wider range of interpretations and multiple

[192] Reference to: '' This kind of openness is therefore best defined as an increase in information. Such a definition, however, forces us to move our investigation onto a different level and to demonstrate the validity of information theory in the field of aesthetics.'' (Eco, 1989, p. 43)

readings; it is '' (…) a "constellation" of elements that lend themselves to all sorts of reciprocal relationships.'' (Eco, 1989, p. 84). The informal characterizes the poetics of the open work and aims to introduce 'movement' into painting. Examples of Open Works that Aim to Capture Movement in Art and Architecture History is **Tintoretto, the Impressionists, the Cubists, in sculpture Calder, and in architecture the Baroque** *(see Glossary for each example)*. Examples in the visual arts of open works that aimed to capture movement can be seen in the work of Tintoretto and the Impressionists where the movement is portrayed by an ambiguity and a vibrant quality, uniting forms by blurring outlines). Other ways of capturing mobility were defined by the cubists, the futurists, with the dislocation of forms. In sculpture another way of defining the 'open work' emerges with the works of Gabo or Lippold *(see Glossary),* where the form is constructed to appear ambiguous and to assume different shapes, allowing for the user to experience a metamorphosis as he walks around the form. This is similar, Eco continues, to Baroque architecture. The works of Calder still echo the 'open work' even more, for they create movement in themselves, with the forms that move in space, and portrays the best example of the 'work in movement'. Informal art associates itself to these examples for it creates movement within itself, yet, it is an open work in an even more mature way because the subject becomes the background in a continuous metamorphosis, and the viewer is forced to choose his own connections and meanings. Contemporary art, upholds both the values of beauty and the values of vitality, action, movement, and chance, '' (…) resting on the dialectics between the work itself and the "openness" of the "readings" it invites.'' (Eco, 1989, p. 100). Another example is the works of Jackson Pollock *(see Glossary)*, that uses disorder of signs, disintegration of outlines, allowing the viewer to create his own network of meanings

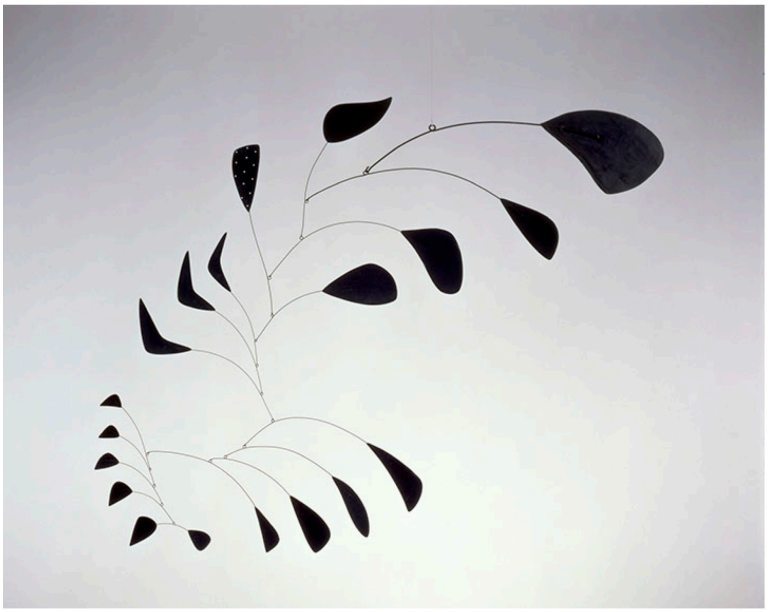
Another characteristic of the open work, continues Eco, is that of being a type of 'epistemological metaphor' of a 'widespread consciousness'[193] (properties present in informal art), bringing into question the principal of causality and the principle of contradiction. It is through these types of art, open art forms, that man can create a unified understanding of the world, formulate new understandings and integrate it within his sensibility. In order to do so it needs ambiguous, unpredictable, improbable and disordered structures – the means by which high degrees of information and meaning are conveyed. However, even in the midst of disorder, the eye needs direction and suggestions, a 'delicate balance' that allows order within the disorder, allowing for a freedom to emerge[194]. Through novelty, the work increases in that information and meaning. It is this that defines the value of art, and not so much its aesthetic connotations of the message.

This new art, an art of chance and vitality, depends on the same basic categories of communication, which is its 'informativeness' and its 'formativity'. As such, 'gesture' and 'sign' need to coexist in a perfect balance, based on the 'formative energy' of its creator, that allow for the 'original intentions' to emerge as information and meaning.

> ***Synthesis:*** *For Umberto Eco, aesthetic experience occurs because of one specific quality: the openness of the work of art. Whereas traditional art forms were unambiguous and direct a specific response, this new type of art that is characterized by its systematical ambiguity, allows for a great variety of different meanings and significances to co-exist, and demanding a deeper involvement from the viewer. As a synthesis, it is possible to summarize the 'open work' as such: firstly it invites the viewer to also make the work too, secondly it allows for multiple 'open' stimulus to occur because of it's ambiguous nature incorporated into the creation, thirdly following a poetics of necessity, allows for unlimited readings that adds vitality to the work of the art, in an endless cycle of 'crisis and expectation' that features an incomplete experience. It is a subjective quality that underlies creation.*

[193] Reference to: '' It's forms appear as the epistemological metaphors, the structural resolutions, of a widespread theoretical consciousness (not of a particular theory so much as of an acquired cultural viewpoint).'' (Eco, 1989, p. 87).

[194] Reference to: '' (…) requites a delicate balance permitting the merest order within the maximum disorder. This balance marks the limit between the undifferentiated realm of utter potential and a field of possibilities. This problematic, liminal situation is characteristic of the kind of painting that thrives on ambiguity, indeterminacy, the full fecundity of the informal, the kind of painting that wants to offer the eye the most liberating adventure while remaining a form of communication.'' (Eco, 1989, p. 98).





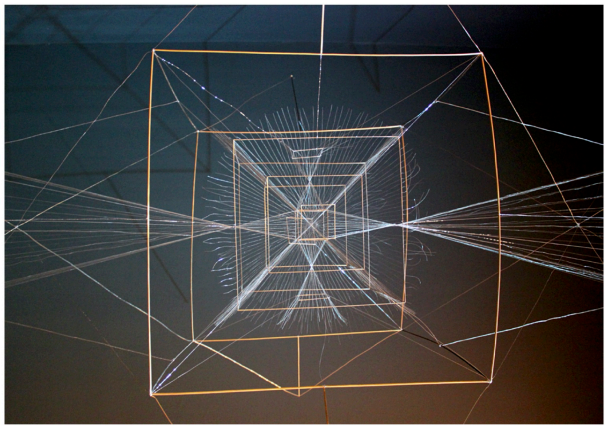




Photo 1: Alexander Calder (1898-1976), Vertical Foliage, 1941. Sheet metal, wire, and paint. 1359 x 1676 mm; Source: http://www.christies.com/features/Performing-Sculpture-Alexander-Calder-6719-1.aspx; Photo 2:Finding of the body of St Mark (1548) Pinacoteca di Brera; Source:https://en.wikipedia.org/wiki/Tintoretto#/media/File:Jacopo_Tintoretto_-_Finding_of_the_body_of_St_Mark_-_Yorck_Project.jpg; Photo 3: Richard Lippold, Variation VII — Full Moon, 1950; Source: https://www.tumblr.com/search/richard-lippold; Photo 4: Jackson Pollock, No. 5, 1948; Source: http://www.artnet.com/magazineus/news/artmarketwatch/artmarketwatch11-3-06.asp

PLATE 19: ECO'S EXAMPLES OF OPEN WORKS: THE QUALITY OF OPENNESS

4.2.2.2. INCOMPLETE PERCEPTIONS AND PHENOMENOLOGICAL ASPECTS

One other principle or quality pointed out by various authors that defines the aesthetic experience is related to incomplete perceptions and to phenomenological aspects.

What is perception?
And how does incomplete perceptions become a requisite for the aesthetic experience?

Defining perception….

Perception is generally understood as '' (…) the ability to see, hear, or become aware of something through the senses'' ('Perception', 2014a); it relates to the awareness of something, through an intuitive understanding an insight, and to '' The way in which something is regarded, understood, or interpreted.'' ("Perception," 2014a) As a synthesis, we can claim that perception '' (…) is the organization, identification, and interpretation of sensory information in order to represent and understand the environment.'' ("Perception," 2014b). Author Bruce Goldstein (2002) indicates perception as: ''Perception is conscious sensory experience.'' (Goldstein, 2009, p.6), that occurs when the electrical signals that represent an 'object' are transformed by the brain into the 'experience of seeing' the 'object'. Caroline M. Bloomer (1990) adds another use to the term: at a first level it can relate to our perceptions of the environment (nervous system and sensations) but at a second level it can relate to more complex though processes ('I perceive qualities.')[195], cognitive and emotional functions. Author Maria João Durão (2003) also explains that the term derives from the latin '*perceptio*' that means 'harvest' or 'correct knowledge'; it is derived from '*percipio*' (means 'understand', 'experiment/feel', and 'capture with intelligence') and from de '*capio*' (that means 'capture' or 'apprehend'). She clarifies that the semantics of the word are related and have their roots in touch and movement, so one can conclude that '' (…) the senses need to be touched (by light, form, sound, odour or taste).'' (Durão, 2003, p.1) *(see Glossary for further information on the authors).*

Bruce Goldstein (2002) demonstrates that the purposes of perception are to inform us about the environment (creating a 'likeness' of the 'perceived environment' in our minds) and to help us in accordance to it[196]. In regards to the perceptual process, he claims, it is dynamic, constantly changing and shifting; one of the first phases of the process, called Transduction, a process that occurs in the nervous system and is related to the transformation of energy[197]. Following this stage is the neural processing, that in turn is connected to knowledge and to the process of recognition. But it is Caroline M. Bloomer (1990) that adds that perceptions are associated with both visual phenomena and the construction of 'meaning'. Currently, she further adds that perception is thought to be more controlled by cognitive facts than by sensory stimulation, and together, those two faculties construct the experience of meaning. Also

[195] Reference to: '' It can refer to responses of the nervous system to external stimulation (sensation), or to primitive awareness (…). At the other extreme, perception can refer to more complex and higher-level thought processes (cognition) – as in ''I perceive deep religious qualities in her paintings.'''' (Bloomer, 1990, p.17).

[196] Firstly, '' (…) perception is to inform us about properties of the environment that are important for our survival.'' (Goldstein, 2009, p. 2); explaining that our perceptual system accomplishes this by creating a 'likeness' of the 'perceived environment' in our minds (psychological function of perception); secondly, perception helps us act in accordance to the environment.

[197] It occurs a ''(…) transformation of one form of energy into another form of energy.'' (Goldstein, 2009, p. 5); this process occurs in the nervous system when for example 'environmental energy' is converted into 'electrical energy'.

emphasizing this duality between cognition and sensation is author Durão (2003) when she explains that the process of perception is associated firstly the 'codification in neural signs' associated with sensation and secondly with the 'selection, organization and interpretation of our emotions'. Perceptual processes, she clarifies, are no longer exclusively associated with the traditional way 'sensation-perception-cognition' but, by the contrary, they merge sensations with cognition[198]. Perception, then is primarily associated with vision; but it also entails all the other senses, in a construction of meaning, that derives from, both emotions and cognitive faculties.

Also of reference is Aristotle's ideas of perception, which he describes as sense-perception, because it is intimately connected to the senses. Sense-perception, the author explains in 'De Anima' (2002), is similar to contemplation, however in sense-perception the things that trigger the activity are external, where as in contemplation they are internal; actual perception, thus, is particular, whereas knowledge, which is derived from contemplation is universal. Sense-perception, thus, is directly connected to the five senses, as the means through which the body apprehends and understands the world around. He summarizes: " Perceiving, then, is like mere assertion and thought, when something is pleasant or painful (the soul), pursues it or avoids it, as it were asserting or denying it. " (Aristotle, 2002, p. 63). Perceptions, he continues, are always intimately connected to consciousness itself. Thus, '' When one actually remembers, he must recognize in consciousness that previously he had recognized in thought or perception, (…).'' (Aristotle, 1906, p. 101).

How does perception construct meaning and significance?

… by Caroline M. Bloomer: Constructing Meaning

Caroline M. Bloomer (1990) underlines particular aspects in regards to the constructions of meaning through perception. In an initial stage she clarifies that the construction of meaning is innate to our human condition, even with random events or random perceptions, this is what she defines as 'projections of meaning'; these 'projections of meaning' she writes, often 'say' more about the viewer and his 'mental' predisposition, than they do about the stimulus.[199] In a later stage, she states that the 'selectivity' hat occurs by the perceptual system, where only some things are perceived as meaningful. And finally there is the experience of 'closure'[200], that occurs when that meaning has been perceived. In works of art, that feeling of 'closure' is never really experienced and therefore human beings always keep

[198] Therefore, '' (…) perception refers to how the acquisition of information from the surrounding medium, made by the senses, is transformed into experience of events, objects, sounds, flavours and the like.'' (Durão, 2003, pp. 2, 3). Also, the sense of perception is beyond the mere registration of an image in the brain, but rather involves a process of filtering where '' (…) the perceptions are inferred in ways that make sense to us.'' (Durão, 2003, pp. 2, 3).

[199] **Projections of meaning:** '' (…) a person instantly perceives even random events as meaningful. Even when relaxing, your mind persists in spinning out meaning – seeing identifiable images in clouds, rock formations, gnarled work, stains in walls.» (Bloomer, 1990, p. 11). As an example of these projections of meaning, she uses the Rorschach test (the responses of a person to inkblots is a way of analysing personality). She calls this 'projection' or 'projected meaning'. Projection can also be found in science for example, she explains: '' (….) scientific data are meaningful only when they can be made to represent an extended projection of concepts that already exist in the scientists minds.'' (Bloomer, 1990, p. 11).

[200] **The notion of 'Closure':** 'Closure': Bloomer explains that one experience 'closure' when ''(…) you have resolved the problem of meaning (…).'' (Bloomer, 1990, p. 14). Furthermore, '' The term closure was originally applied by the Gestalt psychologists to the phenomenon of identifying a discontinuous figure as a continuous or unitary image.'' (Bloomer, 1990, p.14). Today it is more commonly applied to describe the 'experience' of identifying a 'stimulus'; the human being, she claims, needs this sense of 'closure' and it is ultimately connected to feelings of relief. In advertisement, images create this sense of closure is a simple and direct way; however, in works of art, the 'stimuli' never reaches its complete 'closure' and the artwork remains of interest even after various 'exposures'; Bloomer summarizes: '' This is the quality people usually associate with great artworks (''Every time I look at/listen to/ read it, I find something new! '') ''. (Bloomer, 1990, p. 15). Furthermore, she clarifies: ''At its most basic level, perception is the experience of simple closure: the act of recognizing and identifying sense stimulation in some fundamental way (…).'' (Bloomer, 1990, p. 18).

searching for new meanings; this inability to attain closure is what defines great works of art, and the sense of closure defines the most simple perceptions.

What other aspects qualify the aesthetic experience through perception?

… by Rudolf Arnheim: visual perception, art and cognition

Also of reference is Rudolf Arnheim (1969) theories in regards to visual perception; he considers visual perception is also both a cognitive and an emotional activity; therefore, artistic activity is understood as a form of reasoning, where there is an inseparable link between perceiving and thinking. A person that creates, he continues, thinks with their senses, in a union between perception and thought, in the 'realm of the imagery'. The artistic realm is thus based purely on perception.

But there is also another important aspect of perception emphasized by Arnheim (1969). Through direct perception one acquires knowledge, and this process that we call learning, is just a 'recollection' or an '*anamnesis*' (for the soul, an entity that has been born many times, remembers within it 'all things'); Arnheim is referring to Plato's and Socrates ideas, and to their ideas of 'gazing upon the truth' through the immortality of the soul, as 'recollection'[201]. This process, he asserts, occurs through perception away from thinking patterns and logical thought. However, he continues, Plato mistrusted ordinary perception (went as far as to abolish sensory images entirely), because for him, sensory images were '' (…) dim reflexions outside of the system of reality.'' (Arnheim, 1969, p. 8), and thus to trust them, it would be necessary to follow the rational example of the mathematicians, who used shapes to think 'not of these' but of the ideas 'which they resemble', the truth.

How does incomplete perception relate to phenomenology?

… by Merleau-Ponty: the phenomenology of perception

It is Merleau-Ponty (1908-1961) that establishes a link between perception and phenomenology. For Merleau-Ponty (a French Phenomenological Philosopher who was deeply influenced by Edmund Husserl (1859 – 1938) and Martin Heidegger (1889 – 1976) *(see Glossary)*), perception has a vial role in his theories. Phenomenology[202] and Merleau-Ponty assume the body is a primary source of knowledge being through the body (through perception) that sensations (triggered by movement) are felt and knowledge and meaning is constructed. Merleau-Ponty views perception as a complexity of body, sensation and cognitive understanding and the body, thus is an expression that 'creates' (apprehending the 'senses' and the 'sense' of the lived experience). Terezinha Petrucia da Nóbrega (2008) explains that Merleau-Ponty's notions of perception are in direct opposition to the previous notions established by empiricism and intellectualism (based around the simple idea of stimulus and response).

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[201] Reference to: '' (…) being, with which true knowledge is concerned: the colourless, formless, intangible essence, visible only to mind, the pilot of the soul.'' And to the works of Socrates: '' In the Meno, Socrates demonstrated that ''all enquiry and all learning are but recollection.'' The soul, being immortal and having been born many times (…) '' (Arnheim, 1969, p. 7)

[202] Author Shirazi (2011) explains that there is a lack of a common definition of '*phenomenology*', which is derived from the very essence of 'phenomenology'. It is generally understood as '' (…) as 'a return to the things themselves' (Husserl), as 'a way of seeing' (Heidegger), or as 'the essence of perception' (Merleau-Ponty), (…)'' (Shirazi, 2011, p. 1)



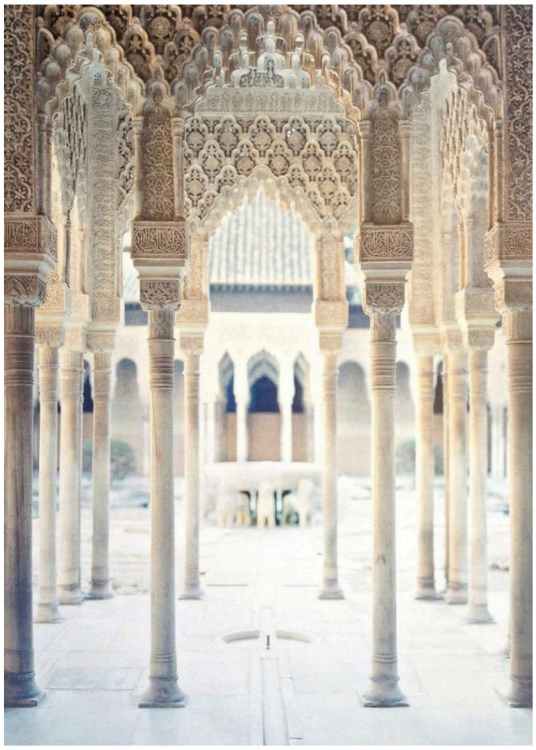


Photo 1: Claude Monet, Arm of the Seine near Giverny in the Fog (1897); Source: https://pt.pinterest.com/pin/251075747950493157/; Photo 2: Court of the Lions at the Alhambra palace in Granada, Andalusia; Source: https://pt.pinterest.com/pin/251075747955042890/

PLATE 20: ART AS AN INABILITY OF CLOSURE: OPEN PERCEPTIONS

What makes Merleau-Ponty's theories of perception add value to the present research, is not only the idea that perception is rooted in the body and is derived from sensation, but also the fact that body 'creates' the experience in the construction of meaning and significance. Another point is of value: the fact that perception is associated to an 'ontological' sense, where, through the complex experience, the viewer constructs an understanding of the self and of the world; he does this by the understanding that the self is present in multiple ways, that the 'things' that compose the environment are also present within himself, and the fact that perceptions are always 'ambiguous'. These 'issues' drive him towards an ontological understanding of existence. Lastly, Merleau-Ponty's theories, as part of a philosophical phenomenology deeply influenced contemporary architectural theories that are analysed below.

> **Further explanation of the ideas presented:** In '*Phenomenology of Perception'* (1945), Merleau-Ponty writes that the human body, consciousness and the outside world are constantly 'engaged' and intertwined through perception; so, the world and the sense of 'self' are continuously in collaboration and definition. Both the object of perception and the background where those perceptions occur, define a whole of 'meaningful relations'; thus, because each is connected to the other, all objects are reflections of each other and the perception is never clear, but instead remains always ambiguous. In '*The Visible and Invisible*', and his last published essay, *'Eye and Mind'* he moves away from traditional phenomenology (in opposition to John Locke) towards what he calls 'indirect ontology': where he aimed to prove that perceptions were not a product of 'atomistic sensations', but of something deeper: a sense of understanding of the world. For Merleau-Ponty (2009), the visible world and the construction of the world, 'motor projects' are part of the same being. The body, in motion moves towards the world, apprehending it. The enigma, he emphasizes, is that the body is simultaneously the thing that 'sees' and that which is 'seen'. The body is a reflection of itself. In this understanding emerges an ontological understanding of the world and of the self. Johnson and Smith (1993) also accentuates this explaing that for Merleau-Ponty, the body is present and aware, when 'the sensing is lit'[203], when the being becomes in tune with his surroundings, and understands that they are made of the same matter and essence: '' 'Nature is on the inside,' says Cezanne. Quality, light, colours, depth, which are there before us, are there only because they awaken an echo in our bodies (…).'' (Johnson and Smith, 1993, p. 125)

How are phenomenological aspects used in the arts to create a significant experience?

… the senses: a requisite for perception and phenomenological encounters

Because it is the body that perceives and constructs significance in a phenomenological experience, there is a great importance granted to the senses, which has been the focus of multiple research. Within the artistic and architectural experience, as a phenomenological understanding, both Juhanni Pallasmaa (1996) and by Steven Holl (1994) regard the senses as the most important mediators. Pallasmaa (1996) believes that the qualified artistic and architectural creation evokes a multisensory experience (derived from all the senses) that creates an intense experience with the 'imaginary' world it projects. There is an innate natural tendency for the different senses to fuse into a cohesive 'embodied' experience, this refers to, what Pallasmaa calls the 'interaction of the sensorial spheres', and creates what he calls, the embodied image. One of the problems of contemporary architecture, he notes, is that it creates a disconnection between the senses (devoid of plasticity and evoking only one or two senses)

[203] Reference to: '' A human body is present when, between the see-er and the visible, between touching and touched, between the one eye and the others between hand and hand kind of crossover occurs, when the spark of the sensing/sensible is lit, when the fire starts to burn what will not cease until some accident befalls the body, undoing what no accident would have sufficed to do… '' (Johnson and Smith, 1993, p.125)

which reflects and leads to a loss of the interior world: a sense of isolation and fragmentation of the self[204]. He further discloses: '' Architecture is the art of reconciliation between ourselves and the world, and this mediation takes place through the senses.'' (Pallasmaa, 1996, p. 50).

Further explanation of the absence of the senses in architecture:

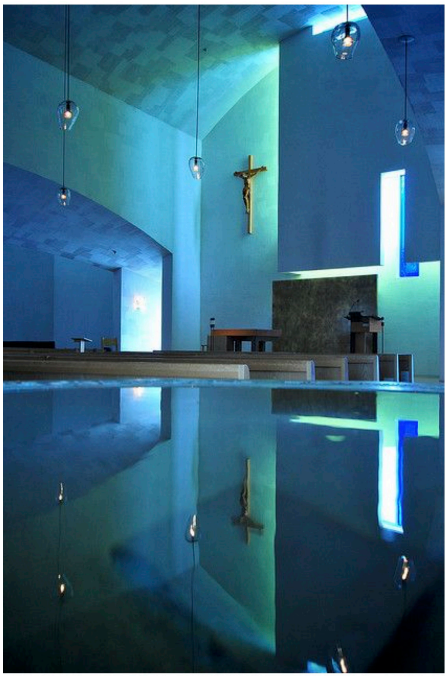
In the cultural era of modernity, the technological culture has separated the senses and there is a predominant focus on the eye and the vision alone, and an equal suppression of all the other senses, that leads to a kind of unnatural 'isolation' and 'detachment'. For Pallasmaa, this is a problem because it does not 'root' the human being into the world. He claims that: '' The fact that the Modernist idiom has not been able the penetrate the surface of popular taste and values is due to its one-sided visual emphasis; Modernist design has housed the intellect and the eye, but it has left the body and the other senses, as well as our memories and dreams, homeless.'' (Pallasmaa, 1996, p. 10). In architecture, he emphasizes as the cause of this problem, the desire to conceal the processes and time from the architectural element; for this, there is a weakened sense of materiality and an absence of natural materials that express time and enrich experience; 'machine like materials' of construction that are scaleless, synthetic or enamelled, are used and are a product of an instant plastic world; the sense of transparency, weightlessness and reflexion are products of modernity, and also erase altogether the experience of time. He also suggests that the haptic qualities grant tactile and material weight, organically driven generating other emotions such as nearness and interiority.

… by M. Rezi Shirazi: phenomenology, perception and architecture

Author M. Rezi Shirazi (2011) adds other ways in which phenomenological and perceptual understanding have been regarded as conditions for the aesthetic experience in architecture. He demonstrates that '' (…) phenomenological approaches have been employed in both architectural theory and practice.'' (Shirazi, 2011, p. 1). Theorists of architecture, argue that phenomenology can 'locate the essence of things' and observe 'phenomena', thereby bringing us 'nearer' to the 'existential being'. This 'turn' towards phenomenology can be explained by Alberto Pérez-Gomes, when he claims that contemporary architecture is disillusioned with rationalism and strives to find a new 'metaphysical' existence, starting at it's origin: perception. As a synthesis, phenomenology, Shizari (2011) explains, 'concerns the study of essences', and so '' (…) architecture has the potential to put essences back into existence.'' (Shirazi, 2011, p. 1). Overall, the phenomenological discourse in architecture is connected to 'relating the human being-in-the-world' as it is 'incorporated' in 'spatial', physical, environmental and material dimensions.

Phenomenological discourse in architecture: is grounded mainly in the work of the philosophers Martin Heidegger (ideas of place and being in the world, that validate ontological aspects of architecture) and Maurice Merleau-Ponty (ideas of perception, body and senses that approach more tangible architectural aspects such as materials); The author explains the differences and complementarities between the two : '' While Heidegger's ideas on dwelling, place, space, and being-in-the-world demonstrate the significance of ontological concerns for architecture, Merleau-Ponty's thought on perception, body, and the sensible dimension of human experience provides an important perspective on more practical, applied architectural issues.'' (Shirazi, 2011, p.1). ; in his view, Nordberg-Schultz (2000) connects more to Heidegger's ideas of 'being', whereas Pallasmaa (2010) and Stevel Holl connects more to Merleu-Ponty's ideas of 'perception', 'body' and 'lived' experience. Other architectural discourses are Alberto Pérez-Gomes (that sustains that only phenomenology can reconcile architecture with its metaphysical dimensions) and the works of the architectural theorists Eduard Führ (1998) and David Seamon (2000), that place phenomenology as a means of understanding 'the essential core of the phenomenon' and thus brings us closer to the 'real' architectural phenomena.

[204] Reference to: ''The dominance of the eye and the suppression of the other senses, tends to push us into isolation, detachment and exteriority.'' (Pallasmaa, 1996, p. 10)







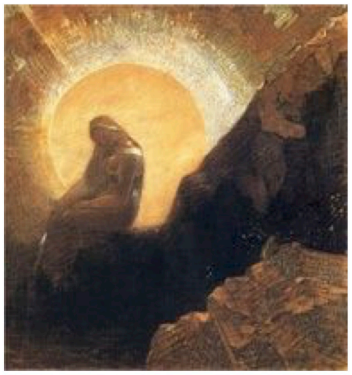


Photo 1: Steven Holl. Chapel of St. Ignatius. Seattle University: Source: https://pt.pinterest.com/pin/251075747955042921/; Photo 2: Simmons Hall at MIT, by Steven Holl; Source: http://www.archdaily.com/65172/simmons-hall-at-mit-steven-holl/andyryan3/; Photo 3:Melancholy by Odilon Redon; Source: https://pt.pinterest.com/pin/251075747948460082/; Photo 4: Bruder Klaus Chapel, Peter Zumthor; Source: http://www.arcspace.com/bookcase/atmosphere;

PLATE 21: PERCEPTION AND PHENOMENOLOGICAL CONSIDERATIONS

… by Steven Holl: Phenomenological Encounters in Architecture

Steven Holl (1994) *(see Glossary),* further describes a phenomenological understanding of the complex experience of architecture as a condition for significance to emerge. Emotions and sensations are triggered by what he describes as 'exhilarating perceptions', and derived by what he calls 'Phenomenal Zones', which are architectural situations and considerations that trigger perceptual phenomena and generate a complete and significant architectural encounter. The first two points clarified by Steven Holl, ('enmeshed experience' and the 'incomplete perception') emphasize an 'open' experience and define 'immaterial qualities' where as the others are more specific ways of achieving these principles (use of water, sound, etc.).

> **Phenomenal Zones of Architecture, by Steven Holl:** He defines eleven phenomenal zones, elaborated throughout the book, thus synthesised as follows: (1) Enmeshed Experience: the merging of object and field, the way they merge together, and the way by which they work towards a 'complete perception'; (2) Incomplete Perception: overlapping perspectives, vanishing points and 'open ends' – implies movement and enhances the idea of existence; (3) Of Colour: emphasizing the values of transparency and opacity, that thus vary the phenomena of the experience of colour; (4) Of Light and Shadow: the properties of all the different shadows, infusing different emotions. (5) Spatiality and Night: night provides a new sensation of form and space, thus changing our experience; (6) Time, Duration and Perception; (7) Water: the idea that water acts as a phenomenal lens that triggers emotions and activates the senses. (8) Of sound: the importance of emphasizing and creating specific sounds in the space. (9) The detail and The Haptic Realm: the importance of detail to emphasize tactile qualities; (10) Proportion, Scale and Perception: the importance of taking into account ideas of proportions, scale and the perceptions that derive from both. (11) Of Site, Circumstance and Idea: considerations regarding the site, and the ideas that can unite the architectural object to it's environment. Summarized from: (Holl et al., 1994, p. 20).

4.2.2.3. INNER FORCES

… by Rudolf Arnheim: artistic experience as visual communication of forces and principles

For Rudolf Arnheim, all visual patterns are always dynamic: '' Just as a living organism cannot be described by its anatomy, so the essence of a visual experience cannot be expressed by inches of size and distance, degrees of angles or waves of lengths of hue. '' (Arnheim, 1964, p. 5). These elements define only the 'stimulus', the message sent to the eye by the physical world, but the expression and significance derives from the activity of forces between the elements. To see these elements, these forces, Arnheim continues, is the perception of action. Thus, to perceive a work of art, to understand it's significance is to have insight. He claims: '' Perceiving achieves, at the sensory level, what in the realm of reasoning is known as understanding. (…) Eyesight is insight. '' (Arnheim, 1964, p. 31). Thus, the work of art is a living organism, that is dynamic in it's essence and that can be understood through the infinite number of forces that it develops within itself.

These forces exist at both a physical level (interaction between elements) and a psychological level (acting on the human psyche or consciousness): they occur physiologically and act psychologically. One of the principles announced by Arnheim (1977), that describes these forces, is the principle of balance. In a work of art, he explains, all elements must be in balance between each other, creating a

physical and perceptual equilibrium. It is an indispensable condition of the work of art. Balance, he explains, '' (…) is the state of distribution in which everything has come to standstill.'' (Arnheim, 1964, p. 9). An unbalanced composition, on the other hand, seems incomplete and accidental. It is the balances work of art that creates an environment, where space and time can be understood. The main property of balance is the idea of equilibrium, which can occur even when the artists captures and describes inequality. The two factors that determine balance are weight (which depends on location) and direction (which is also associated to location, but implies movement). In the work of art, the meaning and significance that is portrayed by balance is complex.

Mainly, through balance, the work of art '' (…) accomplishes what can never be realized by the overlapping strivings that make up human life.'' (Arnheim, 1964, p. 21). However, it is not only this principle of balance that describes the work of art; the work of art is defined not by balance, unity, harmony or order, but by the pattern of forces that are being balanced, ordered and unified. Arnheim continues: '' A work of art is a statement about the nature of reality.'' (Arnheim, 1964, p. 21); a unified structure of forces presents a togetherness with a significance. It is the content of the work of art that matters, and all the elements are there to convey that content in that unique way. The aesthetic experience, then, for Arnheim (1964) is to apprehend significance, to understand and apprehend these hidden forces that are innate to the artwork as principles and values.

Summary:

Starting with the clarification of the issues of perception by Bloomer (1990), Goldstein (2009) and by M.J. Durão (2006), where they explain that perception is related to both cognitive and emotional facts, and to both visual phenomena and the construction of 'meaning'; The construction of meaning through perception occurs through 'projections of meaning' (mental projections), selectivity (selects what to perceive) and closure (the full understanding of the meaning), (Bloomer (1990)); the inability to attain closure is what defines great works of art (Bloomer (1990)). Rudolf Arnheim (1969) clarifies 'Visual Perception' as a cognitive activity, therefore all artistic experience (and creation) is a form of reasoning, where there is an inseparable link between perceiving and thinking; so, the artistic realm is thus based purely on perception. Merleau-Ponty (2009) adds that perception occurs through the body, in a sort of phenomenological experience, that constructs significance and meaning, by giving the human being an ontological understanding of his own existence. It is the nature of perception to be ambiguous. For Juhanni Pallasmaa (1996) the senses act as mediators of the aesthetic experience, and thus, without the incorporation of all the senses, the perceptual and phenomenological experience is fragmented and doesn't generate significance. In architecture, phenomenology is understood as that which: can 'locate the essence of things' allowing for an existential dimension to emerge; can reconcile architecture with its metaphysical dimensions, can understand 'the essential core of the phenomenon' (M. Rezi Shirazi (2011)). Without a perceptual and phenomenological understanding, the aesthetic experience is incomplete. For Steven Holl (1994) phenomenological aspects define the complex experience of architecture and as such are a condition for significance to emerge. This complete phenomenological experience is the root of significance in architecture and is derived from a combination of multiple physical and immaterial substances that comprise the space (incomplete perceptions). Lastly, we observed that the experience is the understanding of inner forces that are composed within the work of art as significance (Arnheim (1977)).

Summary:

4.2. Experience

1. ***Once the creation of significance has been understood, it is of the essence to determine what occurs in the experience of significance. Multiple theories emphasize that it is the aesthetic experience that defines Art and that greatly contributes to the understanding of significance as art.***

2. ***The aesthetic experience…***

    - *is the fullest type of experience that can be lived for it allows man to understand and uncover multiple meanings and significances about his own existence (Dewey (1976)).*
    - *is represented by the aesthetic judgment (a sort of reflecting that finds the universal within the particular); these Judgments derive from the features of the artwork itself, and* ***are a complex interplay between mental faculties such as imagination, perception, intellect or judgment****. From judgments results a feeling of pleasure (or displeasure); this 'feeling' is what defines the aesthetic judgment and it can be: agreeable, beautiful or sublime. (Kant).*
    - *the judgments and the feelings* ***possess a universal validity****, specifiying a kind of 'subjective universality' that establishes a union between Platonic universality with Aristotelian subjective pleasure; therefore, there is a* ***universality to art that is communicated through form and understood through judgments of beauty*** *(Kant).*
        - ***occurs*** *when a sensuous object stimulates our emotions, intellect and imagination, activated together in a 'free-play' (Kant).*
        - *is an active and dynamic act that involves conceptualization from the viewer, engaging his past experiences and bridging links between both emotive and cognitive faculties (Goodman (1976))*
        - *is engaging, inquisitive and disinterested, it possesses a particular type of emotion, the aesthetic emotion, and it's aim is satisfaction (Goodman (1976)).*
        - *is defined by three types of functions: as a mental gymnastics, as play and as conversation and it's aim is enlightenment (Goodman (1976)).*
        - *occurs in two parts: a 'specialized sensuous experience' (seeing or hearing) and the 'imaginative experience' (where the significance of art exists) that engages the viewer (Collingwood (1938)).*
        - *establishes consciousness: it dominates both feeling and thinking, by converting impression 'impression into idea' or 'crude sensation into imagination'. Consciousness thus, is a level of experience intermediate between the psychic (emotional) and the intellectual, and it is the activity that generates the artistic experience (Collingwood (1938)).*
        - *relates to the psychological value of art: allows firstly for the defining of unconscious processes (understanding of self) and secondly for the mastering of chaos (a defensive activity); both forms define a high level of satisfaction and a rich experience: which occurs as a result of the creation of 'complex tensions', whereas low art forms merely creates satisfaction of 'latent wishes'. (Pinchas Noy* (1968))
        - *is a complex experience that involves multiple faculties, that engages the viewer in an active participation: reconstruction of symbols, reflective judgment, creation of connections through creative imagination and critical taste (Joyce Carey (1984) and Roger Scrutton (1979))*
        - *is a private dialogue, that engages both emotional and cognitive fields and that reveals the intensities of the world and permeates consciousness (Pallasmaa (2010)) .*

3. The aesthetic experience allows us to understand art as:

- *the communication of the concentration of meanings and of significances to the viewer (Dewey (1976)).*
- *experience in it's most highest sense: a dynamic, self-forming interaction between man and reality (Dewey (1976)).*
- *a symbol that recreates nature, by intuition, through it's 'aesthetic idea', in terms of an analogy (Kant)*
- *a sort of beauty that firstly resembles, or is like, nature and secondly is guided by 'genius' (a 'disposition through which nature gives the rule of art'; beauty then, is an 'expression' of aesthetic ideas, which are a counterpart to rational ideas, and is a 'purposiveness without purpose' generating a disinterested response (Kant).*

4. In order for the aesthetic experience to occur, in contemporary art, there is a need to for the existence of the openness quality, defined as 'the open work':

- *invites the viewer to make the work too, allows for multiple 'open' stimulus to occur because of it's ambiguous nature incorporated into the creation, and finally following a poetics of necessity, allows for unlimited readings that adds vitality to the work of the art, in an endless cycle of 'crisis and expectation' that defines an incomplete experience. (Umberto Eco).*

5. Another two aspects that need to exist in order for the significant experience to emerge, are defined by the ideas of perception and by phenomenology*:*

- *perception is related to both cognitive and emotional facts, and to both visual phenomena and the construction of 'meaning' (Bloomer (1990), Goldstein (2009), M.J. Durão (2006), Rudolf Arnheim (1969))*
- *the construction of meaning through perception occurs through 'projections of meaning' (mental projections), selectivity (selects what to perceive) and closure (the full understanding of the meaning), (Bloomer (1990))*
- *the inability to attain closure is what defines great works of art (Bloomer (1990)).*
- *perception through the body, in a sort of phenomenological experience, that constructs significance and meaning, by giving the human being an ontological understanding of his own existence. It is the nature of perception to be ambiguous (Merleau-Ponty (2009)).*
- *the senses act as mediators of the aesthetic experience, and thus, without the incorporation of all the senses, the perceptual and phenomenological experience is fragmented and doesn't generate significance (Juhanni Pallasmaa (1996))*
- *without a perceptual and phenomenological understanding, the aesthetic experience (specially architectural) is incomplete, because the human beings isn't rooted in the essence of things and in ontological and existential dimensions (M. Rezi Shirazi (2011) and Steven Holl (1994)).*
- *the complete phenomenological experience is the root of significance in architecture and is derived from a combination of multiple physical and immaterial substances that comprise the space (incomplete perceptions) (Steven Holl (1994)).*

6. Lastly, the aesthetic experience *is to apprehend significance: to understand and apprehend the hidden forces that are innate to the artwork as principles and values (Arnheim (1977)).*

Summary Chapter 4:

In the present chapter 4, we understood the phenomena of significance through two aspects: through the creation of art (4.1.) and through the experiencing of art (4.2.). In 4.1., Creation, it was analysed that ***the act of creation*** *can be defined as the act of conscious generation of something, in a 'non-technical' way, as an extension of the self; this ability to create is found in everyone (the act of observing is also creation) as explained by Collingwood (1937), and the unique skills developed by the artist are an ability to externalize himself through creation (Umberto Eco (1989)), and to project his aura (Saarinen (1948)). We also understood that where as traditionally, the artist was considered to create by a means of inspiration, contemporary theories* ***define the creation process, as that which is creative****, in the sense that it uses creativity and is organized in five stages: first insight (finding new problems, and imagining new solutions), saturation (the search for solutions and multiple sources of inspiration), incubation (the inner development of ideas), illumination (the flash of insight) and verification (checking for errors and usefulness) that act as continuously as a cycle and involve the duality of the brain and its two types of reasoning (Edwards (1987)).* ***The artistic creative process can be further understood as:*** *possessing artistic talent (the ability to express the depths of human experience through a primary means of communication (feelings and emotions) (Pinchas Noy (1972)), as being a sort of automatism that reveals what is already there, in a sort of uncovering of unconscious processes and experiences (Pallasmaa (2010)) and lastly as that which uses creative instinct that is the union* ***of three faculties: intuition, instinct and imagination*** *(Saarinen, 1948). It was also assessed that these three faculties were of vital importance in multiple aesthetic theories, and featured each one individually. The first,* ***Instinct*** *is generally understood as a natural ability to know without learning or without thinking; the second,* ***Intuition (a central faculty to multiple artistic theories: all authors consider intuition to be at the centre of both the creative process and of what defines art), is*** *a free essence that creates an 'impression of feeling' on memory (Carey, and Saarinen), that which expresses the artist's consciousness or spirit (Croce). It is considered the one faculty that defines art (Croce, Carey, Afonso) and that which guides the artist in his creation process, allowing him to discover (above all other forms of knowledge) (Schelling). Lastly, imagination (also has a central place in multiple theories) and* ***can be understood as****: that which defines another life for man (Roger Fry (1961)), a power that depends on the ability of the human spirit to enter the things around it, and the real life of the Imagination, then, is in the discovering of truth (Ruskin (1903)). In art, imagination involves consciousness (that which is developed by the imagination) and emotion, that which is felt by the imagination (Collingwood (1943)), is always unique (in a constant search), alive and vivid, contemplative and free (Ruskin (1903)); it acts intuitively (without reasoning) selecting that which comes through intuition (Ruskin (1903)) and has the power to create a link between human consciousness (the world of spirit) and the physical world (matter), as it embodies those two essences in the work of art (Pallasmaa (2010) and Bachelard (2010)).*

Lastly we analysed the idea of expression, which was considered to be that which describes the creative process, ***and the means by which art communicates and possesses significance.*** *Art expresses, through intuition and imagination both cognitive (ideas and thoughts), and emotional (emotions and feelings) substances and in this duality, lies art's significance.*

In 4.2 Experience, the ***multiple theories emphasize that it is the aesthetic experience that defines Art and that greatly contributes to the understanding of significance as art. The aesthetic experience was specified as*** *the fullest type of experience that can be lived for it allows man to understand and uncover multiple meanings and significances about his own existence (Dewey (1976)), as that which possesses aesthetic judgments (a sort of reflecting that finds the universal within the particular); these Judgments derive from the features of the artwork itself, and* ***is a complex interplay between mental faculties such as imagination, perception, intellect or judgment****. (Kant). It occurs when a sensuous object stimulates our emotions, intellect and imagination, activated together in a 'free-play' (Kant). We also saw that it is an active and dynamic act that involves conceptualization from the viewer, engaging his past experiences and bridging links between both emotive and cognitive faculties (Goodman (1976)). Multiple other authors explained the complexity of the aesthetic experience as consciousness and as that which envolves multiple faculties freely (Pinchas Noy (1968), Collingwood (1938), Goodman (1976), Joyce Carey (1984) and Roger Scrutton (1979)). It is t****he aesthetic experience allows us to understand art as*** *the communication of the concentration of meanings and of significances to the viewer (Dewey (1976)). It was also realized that in* ***order for the aesthetic experience to occur, in contemporary art, there is a need to for the existence of the openness quality, stated as 'the open work' as defined by Umberto Eco. Another two aspects that need to exist in order for the significant experience to emerge, are the ideas of perception and by phenomenology****.* ***Lastly, we saw, that the aesthetic experience*** *is to apprehend significance: to understand and apprehend the hidden forces that are innate to the artwork as principles and values (Arnheim (1977)).*

BIBLIOGRAPHIC REFERENCES: Chapter 4

Afonso, N. (2010). *Time does not exist: Manifesto.* Lisbon: Dinalivro.

Aristotle (2002). *De anima: Books II and III*, 2nd edition. Oxford: Clarendon Press. Available at: http://people.exeter.ac.uk/sp344/0198240848%20-%20De%20Anima%20Books%20II%20and%20III%20(With%20Passages%20From%20Book%20I)%20-%20Aristotle,%20Christopher%20Shields,%20D.%20W.%20Hamlyn.pdf [Accessed 5 Aug. 2016].

Arnheim, R. (1969). *Visual thinking*. California: University of California Press.

Arnheim, R. (1977). *The Dynamics of Architectural Form*. California: University of California Press.

Bielefeld, B., el Khouli, S. (2007). *Basics Design Ideas*. Basel, Boston, London: Birkhäuser Architecture.

Bloomer, C. (1990). *Principles of Visual Perception.* New York: Design Press.

Broadbent, G., Ward, A. (1971). *Metodologia del diseño arquitectonico.* Barcelona, Spain: Editorial Gustavo Gili.

Canella, G., Coppa, M., Gregotti, V., Rossi, A. (1971). *Teoria de la proyectación arquitectónica.* Barcelona, Spain: Editorial Gustavo Gili.

Cary, J. (1984). A*rt and reality: ways of the creative process*. London: Ayer Company.

Collingwood, R.G. (1938). *The Principles of Art.* Oxford: Clarendon Press.

Durão, M.J. (2003). Funções perceptuais para o design de espaço, in: *Revista de Comunicação e Cultura,* 7.

Durão, M.J., (2006). O Diáfano e o μέλας. Ar - Cadernos da Faculdade de Arquitectura da Universidade Técnica de Lisboa, 6, pp. 144-147.

Durão, M.J. (2002). Colour in the built environment, in: *FABRIKART-Arte*. Spain: Universidad del Pais Vasco-Euskal Herriko Unibersitatea.

Eco, U. (1989). *The Open Work*. Cambridge, Mass.: Harvard University Press.

Edwards, B. (1987). *Drawing on the Artist Within: An Inspirational and Practical Guide to Increasing Your Creative Powers*. New York: Touchstone.

Flam, J. (1995). *Matisse on Art.* California: University of California Press.

Freeland, C. (2002). *But Is It Art?: An Introduction to Art Theory*. Oxford and New York: Oxford University Press.

Fry, R. (1961). An Essay in Aesthetics (1909), in: *Vision and Design*. Mineola, New York: Penguin Books, pp. 22 – 39. Available in: http://rci.rutgers.edu/~tripmcc/phil/poa/fry-essay_in_aesthetics.pdf [Accessed 09 Apr. 2014].

Ginsborg, H. (2014). *Kant's Aesthetics and Teleology*, The Stanford Encyclopedia of Philosophy, Zalta, E.N. (Ed.)..Available in: http://plato.stanford.edu/archives/fall2014/entries/kant-aesthetics/ [Accessed 08 Sep. 2015].

Goldstein, E. (2009). *Sensation and Perception*. New York: Cengage Learning.

Goodman, N. (1976). *Languages of Art,* 2nd edition. Indianapolis, Cambridge: Hackett Publishing Company Inc.

Hofstadter, A., Kuhns, R. (1976). *Philosophies of Art and Beauty: Selected Readings in Aesthetics from Plato to Heidegger*. Chicago: University of Chicago Press.

Holl, S., Pallasmaa, J., Gómez, A.P. (1994). *Questions of : phenomenology of architecture*. 2nd edition. New York: a + u Publishing Company and William Stout Publishers.

Johnson, G.A., Smith, M.B. (1993). *The Merleau-Ponty Aesthetics Reader: Philosophy and Painting*. Evanston, Illinois: Northwestern University Press.

Instinct (2006). In: *Merriam Webster* [online]. Springfield: Merriam-Webster, Inc. Available at: http://www.merriam-webster.com/dictionary/instinct [Accessed 17 Mar. 2016]

Noy, P. (1972). About Art and Artistic Talent, in: *International Journal of Psycho-Analysis,* 53, pp. 243 – 249. Available at: http://www.pinchasnoy.com/index.php?file=kop6.php [Accessed 09 Apr. 2015]

Noy, P. (1968). A Theory of Art and Aesthetic Experience, in: *The Psychoanalytic Review,* 55, pp. 623 – 645. Available at: http://www.pinchasnoy.com/index.php?file=kop6.php [Accessed 09 Apr. 2015]

Pallasmaa, J. (2011). *The embodied image: imagination and imagery in architecture*. Chichester: John Wiley & Sons.

Pallasmaa, J. (1996). *The Eyes of the Skin: The Architecture and the Senses.* London: Academy Editions.

Perception (2014). *Wikipedia, the free encyclopedi*a. Available at: http://en.wikipedia.org/w/index.php?title=Perception&oldid=607946640 [Accessed 12 Apr. 2014].

Pinto, J.C. (2001). *A caixa, o espaço-limite, e a ideia de caixa nos momentos da arquitectura portuguesa*, Revista Ar: Cadernos da faculdade de arquitectura da universidade de lisboa, 1, Lisboa, pp. 28 - 30.

Pinto, J.C. (2006). *Entre a Arquitectura e a Pintura*, Revista Ar: Cadernos da Faculdade de Arquitectura da Universidade de Lisboa, 6, pp. 120 - 125

Pust, J. (2016). *Intuition*. The Stanford Encyclopedia of Philosophy, Zalta, E.N. (Ed.). Available in: http://plato.stanford.edu/archives/spr2016/entries/intuition/ [Accessed 14 May 2016].

Ruskin, J. (1903). Modern Painters: Of General Principles and of Truth, Volume I (Part 1 and 2), in: *The Works of John Ruskin*. London and New York: Longman, Greene and Co. Available in: http://www.lancaster.ac.uk/depts/ruskinlib/Modern%20Painters [Accessed 5 Oct. 2016].

Saarinen, E. (1948). *The search for form in art and architecture*. New York: Courier Dover Publications.

Scruton, R. (2009). *Beauty*. Oxford, England.: Oxford University Press.

Scruton, R. (1979). *The Aesthetics of Architecture*. Princeton, New Jersey: Princeton University Press.

Shirazi, M.R. (2011). *On Phenomenological Discourse in Architecture*. Available at: http://www.arch.ksu.edu/seamon/Shirazi_phenomenological_discourse.htm [Accessed 21 Oct. 2013].

Tzonis, A. (1977). *Hacia un entorno no opresivo*, 2nd edition. Madrid: Hermann Blume Ediciones.

CHAPTER 5

SIGNIFICANCE IS…

APPREHENDED/EMBODIED/UNDERSTOOD AS

Introduction:

In the present chapter it is identified the main core ways in which Significance is apprehended, embodied and understood: these are identified and explained individually, as they are supported by multiple authors. The ideas are condensed into nine points: beauty, poetry, truth, signs and symbols, metaphors, values, emotions, pure form and colour. Firstly, it is important to understand that the title refers to two aspects: the embodiment as that which is created by the artist, and the apprehended as that which is viewed and perceived by the observer. Thus, the nine points analysed, correspond to the different criteria's announced by the theorists as that which is the main driving essence of significance (that is both embodied and apprehened): some of the authors emphasize the quality of beauty, others of poetry, and others of general values as the main significance which is contained and embodied in the creation. These views thus, were organized, creating the distinct nine aspects. As the work will show, different authors point our different aspects of each 'embodiment', therefore, the chapter aims to summarize each specific view that contributes to the overall understanding of the 'embodiment' being analysed. It is like each author adds a quality or particularity of each 'embodiment' thereby creating and defining an overall understanding. After these different views are presented, for each of the nine criteria's, a synthesis will be defined, and lastly, an overall conclusion, that condenses the analysis. These 'views' of what significance is (what it apprehends, what it embodies and what it communicates) gives us the general idea that each of the aspects pointed out describe a value or a principle that sustains the significant creation. Therefore, it is not that each of the points presented should be understood individually and mutually excluding, but, on the contrary, one single artwork can contain a multitude of the aspects presented: one single creation can be an embodiment of beauty, that contains truth, through symbols and metaphors, and that is

apprehended as poetry. However, let's begin by understanding each of the individual ideas pointed out by the theorists as the main driving essence of significance. The work will begin with beauty…

5.1. BEAUTY

What is significance as beauty?

… The traditional understanding of Art as beauty, truth and goodness

There is a classic traditional way of seeing art as that which communicates and embodies beauty, and in this beauty is art's significance.

This traditional idea of art, that placed beauty at the center of the artistic significance was deeply influenced by Plato's theories and ideas of a metaphysical idealism of creation. For Plato, beauty was associated to 'sexual love' and through beauty (as a manifestation of divine order and the intangible world of the ideals or forms) man could understand his highest potential; beauty (in general and associated to art) was '' (…) that which lures us onward in the path of philosophy, the quest of truth.'' (Collingwood, 1938, p. 38). Although Plato begun from this understanding of sexual love through beauty, he surpasses it, and emphasizes it as quest for truth, as pointed out in the above statement by Collingwood (1938); beauty, thus was an expression of truth, however only fragments of that truth (shadows) really reached humanity (Plato, 1937, p. 514).

This understanding of beauty connected to truth and goodness deeply influenced many theories that followed. Of reference is Plotinus (204/5 – 270) and St. Augustine (354 – 430) *(see Glossary),* that considered art (as beauty) as a reflexion of Divine Order, and later Ficcino (1433 – 1499) *(see Glossary)*, which united those ideas to love. All these theories, searched in what Plato called the world of the intangible's (the world of the Soul) for the value and meaning of art placing beauty at it's core, thus continuing the metaphysical ideas of art that sustain that beauty belongs to the world of the absolutes and is accompanied by both truth and goodness. All of them deeply influenced the **Renaissance's metaphysics** *(see Glossary)* and conception of art and architecture; an example of this direct influence in architecture is Alberti's treatises that followed the Vitruvian tradition and sustained a perfect ideal of beauty as a manifestation of divine truth and goodness.

A deeper look at each of those theories is of value. Plotinus (204/5 – 270), like Plato, distrusted matter (a poor 'mimesis' of the higher intelligible world) and believed that all creations emanated from 'the One' (the intellect, the good and the soul) in lesser degrees of perfection, as beauty. Beauty then is an emanation of the real 'beauty', or 'goodness' of the soul and is thus a symbol of cosmic harmony and a symbol of a higher reality[205]. The pleasure felt in the experience of beauty, then, is derived from this

[205] **Plotinus's (204/5 – 270)** metaphysical philosophy is centred on three main concepts: the one (there is one supreme essence, indivisible and absolute), the intellect (or Mind) and the soul. From the good or 'the One', the intellect and the soul, Plotinus claims, comes everything as a process of emanation, towards stages of lesser perfection: '' From the One comes Mind, from Mind comes

contact with the 'origin' or 'essence' of things. Art, then, is a symbol of 'cosmic harmony' through it's beauty, where it's significance lies. Similarly, for St. Augustine (354 – 430) the arts make a contribution to the understanding of the **Divine order** *(see Glossary)* because they are emanations of God (Plato's intangible world of forms becomes the higher realm of God); artistic beauty, then is the highest form of significance[206].

Ficcino (1433 – 1499), deeply influenced by Plato (ideas of 'erotic madness) and by Plotinus (art as emanations), holds love to be the power that seeks the beautiful in life and in art; for him, the contemplation and experience of beauty the ultimate realization for the human soul. Beauty, then, was a manifestation of the 'substance of the Angelic Mind' or essence of the world created by God and could be experienced through love (another manifestation of that essence). As such, beauty is the radiance of the divine goodness (something always incorporeal and intangible), it shines through in everything, and love is the means by which it can be understood, lived and experienced. The true artist, for Ficcino, then, seeks for love, and lets love guide him in the understanding of beauty.

> **Ficcino's metaphysical ideas of Art as Beauty:** Ficcino (1433 – 1499) had a profound impact on the Renaissance's revival of classical beauty and in reconciling the philosophy of Plato with Christianity. Ficcino claimed: '' '' Love is the desire for the fruition of beauty.'' '' (Hofstadter and Kuhns, 1976, p. 204). In other words, Ficcino, like Plato and his 'erotic madness', holds love to be the power that seeks the beautiful, being the contemplation and experience of beauty the ultimate realization for the human soul. For Ficcino, there are three worlds: God, the Angelic Mind and the Soul of the World[207]. For Ficcino, God first created the 'substance of the Angelic Mind', or Essence; then God created the Soul, and in it he 'painted' what we sense as 'bodies', defining the material world. These, Ficcino continues, are 'Prototypes or Forms', the 'Ideas'. He continues: '' This composite of all the Forms and Ideas we call in Latin a '*mundus*', and in Greek, a cosmos, that is, Orderliness.'' (Hofstadter and Kuhns, 1976, p. 206). The exterior form of this Orderliness is Beauty, and its offspring, its result, is love. Ficcino summarizes: '' Love is the teacher and the master of the arts.'' (Hofstadter and Kuhns, 1976, p. 214). Beauty, Ficcino claims, is something 'incorporeal', it cannot be anything 'bodily', for it relates to universal principles. As such, he does not agree that beauty is an arrangement of the parts in accordance with proportion, but instead, what one calls beautiful relates to something more: it is the 'splendour of the divine countenance'. He claims: '' We do not doubt that this beauty is everywhere incorporeal, for it is obviously incorporeal in the Angelic Mind and the World Soul.'' (Hofstadter and Kuhns, 1976, p. 223), and explains that what the eye sees as beauty is merely the light of the sun.

On this issue, Scrutton (2009) summarizes, that beauty (associated to truth and goodness) is seen as an ultimate value that justifies our rational lives: it is '' (…) something that we pursue for its own sake, and for the pursuit of which no further reason need be given.'' (Scruton, 2009, p. 2). These ideas, Scrutton continues, were also expanded by St. St Thomas Aquinas: he sustained a trinity of universal values (the 'transcendentals': truth, goodness and unity), being that, beauty, was the underlying value associated to all

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Soul and Soul forms and enters body.'' (Hofstadter and Kuhns, 1976, p. 140). Art, thus, possesses a higher or lower degree of emanation, manifested through it's beauty. The experience of beauty by the soul, gives pleasure because it takes us to the origin of things, where all things are whole and complete. Beauty, then, is a symbol of cosmic harmony and a symbol of a higher reality.

[206] **St. Augustine (354 – 430)** begins his analysis of art from faith and Christianity, aiming to resolve the conflicts between religion and the overall concept of what art is. For St. Augustine the arts make a contribution to the understanding of the Divine order, in the most abstract and intangible sense. Albert Hofstadter and Richard Kuhns (1976) explain that for St. Augustine, '' As long as art agrees with the truths of faith and reflects the harmony of God's creative power it has a justification.'' (Hofstadter and Kuhns, 1976, p. 172). With St. Augustine, the intangible essence of Plato's world of forms becomes the higher realm of God. The highest degree of the manifestation of the Divine Order, of God, is the materialization in art of beauty, for beauty is part of the realm of the divine, of goodness and truth. Art then, aims to materialize that wholeness and that Divine order of the soul. In St. Augustines words: '' So earthly things are subject to heavenly things, seeming to associate the cycles of their own durations in rhythmic succession with the song of the great whole, universitatis. '' (Hofstadter and Kuhns, 1976, p. 186).

[207] Ficcino explains: '' For the Platonists, there are three worlds; therefore, there will be three Chaoses. First of all is God, the author of everything, who we say is the Good Itself. He created first the Angelic Mind, then the Soul of this World as Plato would have it, and last, the Body of the World. '' (Hofstadter and Kuhns, 1976, p. 205).

three. What all the Idealistic Aesthetic Philosophers have in common is the focus on the 'significance' of the work of art as beauty. Beauty, through art, is the link that unites man to truth, goodness and divinity. Therefore, the importance of the work of art lies in the connections it establishes with the pure world of the One, the Soul, of Forms, of Ideas, of God or of the Divine; it's value and it's significance, therefore, lies in how well it emanates from the pure condition as beauty.

Scrutton (2009) explains that the traditional view of art as a metaphysics of beauty and of the soul, begun to be questioned over time, as beauty, goodness and truth begun to be seen as entities that opposed each other: '' From Kierkegaard to Wilde the 'aesthetic' way of life, in which beauty is pursued as the supreme value, has been opposed to the life of virtue.'' (Scruton, 2009, p. 3). However, Scrutton (2009) reiterates that although a separation has occurred in beauty as goodness, there is still a pervading idea that beauty relates to the morally good and there is still a contemplative aspect to it's experience (deeply influenced by Hegel's ideas of he beautiful soul distancing itself from the world to find purity and contemplation[208]) *(see Glossary for further information on authors).* What Scrutton (2009) is emphasizing is the dispute between the classic approach and the modern approach that begun to perceive beauty as something that was part of human culture, and that changed according to it's time and place (a view that begun in the XVII century and continued until the present day).

> ***Synthesis**: Art for the three Aesthetic Philosophers is a reflexion, 'emanation', of the intangible world of the absolutes: either of 'the One' (Plotinus), of the Divine Order (St. Augustine) or of God and Orderliness (Ficcino). Beauty then is a manifestation of that wholeness, it exists in that world connected to truth and goodness. Art's role is to act as a connection to that highly perfect world. Both Beauty and Art, are understood, perceived and created by Love (Ficcino). Art's significance, then, lies in beauty (the connection to the divine).*

… by Hegel: Beauty as a manifestation of spirit and truth

Hegel, sustains (as previously explained) art as a manifestation of the Spirit (or the Absolute Idea); he claims that it finds expression through beauty: '' Art aims essentially at beauty, which is one way in which truth is expressed.'' (Hofstadter and Kuhns, 1976, p. 380). Equally, true beauty, in true art, is a sensuous expression of free spirit for free spirit. However, for his to occur, and in order for it to be understood as significance, there are some properties that need to be enumerated and clarified.

For Hegel, Houlgate (2014) explains, beauty possesses a formal quality, and that is the quality of being 'unified organically'[209]. Further, in art, the idea (manifested through beauty) is beautiful insofar as it becomes accessible to consciousness, through its outward form, and it does so through 'content'. As such, it is not only form 'unified organically' that defines beauty but 'content' which is a reflexion of the freedom and richness of the spirit. Subsequently, genuine art and genuine beauty, have to posses this content, which is the connection to the 'Idea' or 'Self-knowing' spirit and is related to the divine. In genuine art, then, there is a conformity between the 'ideal content' (pure idea) and the 'sensuous,

[208] Scrutton explains that Hegel, in '*The Phenomenology of Spirit*' describes 'the beautiful soul', (drawing from the writings of Goethe, Schiller and Friedrich Schlegel) as that which stands aside from evil in a form of forgiveness of others and of self; the beautiful soul tries to detract itself from the engagement in the real world in order not to destroy it's inner purity. Even today, continues Scrutton, '' 'beautiful soul', meaning that his virtue is more an object of contemplation than a real force in the world.'' (Scruton, 2009, p. 50).

[209] Reference to: '' (…) it is the unity or harmony of different elements in which these elements are not just arranged in a regular, symmetrical pattern but are unified organically.'' (Houlgate, 2014).

imaginative configuration' (its manifestation in form as beauty). The most valuable example of Art and beauty can be found, for Hegel, in the Art and Architecture of Ancient Greek's classical art, where the best example of the perfect union, accordance, between Idea and Form, where: '' Such beauty consists in the perfect fusion of the spiritual and the sensuous (or natural).'' (Houlgate, 2014).

> ***Synthesis**: Hegel, states that art is a manifestation of the Spirit (or the Absolute Idea); and it finds expression through beauty. This beauty is not something that can be understood physically, but is that which emerges from art's content, as the expression of freedom, and connection to the 'Absolute' of the spirit. Although it possesses formal qualities, it is only beautiful insofar as it relates to that truth and freedom of the spirit.*
>
> ***But how does beauty associate to art's significance now?***

… by Tolstoy: The Problematic of Beauty and moving beyond them in Aesthetics

Tolstoy (2013) also indicates this evolution of the traditional conception of 'beauty', but for him, the value is not only the separation from goodness but also what beauty as a principle reveals about the significance of art. He summarizes various aesthetic theories in order to validate his point of view, some of which is now presented. Firstly, Alexander Gottlieb Baumgarten (1714 – 1762), (considered the founder of aesthetics *(see Glossary)*), that sustained beauty was the object of all aesthetic experience, apprehended by the senses (in an imitations of nature's principles). Secondly, the opposing ideas of Sulzer (1720 – 1799) and Moses Mendelssohn (1729 – 1786) that associated beauty in art to a sense of morality. Then follows Winckelmann's ideas that sustained a beauty of form and of expression (rather than beauty as goodness or morality). Also, Kant's views (followed by Schiller (1759 – 1805)) that sustained beauty appeals universally without any other purpose. And then Fichte's aesthetic theories that claims that the marc of beauty is not in something exterior, but in the presence of the 'beautiful soul' of the artist. These are followed by Schelling's ideas, that claim beauty is the image of the infinite in the finite, and that art is a union between the opposites, between the subjective and objective, the unconscious and the conscious. Lastly, Hegel that sustained God reveals himself in nature and in art, by beauty; the truly beautiful then is 'spirit' and everything that reflects 'spirit', such as art *(see Glossary for further information on all authors)*.

> **The evolution of the concept of beauty in art after the metaphysical ideals:**
> As is explained, Baumgarten (the founder of aesthetics), believed that the objective of aesthetic knowledge is 'beauty' (apprehended by the senses), whereas the objective of logical knowledge is truth (apprehended by reason) and goodness is attainable by moral will. Beauty in this sense, has the finality of instilling aesthetic pleasure and desire and is seen as the concurrence of the parts amongst themselves; beauty should then be inspired by nature and the imitation of nature – in Tolstoy's opinion, the real objective of art. After Baumgarten, authors like Sulzer, Mendelson and Moritz, consider that art's finality, unlike Baumgarten, is not beauty but goodness (expressed as beautiful and satisfying moral concerns). For Sulzer beauty in art is that which awakens the feeling of 'morality'[210].

[210] For Sulzer, the finality of humanity is the overall well-being of public life; this is achieved by the education of a feeling of 'morality' and this should be instilled in art: '' Beauty is that which awakens this feeling.'' (Tolstoy, 2013, p. 51) Original quote: '' A beleza é aquilo que desperta este sentimento.'' (Tolstoy, 2013, p. 51)



Photo: Baltic Sea, near Rügen, 1996, and Ligurian Sea, near Saviore, 1993, by Hiroshi Sugimoto; Source: http://www.thisiscolossal.com/2014/04/reflected-landscapes-by-victoria-siemer/

PLATE 22: "BEAUTY IS THE IMAGE OF THE INFINITE IN THE FINITE" : TOLSTOY

> In this sense, beauty unites again with truth and goodness. However, with Winckelmann, once again, these are divided, and art gains again an 'outward' concern; according to Winckelmann, the finality of art is beauty (independent of goodness), and this beauty can be the beauty of form, the beauty of an idea or the beauty of an expression (possible only from the presence of the previous two); this is the supreme finality of art, as found in Antiquity[211]**.** Until Kant's distinct aesthetic theories that defined a new idea of beauty: '' According to Kant, beauty, in a subjective sense, is that which without concepts and practical benefit appeals necessarily and universally, while in the objective sense it is the shape of the object whose purpose is to be apprehended, without any other purpose.'' (Tolstoy, 2013, p. 56)[212]. These views were also followed by Schiller. Also of reference, Tolstoy explains, after Kant, is Fichte's aesthetic theories; according to Fichte nature has two sides, it is the product of ''our limitations'' and it is the product of our '' free'' ideal activities, in this latter attitude, the free see vivaciousness, inner growth, and apprehend beauty; beauty in this sense, depends on the 'perspective' of the viewer; in this sense, art is created for the whole human being, and the marc of beauty is not in something exterior, but in the presence of the 'beautiful soul' of the artist. Schelling, contemporary of Fichte, also has influential views. According to Schelling, Tolstoy explains, art is a product or a consequence of the 'conception' of the world; and as such, '' Beauty is the image of infinite in the finite.'' (Tolstoy, 2013, p. 58) [213]; art is a union between the opposites, between the subjective and objective, the unconscious and the conscious, and because of it, it is the highest form of knowledge. After Schelling, Tolstoy continues, Hegel and his new aesthetic theories are of importance, still sustained today; for Hegel, God reveals himself in nature and in art, by beauty; the truly beautiful is 'spirit' and everything connected to 'spirit' and thus the beauty of nature is a reflexion of spirit; thus: '' Beauty possesses only spiritual content.'' (Tolstoy, 2013, p. 59) [214], but this spiritual, needs a formal and sensorial means to express itself, and that is the 'appearance' (from the German word *Shein*). Thus, for Hegel, truth and beauty are the same thing, materialized in art. Opposing Hegel's views, Tolstoy states, emerges Schopenhauer; for him, 'will' (as abstraction of individuality) is objectified in different levels, and the higher the level the more beautiful it is, but all levels contain their own type of beauty; artistic genius then possesses the higher levels of abstraction and thus reveals the most elevated beauty.

Tolstoy (2013) continues quoting and explaining other more recent aesthetic theories in regards to beauty, however, he claims that all of them possess the same hazy and confused ideals of beauty. All of them include a duality: on the one hand, beauty is understood as something mystical but imprecise, that involves philosophy, religion and life itself (as in Hegel, and his German and French followers); on the other, beauty is just a certain type of disinterested pleasure (as with Kant and his followers)[215]. As a result, in a subjective sense beauty is what awakens in us a certain kind of pleasure; in an objective sense it is something absolutely perfect that exists, outside of us. However, all the definitions of beauty as manifestations (nature, proportions, symmetry, harmony, etc.) define either nothing, or only a property or a characteristic of the condition, and do not include what is 'considered art' or what sustains art's significance[216].

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211 As summarized from pages 45 to 55, of 'What is Art?' by Leo Tolstoy.

212 Free translation from: '' Segundo Kant, a beleza, no sentido subjetivo, é aquilo que sem conceitos e sem beneficio pratico agrada necessária e universalmente, enquanto no sentido objectivo é a forma do objecto cujo propósito é ser apreendido, sem qualquer outra finalidade.'' (Tolstoy, 2013, p. 56)

213 Free translation from: ''A beleza é a imagem do infinito no finito.'' (Tolstoy, 2013, p. 58)

214 Free translation from: '' O belo possui apenas conteúdo espiritual.'' (Tolstoy, 2013, p. 59)

215 Reference to: '' First, that beauty is something that exists in itself, a manifestation of the absolutely perfect – of the idea, the spirit, of the will, of God; the other, that beauty is a certain kind of pleasure obtained by us selflessly.'' (Tolstoy, 2013, p. 70); Free translation from: ''A primeira, que a beleza é algo que existe em si mesmo, uma manifestação do absolutamente perfeito – da ideia, do espirito, da vontade, de Deus; a oytra, que a beleza é um certo tipo de prazer obtido por nós desinteressadamente.'' (Tolstoy, 2013, p. 70)

216 **The inability of beauty in aesthetics to define art's significance:** In this sense, there doesn't exist an 'objective definition of art', to understand art as a 'revelation of beauty' is to believe in an 'incomplete' conception of art. In his words: '' If we recognize that the purpose of any activity is only our pleasure, and just define it in regards to this pleasure, it is clear that this definition is false.

***Synthesis**: For Tolstoy, the aesthetic ideas of beauty (traditional and contemporary) do not define art and it's significance.*

So then what is beauty in Art? And why is it important for significance?

…by Roger Scrutton: Beauty as significance and meaning

Roger Scrutton (2009) demonstrates that because it is possible to find beauty in so many disparate and multiple things, it is possible to understand that beauty is not an inherent property of something but something more (deeper). Beauty, the author summarizes: can be regarded '' (…) as the subject-matter of aesthetic judgment.'' (Scruton, 2009, p. 17). He adds various aspects that define beauty in general and the judgment of beauty: it's judgment demands attention from the viewer and occurs in multiple subjects; wanting something for it's beauty, is wanting to contemplate it in a complex way: it is, a want, without a concrete goal, an open ended action that can see no fulfillment; the object of the beauty one desires, is always unique (cannot be substituted by another); beauty, like art, is there for it's own sake, and therefore it cannot be understood through an instrumental viewpoint; the experience of beauty is founded both on rationality and sensitivity: it is reason, that is challenged to find meaning in the object and to understand what is being contemplated[217]. Scrutton (2009) also adds that the experience of beauty and our desire for it, is associated to transcendental realms: '' We are both in the world and not of the world, and we try to make sense of this peculiar fact with images of the soul, the psyche, the self or the 'transcendental subject'.'' (Scruton, 2009, p. 51). This fact, associates reason, freedom and self-awareness, and is present in both our experience of beauty and in the experience of the sacred ('' Sacred things are not of this world (…).'' (Scruton, 2009, p. 52)). The sacred takes us to the higher conditions of beauty, and therefore beauty is always a matter of degree. The beautiful and the sacred are connected to each other in our emotions, and both experiences have their origin in the embodiment.

Roger Scrutton (2009) also identifies four types of beauty, or four categories, devoting for each a chapter in his book: human, natural, everyday and artistic beauty. For the purpose of this thesis, only artistic beauty will be analyzed (but a brief summary is presented of the other forms of beauty[218]).

That's exactly what happened with the definition of art.'' (Tolstoy, 2013, p. 75) Original quote: '' Se reconhecermos que a finalidade de qualquer actividade é apenas o nosso prazer, e se apenas a definirmos em relação a este prazer, é evidente que esta definição será falsa. Foi exactamente isso que aconteceu com a definição de arte.'' (Tolstoy, 2013, p. 75). Tolstoy clarifies: describing art by its 'judgment' or 'taste' or 'beauty' doesn't clarify the significance of art in any way; furthermore, these concerns, '' (…) not only doesn't contribute to enlighten in what consists this peculiar human activity that we call art, but it makes that enlightenment completely impossible.'' (Tolstoy, 2013, p. 77); original quote: '' (…) não só nao contribui para esclarecer em que consiste esta peculiar actividade humana a que chamamos arte, como torna este esclarecimento completamente impossivel.'' (Tolstoy, 2013, p. 77)

[217] '' I have said about the experience of beauty implies that it is rationally founded. It challenges us to find meaning in its object, to make critical comparisons, and to examine our own lives and emotions in the light of what we find.'' (Scruton, 2009, p. 197).

[218] **Human, natural and everyday beauty:** In human beauty, Scrutton (2009) emphasizes Plato's ideas of two kinds of beauty as love: love for material possession and love for timelessness, the beauty of the soul. He explains that the beauty that is associated to youth and to bodily desires, wants to possess and act upon that love; whereas the beauty that is disinterested awakens only a desire for contemplation: '' The old man's face is full of meaning for us, and if we are looking for satisfaction we find it there, in the thing that we contemplate, and in the act of contemplation.'' (Scruton, 2009, p. 42). In natural beauty, Scrutton explains, is the idea of nature as a universal object of contemplation: It is through nature, that beauty can best be understood, because it possesses a universal force. The experience of natural beauty contains a sort of 'reassurance' of our place in the world. In summary, Scrutton claims, the kind of meaning that we find in nature when contemplating its beauty, does not have much to do with the kind of meaning we find in art. However, all beauty and art are connected in our feelings, hence, '' (…) the experience of beauty comprehends landscape and architecture equally.'' (Scruton, 2009, p. 77). In everyday beauty, Scrutton emphasizes that there is an aesthetics of everyday where the judgment of beauty is carried out at multiple levels and is rooted in experience and tradition; these define a lower form of beauty and even art.

Artistic beauty, the author continues, is the highest form of beauty, and in it lies the value, function and significance of art: a unique, meaningful beauty that is created by man for the spirit of man[219]. Like all other forms of beauty, artistic beauty demands the attention of those who perceive it, for it expresses the true ideals of their makers. Works of art, thus, are created as objects of 'contemplation' and convey messages, significance and meanings through their beauty. Thus, artistic beauty is intrinsically connected to significance is all art forms (however, there are artistic works that use beauty's opposite, ugliness to convey meaning and significance). Which means that beauty (or it's opposite) is only one of the many aesthetic values within the work of art that conveys significance. In brief, Scrutton (2009) claims: '' Art moves us because it is beautiful, and it is beautiful in part because it means something. It can be meaningful without being beautiful; but to be beautiful it must be meaningful.'' (Scruton, 2009, p. 105). This desire for beauty in art and its significance is what allows man to find his place in the world, granting him a metaphysical understanding and guiding man in the pursuit of harmony with the world and with ourselves[220]. Through beauty, real beauty, as significance (related to the artistic object), man understands his own innate condition.

> ***Synthesis**: It is Roger Scrutton (2009) that creates a contemporary understanding of beauty, art and significance. Beauty in general:* is founded both on rationality and sensitivity, *is found in an object that is always irreplaceable, defines a want that is open-ended and that can see no fulfilment, creates connections to the sacred things of life, and beauty exists in degrees (being at it's most intense in the artistic object). Secondly, works of art, created as objects of 'contemplation', convey messages, significances and meanings through their beauty. Through beauty, as meaning and significance (related to the artistic object), man understands his own innate condition and his own place in the world (metaphysical and existential values).*

What else defines beauty as significance in art?

… by Alain de Botton: the 'Ideal' of beauty

For Alain De Botton (2008), the significance of beauty (and of architecture as previously seen) lies in the capacity to 'echo an ideal' and to mirror a certain 'island of perfection'. He writes that a sense of beauty, is deeper than a simple aesthetic pleasure because it is an attraction to a certain kind of life: the object of design, art or architecture, are incarnations (or materializations) of certain values, qualities and speak of lifestyles, ideals messages and visions of happiness. We are hence, compelled to admire the qualities that we wish to possess, admiring the 'beauty' that is projected, completes us. This view is grounded in Stendhal's work *(see Glossary),* as De Botton (2008) explains, when he offered the correlation between 'visual taste' and 'values' by claiming: ''(…) 'Beauty is the promise of happiness'.'' (De Botton, 2008, p.98). This differentiated 'the love for beauty' from the mere academic ideals and aesthetics worries, and connected the appeal for beauty with the conditions, concerns and needs of human

[219] Scrutton (2009), on artistic beauty claims: '' Works of art (...) have a dominant function. They are objects of aesthetic interest. They fulfill this function in a rewarding way, offering food for thought and spiritual uplift, winning for themselves a loyal public that returns to them to be consoled or inspired. '' (Scruton, 2009, p. 99). For Scrutton all art is 'an object of artistic interest' and this fact is their dominant function. As such, judgments are carried out to the art object that can be either uplifting or degrading.

[220] '' We can wander through this world, alienated, resentful, full of suspicion and distrust. Or we can find our home here, coming to rest in harmony with others and with ourselves. The experience of beauty guides us along this second path: it tells us that we are at home in the world, that the world is already ordered in our perceptions as a place fit for the lives of beings like us.'' (Scruton, 2009, p. 174).

life - with the underlying quest of human life. Furthermore, these values, De Botton describes, are associated with what he defines as a 'search for happiness'. So, in his words ''If the search for happiness is the underlying quest of our lives, it seems only natural that it should simultaneously be the essential theme to which beauty alludes.'' (De Botton, 2008, p.98).

In brief: the sense of beauty and the understanding of life (values, principles) are intrinsically connected; which means that to see a work of art, design or space of architecture as beautiful is to understand it as the physical incorporation of the values one considers to be of essence for our own existence. We are attracted to that which completes us: An artwork is 'beautiful' when it grants us the virtues we are missing. In short: '' Art holds out the promise of inner wholeness.'' (De Botton and Armstrong, 2013, p.34). Although De Botton (2008) adds an anthropological point of view, it is a point worth observing and contemplating on.

> ***Synthesis**: Alain de Botton (2008) considers that the significance of beauty lies in the capacity to 'echo an ideal' and to mirror a certain 'island of perfection'; beauty is an attraction to a certain kind of life. Art as beauty then, is the promise of inner wholeness because it echoes (resonates in us) as the virtues we are missing.*

… by Rudolf Steiner: the quality of beauty as a spiritual quality

According to Rudolf Steiner (1992) the semantical origins of the word 'beauty' elucidates it's meaning accurately and it's connection to spirituality: originally it derived from the German 'sheen', it meant 'to shine'[221]. A thing that is 'beautiful' shines forth by showing its nature on its surface; this is the character of what we call 'beauty': that it shows it's 'inner nature' and brings it forth in its 'outer form'. Beautiful, is when the inner qualities are revealed externally. The opposite of beautiful, the author continues, is that which hides its own true nature, ugliness. But furthermore, this element that shines forth, is its 'spiritual element', its own spiritual condition: '' So when we speak of beauty objectively we are thinking of artistic beauty all the time as something spiritual that is revealed by art.'' (Steiner, 1992, p.160). Art, the author continues, has this kind of obligation, to understand this revealing and this 'shining forth'', '' (…) this revelation of the spirit pervading in the world.'' (Steiner, 1992, p.160). In this way, in short, it can be said that: ''All genuine art seeks the spirit.'' (Steiner, 1992, p.160), being this quality of the spirit that makes art become art, and in itself, be 'beautiful'.

The experience of beauty, Steiner (1992) explains, generates the same experiences as being in a dream state: a specific state of both consciousness and unconsciousness. This experience is just one of the three states, man can be immersed in; the others being a state of sleep (unconsciousness) and being awake (fully conscious). It is the dream state (between conscious and unconscious), the third state that man can be immersed in, that is connected to the inner life of the soul, and is connected to beauty: '' Our whole capacity for beauty is founded on our ability to dream.'' (Steiner, 1992, p.181).

> **The three stages of consciousness:** Being asleep, is described as the stage when man leaves the physical and etheric bodies to their selves, and starts belonging to the outer world things When in between awake and sleep, what exists there is simply '' (…) unattached sense impressions moving freely about.'' (Steiner, 1992, p.176). When we are asleep colours move freely, when awake they are attached to weight and to objects. It is this quality of 'free flowing colours' that of the essence:

[221] '' Beauty – taking it now in the German – is connected with the word appearance, or something bright and shinning and you should look for something similar in other languages ('Sheen' has the same root as both the English word 'shine' and the German 'shon').» (Steiner, 1992, p.159).

> «Free flowing colours have the urge to vanish into the far reaches of the world; they are anti-gravity. Earthly things press towards the Earth's centre, (…)'' (Steiner, 1992, p.178). Lastly, the dream state is connected to the inner life of the soul, living in memory. The inner world and the outer world coincide, and there is a connection to beauty: ''If we did not have a dream state nor the power of dream that continues on into our inner life we would not have beauty. Our whole capacity for beauty is founded on our ability to dream.'' (Steiner, 1992, p.181). The experience or the creation of beauty generates the same kind of inner soul experience as the dream. The author explains, that in the sleeping state man in unconscious; in the dreaming state, man is half awake half asleep, and finally in the awake stage, man in fully conscious.

It is art and this type of beauty that can generate a deep kind of experience, connected to feeling and intuition in its multiple forms it can bridge the link between the physical world and the spiritual world. When this occurs: '' The soul will enter the spiritual world as though through a window.'' (Steiner, 1992, p.87). The soul, that is unique to man (the mineral possessing only life, the animal possessing life and a soul, and Man possessing life, a soul and a spirit), can grow and expand, through art and it's beauty. It is this kind of rich experience and deep spiritual connection that allows man to become aware of consciousness and to become consciousness himself allowing man to grow and evolve both emotionally and spiritually.

> ***Synthesis:*** *Rudolf Steiner (1992) argues that beauty is that, which possesses a 'shining, self-revealing quality', that allows for the true nature of the world to come forth; it opposes the concept of ugliness as that which conceals its own true nature, hiding the very essence of the world. Thus, it is this quality of the spirit, as shining through, that makes art become art, and in itself, be 'beautiful'. The experience of beauty generates the same experiences as being in a dream state: a specific state of both consciousness and unconsciousness, connected to the inner life of the soul. Art, through it's beauty, connected to feeling and intuition, bridges a link between the physical world and the spiritual world, developing consciousness and allowing the soul to expand and grow. Allows for emotional and spiritual growth.*

… Understanding Beauty: Conclusion

All theories agree that beauty is an operative embodiment in art: that beauty is indeed the center (the subject-matter) of the aesthetic pleasure, that beauty is the main driving aspect of all artistic creations (including architectural) and that in this beauty is art's significance. Also, all the theories analyzed present beauty as an intrinsic aspect that is elusive in its nature (an open ended quality), that connects to the ideas of virtue, truth and goodness or to an ideal type of life (which can also be understood as possessing virtues and truth).

What they differ on is what beauty itself relates to or echoes and how it connects to those ideas: for the classical tradition it is through a reflexion of the divine order: (the beauty of the work of art, (and of any other creation) was in how well it echoed and embodied the pure condition of beauty as a divine entity; thus, beauty is pursued as the supreme value, as the ultimate significance that can be embodied in a creation; for Hegel it is a reflexion of the freedom and richness of the spirit; for the modern understanding, beauty is a shining (reflecting inner qualities, through an outer form) or an embodying principles that are ideal for life (beauty is not only something intangible that connects to the spirit or that echoes a divine order, but something that can grant us virtues that we are lacking).

Thus, throughout the different theories observed and analysed, we saw that there is an overall idea that the embodiment of beauty is that which contributes to elevate life to a higher realm of existence:

either as a connection to the divine world, as a reflexion of a perfect condition (classical understanding) or as a reflexion of aspects that are lacking in our own life (a more contemporary understanding put forth by De Botton (2008). Although something divine always completes our existence, De Botton (2008) makes a more practical and more rooted in everyday life. Understanding of beauty.

Another aspect that the theories differ on was pointed out by Tolstoy (2013), when he explained that all aesthetic theories understood beauty (as significance) as a sort of pleasure (disinterested aesthetic pleasure), and although that might be true, it is not the main driving aspect of beauty or of art. Thereby Tolstoy views beauty merely as a quality that shouldn't be understood through its 'pleasure'. Tolstoy echoes the more contemporary views, which understand beauty as an elusive quality, rather than as something that allows for a disinterested pleasure.

It was Scrutton that added aspects of the embodiment of beauty as significance, clarifying particularities such as the fact that the judgment of beauty entails both rational and sensitive aspects, that it is a want without a concrete goal (an open ended quality), that in order for something to be beautiful it needs to contain significance within its core, as embodiment; and that through beauty, as significance (embodied in the artistic object), man understands his own innate condition.

As shown, beauty, as meaning and significance (related to the artistic object) is something deeper than mere physical attributes and connects to an idea of 'truth' (which is the value that will be analysed next).



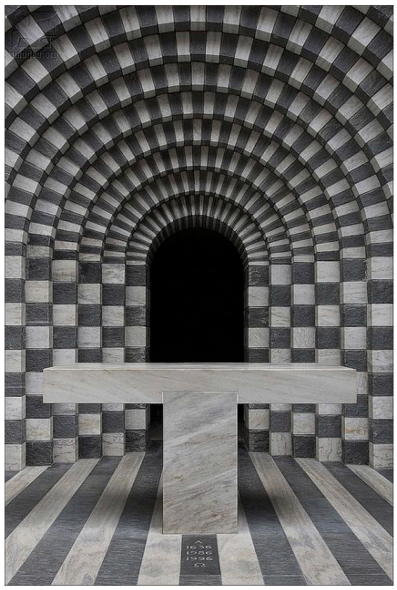




Photo 1: Antony Gormley, 2014; Source:https://pt.pinterest.com/pin/251075747955036207/; Photo 2: San Giovanni Battista Church designed by the Swiss architect Mario Botta; Source:https://pt.pinterest.com/pin/251075747955042938/; Photo 3: Kresge Chapel at MIT by Eero Saarinen; Source: https://pt.pinterest.com/pin/251075747955026493/

PLATE 23: EMBODIMENT AS BEAUTY

Synthesis:

Beauty

1. ***Beauty in general:***
    - *is founded both on rationality and sensitivity,*
    - *is found in an object that is always irreplaceable, defines a want that is open-ended and that can see no fulfilment,*
    - *creates connections to the sacred things of life, and beauty exists in degrees (being at it's most intense in the artistic object), (Scrutton (2009))*
    - *is that which possesses a 'shining, self-revealing quality', that allows for the true nature of the world to come forth; it opposes the concept of ugliness as that which conceals its own true nature, hiding the very essence of the world. (Steiner (1992))*

2. *The experience of beauty generates the same experiences as being in a dream state: a specific state of both consciousness and unconsciousness, connected to the inner life of the soul (Steiner (1992)).*

3. *Tolstoy determines that all the aesthetic ideas of beauty (traditional and contemporary) do not define art and it's significance. It is Roger Scrutton (2009)* ***that creates a contemporary understanding of beauty, art and significance.*** *However in the classical tradition, one can also find the same ideas echoed through contemporary aesthetics, and these are:*

4. ***Works of art, created as objects of 'contemplation', convey messages, significances and meanings through their beauty*** *(Scrutton (2009) and Hegel).*

5. ***Beauty, as meaning and significance (related to the artistic object):***
    - *cannot be understood physically but as that which emerges as content: the expression of freedom, and connection to the 'Absolute' of the spirit (Hegel)*
    - *is an 'emanation', of the intangible world of the absolutes: of 'the One' (Plotinus), of the Divine Order (St. Augustine) or of God and Orderliness, perceived by love (Ficcino).*
    - *is only beautiful insofar as it relates to that truth and freedom of the spirit (Hegel)*
    - *is the promise of inner wholeness because it echoes (resonates in us) as the virtues we are missing. (De Botton (2008))*
    - *allows for a connection to the perfect world (the connection to the divine) (Plato, Plotinus, St.Augustine, Ficcino)*
    - *allows man to understand his own innate condition and his own place in the world (metaphysical and existential values) (Scrutton (2009)*
    - *allows man to create a connection to the 'Absolute' world of the spirit (Hegel)*
    - *allows for emotional and spiritual growth. (Steiner (1992))*
    - *is a quality of the spirit, (that which shines through), that makes art become art. (Steiner (1992))*
    - *bridges a link between the physical world and the spiritual world, developing consciousness and allowing the soul to expand and grow. (Steiner (1992))*

6. ***As shown, beauty, as meaning and significance (related to the artistic object) is something deeper than mere physical attributes and connects to an idea of 'truth' (which is the value that will be analysed next).***

7. *The* ***significance of beauty lies in the capacity to 'echo an ideal' and to mirror a certain 'island of perfection'*** *(De Botton (2008))*.

8. ***Beauty, as a shining of the soul, is the one property that makes art be art, and in which lies all it's significance*** *(Steiner (1992))*.

5.2. TRUTH

There are numerous theories that accentuate that beauty is merely a name that is given to describe a deeper idea, which is that of truth. These theories, do not focus on beauty as the real significance of the artwork but instead understand truth to be where the real significance exists; although some of these theories may find their roots in morality, others search through a more philosophical perspective, as the work will show. Some of these theories will be studied and presented in the hopes of defining this 'truth' as significance.

… by Saarineen: truth as form and true Art

The first author that will be presents is Saarinen (1948), *(see Glossary),* who places truth as the one single value and significance of art, upon which all other significances can emerge. Saarinen has a very specific understanding of 'truth' in regards to art: he says that the word truth, in art, means the same as 'indigenously creative' (direct, true, creative and expressive); thus, for an artwork to be 'true' and possess 'truth', then, it needs both 'expressiveness of character and meaning' and the creative quality of form[222]. This truth echoed and contained in the work of art, does not depend on the means of expressions, on the 'language' or the manners used (these might reflect it, but do not decide it or define it), it is simply: '' (…) the fundamental quality of one's being. '' (Saarinen, 1948, p. 202). Saarinen (1948) further states that truth must be 'relatively' understood: the search for perfection, a vain search, may lead to the 'death' of art, whereas relativity opens a way for 'movement', 'change' and 'life'; in consequence, formulas or rules are in direct contradiction with the individual nature of 'truth' that depends on 'individual freedom'. Truth is a 'mental disposition' that depends on the desire for truth, not on any set of rules. In art, the more the artist is possessed with a sincere 'desire for truth', the more the 'quality' will be transferred into 'his work'. Truth, then, is a condition of art (understood as form, freedom and the desire for 'truth'), is expressed and understood through both emotional and cognitive considerations (which are manifest through 'truth'), is what echoes it's significance and what allows for all the other significances to emerge. Art then is a result of this dual nature of logic and emotions, as manifested through 'truth', just like the universe[223].

> ***Synthesis:***
> *For Saarinen (1948), truth in art, means 'indigenously creative' (direct, true, creative and expressive), is expressed as both 'expressiveness of character and meaning' and the creative quality of form and is an echo of the fundamental quality of one's being. Truth, then, is a condition of art (understood as form, freedom and the desire for 'truth'), is expressed and understood through both emotional and cognitive considerations, is what echoes it's significance and what allows for all the other significances to emerge.*
>
> ***What other ways can truth be understood?***

[222] Therefore, between the notions of ''true art'' and ''untrue art'' is the implications that the art is produced, or not, with '' (…) true expressiveness of the character of the occasion and with sensitiveness to the fundamentals of creative art.'' (Saarinen, 1948, p.196). Thus, '' As we see, then, ''true expressiveness of meaning'' and ''creative quality of form'', are the categorical prerequisites in the appraisal of true art.'' (Saarinen, 1948, p.196).

[223] In this sense, the author uses the clarification (an example) of the universe possessing this duality in mutual cooperation: '' (…) The logical thought of the universe is dual. In the first place it is logically intellectual, directing the regularly functioning universe. In the second place it is (…) emotionally directing the manifestations of the universe towards life.'' (Saarinen, 1948, p.208). It is both masculine and feminine, in a 'duality of logic'.

… by Hegel: truth as spirit and Art as a free creation of the spirit

Hegel conveys the idea that the word truth, in art, has a different significance. He sustains that art is a manifestation of truth, which is the basis of the Spirit and of the Absolute, through beauty; it was in this manifestation of truth (through beauty) that art's significance existed.

> **Hegel's Contextualization:** Hegel's (1770-1831) aesthetics forms part of the German aesthetics group, and he was deeply influenced by Winckelmann, Kant and Schiller. His ideas later influenced both Heidegger and Adorno. Hegel's aesthetics, philosophy of art, is mostly concerned with beauty in art, with the development of art and the different types of arts (Houlgate (2014) for the Stanford Encyclopedia of Philosophy, '*Hegel's Aesthetics'* (2014), claims: '' Hegel's philosophy of art is a wide ranging account of beauty in art, the historical development of art, and the individual arts (…).'' (Houlgate, 2014, p. 1).). It forms part of his philosophy of spirit and is defined is his *Encyclopaedia of the Philosophical Sciences* (1817, 1827, 1830), within the category pertaining to the 'absolute spirit', (to which follows only the part on the philosophy of religion), where he analysis numerous works of art, examining forms of beauty, in order to draw the adequate understanding. However they aimed to be supplemented by lectures (some were written down by his students) and therefore there is no full or accurate definition of Hegel's aesthetics.

But what is this truth? Truth, in art, for Hegel relates to his idea of spirit: a living entity that sustains and defines all reality, which is the basis of the absolute[224] and contains both truth and beauty, in the realm of the Absolute. Art, then is the expression of spirit in an understanding of itself (which is it's exclusive purpose, and what distinguishes art from other disciplines)[225]; artistic objects (as expression of the free spirit), then, allow for the freedom of the spirit to be made visible as both truth and beauty. As such, '' The purpose of art, for Hegel, is thus the creation of beautiful objects in which the true character of freedom is given sensuous expression.'' (Houlgate, 2014), of which truth is a requirement. The principal aim of art, then, is to allow us to contemplate images of our own spiritual freedom, allowing us to be aware of the truth of ourselves and to understand who we really are (in this lies art's significance).

Art, then, for Hegel can be descriptive, decorative or moral, however in doing so, it fails to grant us the real aesthetic experience of freedom of the spirit and fails to achieve it's main significance. Art that falls short of the understanding of the free spirit, which does not spring from it, lacks beauty (and truth) and therefore is bad art. Therefore, to be true and beautiful, Hegel believes that art should be created 'naturally' following nature's principles, but exclusively as a creation of man's spirit and freedom. Nature can create a formal beauty but only spirit can create true beauty and truth, through art. Beauty, then, one of the aims of art, is just one of the ways truth can be expressed.

Hegel states that, '' (…) the value and meaning of the arts depends on understanding ''(…) the Idea toward self-consciousness. '' (Hofstadter and Kuhns, 1976, p. 380). It is the understanding of the Truth, manifested as freedom and as beauty, contained in the work of art, as it grows consciousness in the viewer, that grants art its value and it's significance.

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[224] Albert Hofstadter and Richard (1976) explain that for Hegel, in the '*Phenomenology of the mind'* the true is not only substance but also a subject: a living entity, the basis of the Spirit or the Absolute ('' The highest level of the evolution of the spirit or mind, Hegel called ''the Absolute''. '' (Hofstadter and Kuhns, 1976, p. 378).) and is what defines and sustains all reality.

[225] Houlgate (2014) explains that for Hegel, art, like philosophy and religion, '' (…) gives expression to spirit's understanding of itself. '' (Houlgate, 2014). It is different from the other disciplines because it creates objects with that exclusive purpose; '' It differs from philosophy and religion, however, by expressing spirit's self-understanding not in pure concepts, or in the images of faith, but in and through objects that have been specifically made for this purpose by human beings.'' (Houlgate, 2014).

***Synthesis**: Art for Hegel is a free creation of the spirit, as truth and beauty (the two essences contained in the spirit), and in doing so, allows man to understand his own spirit as freedom and so growing and expanding his consciousness. Art, then, is to bring truths about ourselves into existence, embodying the free spirit and revealing the true character of freedom and it communicates to man's spirit through consciousness. The significance of art is in showing us what divine and human freedom look like, allowing for the spirit's self-understanding of its own freedom, through beauty and truth.*

What other ways can truth be understood?
How does this truth arise?

… by Heidegger: Art as an establishment of Truth: through World and Earth

'' Thus like Hegel and others before him, Heidegger assigns to art a supreme role in human experience. Indeed, as he points out, art, being an origin of the establishment of truth, is at the same time an origin in the history of a people. '' (Hofstadter and Kuhns, 1976, p. 647).

Martin Heidegger (1989) accentuates truth as significance in art in yet another way. Heidegger (1989) defends that in the contact with the work of art we are transported to another place, being through the work that the intrinsic qualities of truth really come to light: an opening occurs, and through the work derives a happening of truth. As a result, the work of art is designated as the place of the occurrence of truth, which is both 'timeless and supratemporal'[226]. Truth for Heidegger (1976), Hofstadter and Kuhns (1976) also explain, is thus unconcealment; it is the connection and relation between the being and 'what is'. The truth that is revealed by the work of art is not a particular kind of truth but a universal one, a 'truth of all that is', like a 'revelation'. Art, then, the authors continue, in Heidegger, is a created entity where truth arises in a unique way and has the function of revealing to man universal truths in regards to his own essence[227]. Heidegger comments that this truth arises through poetry. Art, then, is understood as a 'poetical essence', being the poetry itself that allows the 'opening', revealing the truth; by this way, all art is in its own essence 'poetry'. Art's essence (and significance) lies in these qualities as a 'thing' that communicate truth through poetry.

The work of art as a thing: Martin Heidegger (1989) explains that the artwork is first a thing, in which the properties are met and expressed, and in which the core of the thing lies. 'The thing', Heidegger explains is something like a support of a set of characteristics; The 'thing' comes to be: by sight, by ear, by touch, through sensations of colour, sound, stiffness, or materiality and is apprehended by feeling and emotions that have the ability to perceive and better understand it (for the faculty of reason and rational interpretation do not have these abilities). It is the senses of sensitivity that perceive, being through emotions, feelings and sensations that something is and becomes perceptible. The concept of 'the thing' derives from the synthesis of both matter and form; however, the character of the artwork, its 'thing' character derives from its matter alone. In his words: ''The distinction between matter and form, and certainly in many different varieties, is the conceptual scheme par excellence for the entire aesthetics and theory of art.'' (Heidegger, 1989, p. 20) [228]. In architecture, for example, the relationship between form and matter can be a strong link, which accentuates and corroborates Heidegger's views.

[226] Free translations from: ''A verdade, diz-se com efeito, é algo intemporal e supratemporal.'' (Heidegger, 1989, p. 29)
[227] Reference to: '' Art has the fundamental historical function of revealing to man the being which is entrusted to him in the fulfilment of his human activity as individual and as a people.'' (Hofstadter and Kuhns, 1976, p. 649).
[228] Free translation from: '' A distinção entre matéria e forma, e decerto nas mais diferentes variedades, é o esquema conceptual por excelência para toda a estética e teoria da arte.'' (Heidegger, 1989, p. 20)

However to really understand what this 'truth' means, and how it occurs in the work of art, Heidegger (1989) creates other concepts: the concepts of 'world' and 'earth'. He writes that 'being a work of art' means to install a 'world'; in his words: '' Rising in itself, the work opens up a world and keeps it in a permanence that slept. Being the work, means**,** installing a world.'' (Heidegger, 1989, p. 34) [229]. 'World' relates to that which is intuited through the work of art, as significance and meaning (beyond the existing and tangible things); it is connected to the existential plane of being and occurs as an amplitude that is opened by the artwork. But this 'world' needs a physical existence in order to exist, which is 'earth' (connected to matter and materiality). The artwork, on one hand creates and installs 'world', and simultaneously, produces 'earth'. The 'earth' (materiality), contains in itself the 'world' (being). Both concepts are inseperable and occur with all works of art (they are part of what defines a work of art); however, each one has it's own value and characteristics: while 'world' opens up, 'earth' shelters, contains and protects. In his words: '' The world aspires, in its stand on earth, to overwhelm it. As that which opens, it tolerates nothing that is closed. The land however, as that which gives shelter, tends to relate and contain itself and the world.'' (Heidegger, 1989, p. 38 [230].

The work of art exists because of the fighting between 'world' and 'earth', being through this fight that the growing unity and truth of the work emerges. This unity (truth), is acquired in the simplicity of intimacy: '' In the intimacy of the combat is the stilling of the work, itself resting, bearing its essence.'' (Heidegger, 1989, p. 39)[231]. Therefore, 'truth' is a des-occultation that emerges naturally, in the intimacy of the fight between 'world' and 'earth', and can be understood as beauty[232]. The clearing truth and the 'shine' of the work is in itself the beauty. Occultation in turn, is seen as a dissimulation of truth, as is the quality of weak works of art. Thus, the essence of the artwork is in the creation process, where the creator can also be understood[233]. Regarding the work of art, Heidegger concludes that we '' (…) rather represent it as an object that should elicit certain ''states of soul''.'' (Heidegger, 1989, p. 55) [234]

> '' Martin Heidegger writes that artistic meaning, in its most fundamental sense, rests on an intricate interplay of showing and concealing; it is the embodiment of truth as *aletheia*. The work of architecture is no mere bearer if meaning, as if the meaning could be transferred to another bearer. Instead, the meaning of the work lies in the fact that it is there.'' (Pérez-Gómez, 2008, p. 116).

***Synthesis**: Truth for Heidegger is that which describes and defines the work of art; it arises in the work through poetry; it is poetry that allows for the revealing of truth. Art's essence (and significance) lies in these qualities as a 'thing' that are*

[229] Free translation from: '' Levantando-se em si mesma, a obra abre um mundo e mantém-no numa permanencia que domia. Ser obra, quer dizer, instalar um mundo.'' (Heidegger, 1989, p. 34)
[230] Free Translation from: '' O mundo aspira, no seu repousar sobre a terra, a sobrepujá-la. Como aquilo que se abre, ele nada tolera de fechado. A terra porém, como aquela que dá guarida, tende a relacionar-se e a conter em si o mundo.'' (Heidegger, 1989, p. 38)
[231] Free Translation from: '' Na intimidade do combate é que a quietação da obra, em si mesma repousando, tem a sua essência.'' (Heidegger, 1989, p. 39)
[232] Heidegger thus further explains that '' (…) beauty is the way by which the 'truth' as des-occultation occurs''. (Heidegger, 1989, p. 45); Free translation from: ''A beleza é um modo como a verdade enquanto desocultação advém.'' (Heidegger, 1989, p. 45)
[233] However, Heidegger explains: '' But the creator of the work only gets clearly understood through the process of creation.'' (Heidegger, 1989, p. 46) . Thus, the search for the essence of the work involves the search for the essence of the creation. Free translation from: ''Mas o ser-criado da obra só se deixa manifestamente compreender a partir do processo de criação.'' (Heidegger, 1989, p. 46)
[234] Free translation from: '' (...) antes a representamos como um objecto que deve suscitar determinados ''estados de alma''.'' (Heidegger, 1989, p. 55)

> *communicated as truth through poetry. The work of art is defined as the place of the occurrence of truth, which is both 'timeless and supratemporal'. The artwork, then, through the creation of 'world' (connected to being), and 'earth' (related to matter), defines it's essence as truth, through the 'combat' between both. When the artwork is this truth, world and earth, it provokes and materializes 'states of soul'.*

What other ways can truth be understood?
How does this truth arise?

…by Pallasmaa: Art as an Artistic Image (life and magic)

Pallasmaa (2011) also defines another understanding of truth and how it emerges in the work of art. Pallasmaa (2011) expresses that art is associated to the idea of an artistic image; the means by which plastic arts (architecture, painting and sculpture) communicate. Artistic images, he accentuates, are not mere figures: they are 'entire worlds' and 'complete micro-cosmos'. Through the understanding of art as these complex worlds '' (…) the imaginary obtains the authority of the real and the real becomes a mystery.'' (Pallasmaa, 2011, p. 88) [235]. It is of reference to clarify the word 'image'. Pallasmaa (2011) remarks that although the word has been extremely misused (and that there are images that restrain and others that generate growth), he states that no artistic impact can unravel without the mediating faculty of the image that evokes and sustains an emotional connection.

> **Image:** Pallasmaa (2011) clarifies that the word 'image' has been misused: it has been used in the same way, for diverse kinds of contexts and significances. 'Image' today, can refer to both publicity images, objects of perception and imagination entities. In the same way, 'Images' are employed in the most diverse ways, serving the most infinite kinds of aims. However, Pallasmaa clarifies that one can distinguish two kinds of images, opposing in themselves in relation to the individual freedom of the subject: '' (...) Images that determine, manipulate, and condition, while others emancipate, assign powers and inspire. The first type is exemplified by images created for political conditioning and consume; the second, by emancipating poetic and artistic images.'' (Pallasmaa, 2011, p. 21) [236]. The first category, restrains and conditions freedom and individuality of the subject, and is based in provoking feelings of guilt and inferiority on the subject; whereas the second category, opens and fortifies emotions, freedom and personal affections. Of the second type, it is an example the 'Poetical Image' and the 'artistic image' that reinforces our notions of existence and independence. Although the concept of the 'image' has been profoundly used, being usually associated to the momentary and the instantaneous, Pallasmaa highlights, that it is through the image that the most profound architectural and artistic experiences, rooted in terms of existence and experience, affect our minds through images, that are '' (…) condensations of essences distinct of architecture.'' (Pallasmaa, 2011, p. 11) [237].

The artistic image, Pallasmaa (2010) further states, (or simply art), is a result of a deep and distinct way of thinking; this way of thinking, is not a reflexion of a certain theory, but are modes of existential and embodied thought in a form of expression. To convert these 'thoughts' in a creation, art uses 'mental and poetic' images that recreate the established, and define a 'novelty' factor and a new 'temporality': at the same time they reflect the culture of the past, they also interrupt time in eternalized images. These 'deep images', present in all art forms, project a sense of life, of having roots, a sense of totality, of life and of magic. In doing so, this causes what he describes as a logic of 'short-circuit' in our

[235] Free translation from: '' É a plenitude e a totalidade microcósmicas das imagens artísticas que lhe dá autoridade e conteúdo inesgotável. Por meio de nossa capacidade de identificação emotiva, o imaginário obtém a autoridade do real e o real se torna um mistério.'' (Pallasmaa, 2011, p. 88)
[236] Free translation from: '' (…) imagens que determinam, manipulam, e condicionam, enquanto outras emancipam, atribuem poderes e inspiram. O primeiro tipo é exemplificado por imagens criadas para o condicionamento politico e do consume; o Segundo, por imagens poéticas e artisticas emancipadoras.'' (Pallasmaa, 2011, p. 21)
[237] Free translation from: '' (...) condensações de essências distintas da arquitectura.'' (Pallasmaa, 2011, p. 11)

faculties and in our categories of life (reality, dream, beauty and significance). It is that 'short-circuit' that produces the 'aura' of the work of art[238]. In order for this to occur: '' All the ingredient of the artistic image is endowed with life.'' (Pallasmaa, 2011, p. 45)[239].

In consequence, for Pallasmaa (2010), this is what defines the 'truth' contained within the artwork: a deep connection with the world that projects a sense of life, of having roots and a sense of totality, defining a sort of 'new temporality'. This truth, is associated to the aura of the work of art and is connected to primitive ways of thinking and living (search for the mythical understanding of the world).

> ***Synthesis**: Pallasmaa (2011) states that truth in art: reflects modes of existential and embodied thought, is a deep connection with the world that projects a sense of life (of having roots and a sense of totality) defining a sort of 'new temporality', is associated to the aura of the work of art and is connected to primitive ways of thinking and living (search for the mythical understanding of the world).*

… by Ruskin: Art as language of truth

John Ruskin (1903)[240] expresses that art is a noble and expressive language, that has it's value in the messages and significance it communicates: ideas as truth. Therefore, he continues, the greatness of an artist and his art lies in what is being created and being said[241]: connected to both the power to delight the senses and the intellectual force that sustains it. A great artist then, is that which succeeds in portraying with force what he aims to communicate, in this way, all artists can also be considered 'great poets'. Many art forms, then, are only connected to language (an inferior type of art), and fail to portray the other force of excellence in art, which is the thought that sustains it and where the real 'excellence' of art can be found (where truth can be found). In painting, for example, the finished work is only better than the sketch, for example, for its ability to better clarify the thought that sustains it. This is what some art aestheticians describe as the 'idea' contained in art, meaning the thought processes that is carried out by the eye into the intellect. Therefore, art is only great, insofar as it conveys a greatest number of great ideas[242] . Ruskin (1903) defines five types of 'great ideas' that are communicated in the work of art (although all of these great ideas could be considered as forms of truth); these are: Ideas of Power (mental or bodily powers by which the work has been produced), Ideas of Imitation (the perception of resemblance), Ideas of Truth (the perception of faithfulness and honesty), Ideas of Beauty (the perception of beauty, either in the thing produced, or in resemblance), and lastly the Ideas of Relation (the perception of intellectual relations). All ideas, are communicated independently from the nature of what is being depicted; they act as a continuum, as a whole.

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[238] He explains that '' That logic short-circuit produces the ''aura'' of a work of art that was recognized by Walter Benjamin.'' (Pallasmaa, 2011, p. 57) Walter Benjamin, The work of art in the age of Mechanical Reproduction, Schocken Books.

[239] Original quote: ''Todo o ingrediente de uma imagem artistica está dotado de vida.'' (Pallasmaa, 2011, p. 45)

[240] **John Ruskin's Contextualization:** John Ruskin (1819-1900) in his book *Modern Painters (…),* defines certain qualities that are necessary, to the production of Art. The book aimed to clarify all aspects concerning art, not only in Ruskin's time, but universal in value. Ruskin, in order to clarify what is greatness in art, explains that there is a distinction between the painter's intellectual power and his technical knowledge; he claims: '' Painting, or art generally, as such, with all its technicalities, difficulties, and particular ends, is nothing but a noble and expressive language, invaluable as the vehicle of thought, but by itself nothing.'' (Ruskin, 1903, p. 87).

[241] As such, he continues: '' It is not by the mode of representing and saying, but by what is represented and said, that the respective greatness either of the painter or the writer is to be finally determined.'' (Ruskin, 1903, p. 88).

[242] As such, art then, Ruskin explains: '' (…) is greatest which conveys to the mind of the spectator, by any means whatsoever, the greatest number of the greatest ideas; and I call an idea great in proportion as it is received by a higher faculty of the mind, (…).'' '' (Ruskin, 1903, p. 92). Therefore, '' He is the greatest artist who has embodied, in the sum of his works, the greatest number of the greatest ideas.'' (Ruskin, 1903, p. 92).

Summary of the Five Types of Ideas Communicated by Art:

Ideas of Power relate to the dignity of the idea, and are associated to the perception of 'excellence', they are associated to perfect art forms. Ideas of imitation rely on some form of deception and the understanding of that deception, they act by producing the emotion of surprise, Ruskin explains: '' Whenever then in future, I speak of ideas of imitation, I wish to be understood to mean the immediate and present perception that something produced by art is not what it seems to be.'' (Ruskin, 1903, p. 103). Ideas of truth, relate to honesty: '' The word Truth, as applied to art, signifies the faithful statement, either to the mind or senses, or any fact of nature. We receive an idea of truth, then, when we perceive the faithfulness of such a statement.'' (Ruskin, 1903, p. 105). In this sense, then, one idea of imitation may contain multiple ideas of truth, and therefore be stronger in character than a simple idea of truth. For ideas of beauty, Ruskin calls beautiful that which is considered 'beautiful' without the definite exertion of the intellect; it relates to taste, in the sense that '' Perfect taste is the faculty of receiving the greatest possible of the term pleasure from those material sources which are attractive to our moral nature in their purity and perfection.'' (Ruskin, 1903, p. 110); as such, people that lack taste receive pleasure from all other sources. Judgment, unlike taste requires an appreciation by part of intellect, and so, judgment is connected to the ideas of beauty in art. But Ruskin explains, ideas of beauty are connected to moral concerns rather than only intellectual ones. Ideas of relation connect all ideas of connection to specific sentiments, forms, expressions, or any other means, but they involve the faculties of intellectual powers for their appreciation.

Artists, then, explains Ruskin, should not be concerned with capturing the real content of what they want to portray, but instead aim at representing the character of things, that contains thoughts[243] and truth. He says that the old masters of painting aimed only at imitation, whereas modern painters aim at that deeper character of truth. For Ruskin, this type of materialization of thoughts and truth in art depends on the faculty of imagination (analysed in the imagination chapter) and is led by a desire towards the supernatural. The desire of the supernatural (belongs to art as truth), is a spiritual nature that relates to divinity as much as to man's aspiration to the divine and to transcendence. It can be manifest as form, as feeling or as principle and is guided by the search towards the ideal[244].

In architecture, as previously seen, Ruskin (1903) defines the Lamp of Truth as one of the seven lamps of architecture. The **Lamp of Truth**, is defined by the spirit of honesty and understanding of 'truth', because for Ruskin, the work needs to be brought about by truth and in truth. Ruskin claims: '' It is, indeed, marvellous to see what power and universality there are in this single principle, and how in the consulting or forgetting of it lies half the dignity or decline of every art and act of man.'' (Ruskin, 1903, p. 57). It is necessary, then, to distinguish what it truth and what is deception. The action of imagination is not an act of deception (as previously believed) but an act of truth, '' It is a noble faculty so long as it confesses its own ideality; when it ceases to confess this, it is insanity.'' (Ruskin, 1903, p. 58). In architecture, truth is connected to the honesty of materials, honesty of means and execution, honesty of colour which is that of its natural materials, and honesty of ornamentation; if architecture uses means to hide it's truth of materials, or of construction, then it is being deceitful; it is a form of corruption of its

[243] '' (…) the exquisite truths of specific form, refined colour, and ethereal space, and content with the clear and impressive suggestion of any of these, by whatsoever means obtained.'' (Ruskin, 1903, p. 165).

[244] He explains: '' In some cases these conditions result partly from feeling, partly from ignorance of the facts of nature, or incapability of representing them, as in the first type of the treatment found in Giotto and his school; in others they are observed on principle, as by Benozzo Gozzoli, Perugino, and Raffaelle.'' (Ruskin, 1903, p. 320). In the representation of the supernatural character, Ruskin points out, is by purity of colour 'almost shadowless', using only the just amount of darkness that is absolutely necessary, for the communication of the forms and character; this brightness of colour is associated to a purity and harmony. Simultaneously, the supernatural character searches for the ideal form: uses symmetry and proportions.

own nature. Truth in architecture, thus, regards to honesty in all aspects of conceptualization, construction and ornamentation; a consistency of values, and an honesty of intentions and execution.

> ***Synthesis**: Ruskin (1903) argues that art is a noble and expressive language, that has it's value in the messages and significance it communicates: ideas as truth. Truth, thus, is that which is communicated in art as a 'great ideas': the thought that sustains it and where the real 'excellence' of art can be found. This truth is associated to two other things: imagination and the desire for the supernatural.*

… Understanding Truth: Conclusion

All theories agree that truth is embodied in the work of art, that it is that which describes and defines the work of art (it's significance) and that it allows significances to emerge (Saarinen (1948), Heidegger and Ruskin (1903)). As we saw previously, truth I, the classical tradition was deeply connected to beauty. However, the contemporary understanding has a more evolving understanding of truth. Truth was understood in a two fold way: firstly that it's aim (and significance) is to bring truths about ourselves into existence, as defined by Hegel, which echoes the traditional understanding of truth as a divine essence that can be contained in fragments in creations; secondly, that it is something that is both 'timeless and supra-temporal' (a quality identified by Ruskin, and echoed by the other authors). Authors further agree that it is both expressed and understood through both emotional and cognitive considerations (specially Saarinen (1948) that made this very clear).

What they differ on is what that truth itself is, where each author pointed out a specific aspect of 'truth': for Saarinen (1948) it is an 'indigenously creative' property (direct, true, creative and expressive), that is an echo of the fundamental quality of one's being; for Pallasmaa (2011), it is an reflection of existential and embodied thought, connected to primitive ways of thinking and living, that has a sense of totality and creates a new temporality; for Hegel, it relates to the spirit as freedom, for Ruskin (1903) it is that which is associated to the imagination, the desire for the supernatural and that which communicates great ideas, and lastly, for Heidegger, truth is that which emerges through the 'fight' and combat between the creation of 'world' (connected to being), and 'earth' (related to matter).

Although the authors accentuate in different ways aspects of the embodiment of truth, the views do not contradict each other, but instead corroborate each others ideas, in different ways. It is clear, that truth is an essence that is 'unworldly', 'supernatural' and creates a 'new temporality', connected to both the primitive and the imagination.

Heidegger accentuated a different aspect, which is that truth arises in the work through poetry; it is poetry that allows for the revealing of truth, and in this coordination lies art's significance. (Poetry is the embodiment that will be analysed as follows).

And lastly, Ruskin connected truth to architecture, when he claimed that truth was something that needed to exist firstly as an understanding, and secondly, something that needed to be carried out in the work itself, in order that all elements of the architectural element, echo truth (integrity and honesty of the materials and of structure, for example).

Thereby, as a summary, it is possible to understand that truth is that which is embodied in the artwork as significance, but in order to do so, it needs to be connected to both a worldly and a personal truth: defining firstly the 'background' of the creator, and secondly materialized in a way that truthful.

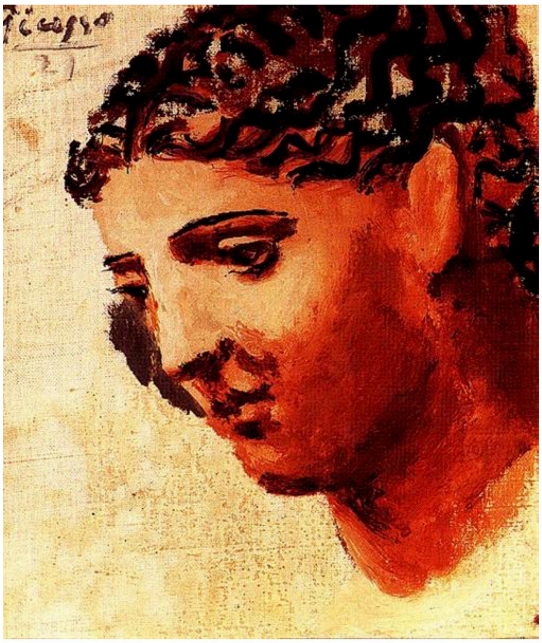




Photo: Head Of WomanPablo Picasso, 1923; Source: http://www.wikiart.org/en/pablo-picasso/head-of-woman-1923?utm_source=returned&utm_medium=referral&utm_campaign=referral; Photo 2: Casa Batllo, Barcelona, by Antoni Gaudi; SOurce: https://pt.pinterest.com/pin/251075747955026486/;; Photo 3: Nocturne Grey and Gold - Canal, 1883-84 - James McNeill Whistler; Source: https://pt.pinterest.com/pin/251075747947357570/



PLATE 24: THE EMBODIMENT OF TRUTH: SPIRIT (HEGEL), WORLD AND EARTH (HEIDDEGER)

Synthesis:

Truth

1. ***Truth is that which describes and defines the work of art (Heidegger), is what defines it's significance*** *(Saarinen (1948), Heidegger and Ruskin (1903))*, ***is what allows for all the other significances to emerge*** *(Saarinen (1948)) and is what defines excellence in art (Ruskin (1903))*

2. ***Art, is a free creation of the spirit, as truth and beauty*** *(the two essences contained in the spirit****); then, it's aim (and significance) is to bring truths about ourselves into existence, embodying the free spirit and revealing the true character of freedom and it communicates to man's spirit through consciousness*** *(Hegel).*

3. ***Truth in art:***

   - ***means 'indigenously creative'*** *(direct, true, creative and expressive), is expressed as both 'expressiveness of character and meaning' and the creative quality of form and is an echo of the fundamental quality of one's being (Saarinen (1948))*
   - *is expressed and understood through both emotional and cognitive considerations, is what echoes it's significance and what allows for all the other significances to emerge (Saarinen (1948)).*
   - ***reflects modes of existential and embodied thought, is a deep connection with the world that projects a sense of life*** *(of having roots and a sense of totality) defining a sort of 'new temporality' (Pallasmaa (2011))*
   - *is* ***associated to the aura of the work of art and is connected to primitive ways of thinking and living*** *(search for the mythical understanding of the world) (Pallasmaa (2011))*
   - ***allows man to understand his own spirit as freedom and through this growing and expanding his consciousness*** *(Hegel)*
   - ***is that which is communicated as a 'great ideas'****: the thought that sustains it and where the real 'excellence' of art can be found. (Ruskin (1903))*
   - *is* ***associated to imagination and the desire for the supernatural****. (Ruskin (1903))*
   - *emerges* ***through 'fight' and combat between the creation of 'world' (connected to being), and 'earth'*** *(related to matter) (Heidegger)*
   - *is both* ***'timeless and supratemporal'*** *(Heidegger)*

4. ***When the artwork is this truth as world and earth, it provokes and materializes 'states of soul'*** *(Heidegger)*

5. ***Truth arises in the work through poetry; it is poetry that allows for the revealing of truth.*** *Art's essence (and significance) lies in these qualities as a 'thing' that are communicated as truth through poetry (Heidegger).*

6. *Ruskin connected truth to architecture, when he claimed that truth was something that* ***needed to exist firstly as an understanding****, and secondly, something that needed to be carried out in the work itself, in order that all elements of the architectural element, echo truth (integrity and honesty of the materials and of structure, for example) (Ruskin (1903).*

5.3. POETRY

The natural succession of the work has lead us to understand that the significance of art is not only defined by 'beauty' and by 'truth' but also by something else that can be found in both, or that is the means by which truth arises (as defined by Heidegger): that special thing is poetry. A new kind of embodiment emerged which needs further clarification.

What does 'poetry' mean?

A general understanding of poetry….

Poetry can generally be understood as '' Writing that formulates a concentrated imaginative awareness of experience in language chosen and arranged to create a specific emotional response through meaning, sound, and rhythm.'' ("Definition of Poetry," 2015); it can also be described as a quality, referring to a sort of beauty of expression. In general, all poetry possesses the quality of moving the viewer deeply, evoking emotions through it's message, its significance and its range of meanings. Poetry, in its traditional literary sense uses words (rhythm, personification, paradox, symbolism, metaphor and other techniques) in order to evoke meanings and significances that are beyond and more 'intangible' than its literal one and so establishing a unique connection with the reader (through the triggering of personal memories, imagination and unconscious capacity of mind).

Poetry in art (art's poetics), belongs to the realm of aesthetics; and therefore, just like aesthetics itself, is difficult to define accurately. Similarly to the traditional literary sense of poetry, poetry in art and architecture uses visual (non-verbal) language to communicate meanings and significances. But that doesn't define poetry as the root of significance in art.

What is a poetic image?

… by Gaston Bachelard: The Poetic Experience

According to Bachelard (2005), poetry can firstly be understood by it's fleeting character that is less clear and sharp that a dream, acting on the self just like 'an ice of an istance' [245]. Secondly, it is a complex essence that should go beyond the simple metaphor, in this way reflecting an implicit metaphysics and a set of ontological values. In the third place, he claims: 'Poetry arises then as a phenomenon of freedom.' (Bachelard, 2005, p. 11)[246], is a product of the creative imagination and possesses within itself mutiple significances. In opposition to the poetry is the 'ephemeral game' that is destitute of all types of meaning or significance. In regards to poetry connected to the arts, Bachelard (2005) speaks of the 'poetic image'. The poetic image is linked to consciousness, and comes from a phenomenological complex system that contains a 'speaking subject'; so, it contains within itself psychoanalytic meditations, possessing an inherent happiness, a product of images 'non-experienced' and 'non-lived' by its creator; in this way it is possible to '' (…) live the unlived and open up to an aperture of

[245] Original expression used by Gaston Bachelard 'um gelo de um instante', in his book 'Poética do Espaço' p.52 - (Bachelard, 2005, p. 52)
[246] Free translation from: ''A poesia surge então como fenómeno da liberdade.'' (Bachelard, 2005, p. 11)

language.'' (Bachelard , 2005 , p.14)[247]. This fact, is what grants the poetic image its character of sublimation, summarizes Bachelard.

Bachelard finds that architecture is poetic in it's nature, for ''The inhabited space transcends the geometrical space.'' (Bachelard, 2005, p.62)[248]. The best example of this architectural poetry is seen in the 'house', or the 'dwelling' (synonymous for 'sheltering') which transforms man and defines his existence in the world.

> **The house as poetry:** For Bachelard, the space of the house is lived by thinking and dreaming and is permanently constructed by the imagination (it is the space of projections of imagination). The house is the product of a past that comes to live in the present through the dream, it is in this space where memory and imagination merge intrinsically, which co-act in a mutual deepening. Within the space of the house, the memory merges with the dream. With Bachelard, we define two values of the poetic space of dwelling: 'shelters of reverie' and 'allows the dream'. The 'reverie' is assumed in this context, within the work of Bachelard, as a principle that unifies the dream, remembering and thinking, and this assumes an integration of the being in space. The poetic reverie allows for 'waves of imagination', which according to Bachelard, are not aesthetic, but powered and produced by the image of the poet. Thus he emphasizes: ''The phenomenology of the imagination requires that we live images directly, that we consider them as happenings of the ascended life.'' (Bachelard, 2005, p.62). Free translation from original expression: '' A fenomenologia da imaginação exige que vivamos directamente as imagens, que as consideremos como acontecimentos súbidos de vida.'' (Bachelard, 2005, p. 62)

Poetics in architecture allows for a sense of 'reverie', a principle that unifies the dream, remembering, thinking, and triggers the imagination, thus allowing for an integration of the being in space. As such, poetry, conducts the being into the center of reverie, where, in this domain, we introduce our own personal dimensions (such as memory) by possessing the poetic images.

> ***Synthesis:*** *Bachelard (2005) conducts that poetry is linked to consciousness; it is is a product of psychoanalytic meditations, possessing an inherent happiness, a product of images 'non-experienced' and 'non-lived' by its creator. In the artistic and architectural creation, it allows for a sense of 'reverie', a principle that unifies the dream, remembering, thinking, and triggers the imagination, thus allowing for an integration of the being in space.*

So how does the poetic image occur?

… by Juhanni Pallasmaa: the poetic image as embodiment

Juhanni Pallasmaa (2011), deeply influenced by Gaston Bachelard, also has a similar idea of the poetic image; however he adds other criteria that are of value. Firstly, for Pallasmaa (2011) poetry in art, is not understood as a literary genre, neither as genre of 'artistic expression' but as an 'artistic sensitivity' in general; secondly, the 'poetical artistic image' is a magical mental act, where a transference of consciousness from the 'object' to the 'subject' occurs, that then is absorbed by the viewer, becoming part of his existence. They are images of integrity and freedom[249], endowed with a specific type of life (a vital force as a living entity), that provoke a sensorial experience composed of multiple layers (that interacts with both memory and desire) and that direct our emotions and thoughts through associations. In the third

[247] Free translation from: '' (...)viver o não vivido e de abrir-se para uma abertura da linguagem.'' (Bachelard, 2005, p. 14)
[248] Free translation from: '' O espaço habitado transcende o espaço geométrico. '' (Bachelard, 2005, p. 62)
[249] Reference to:'' Poetic images are images of integrity and personal freedom.'' (Pallasmaa, 2011, p. 21); Free translation from: '' As imagens poéticas são imagens de integridade e liberdade individual.'' (Pallasmaa, 2011, p. 21)

place, these poetical images, always allude rational, linear and exclusive thinking, and belong to the 'contradictory' and 'illogical' phenomena, by connecting with the emotions, the senses and the imagination, and evoking 'empathy and compassion'. In short: ''The poetical image transcends its material and rational essence.'' (Pallasmaa, 2011, p. 41)[250] .

The artistic expression of the poetic image, Pallasmaa (2010) further writes, is an 'embodied' and 'emotional' evocation of the 'world of flesh', it is not an isolated representation, but becomes an 'internalized experience'. This internalized experience seems to derive partly from what Pallasmaa refers to 'projective identification' (expression used by Melanie Klein), where the subject projects onto the work. The profound artistic poetic image, endowed with its own 'vital force', allows the viewer through a process of 'imaginative projection' to re-create a world around them and accept them as part of his own world. Its in this process of embodiment through internalization that deeply portrays and describes the poetic image and how it connects to the viewer in an artwork.

> **Embodiment further described:** In the art of painting for example, the 'embodiment' of the physical realm in the artwork, resonates with the observer. By evocation, the poetic image in painting, embodies the substantial qualities that allows for an internal resonance and equivalence in the observer. In architecture, spaces shelter 'our bodies', and the image of architecture is an 'invitation to action'. Each element is an invitation to a specific action to unravel: dimensions and details accommodate movements, materials allow stillness, etc. This is reasonable and understandable, explains Pallasmaa, for the significative perception can be understood as part of our evolutionary condition, it is part of our biological 'alive' existence. It is part of our 'nature' to search for significance in the most arbitrary images. We experience the most accidental visual formations as '' (…) representations of phenomena of the real world and of life.'' (Pallasmaa, 2011, p. 44) Original quote : '' (...) Experimentamos essas formações visuais acidentais e 'amorfas' como representações de fenómenos do mundo real e da vida. '' (Pallasmaa, 2011, p. 44)

In order for this specific type of 'alive' poetic image to occur, Pallasmaa accentuates that it needs to belong to two realities: the real and the suggested, the 'perceived and the imaginary', the 'physical reality of perception' and the 'unreal sphere of imagination'; it is from this simultaneity that the hypnotic power of the great works of art and their poetic images prevail.

In experimenting a work of art, the artistic image leaps from the physical, material, dimension into the intellectual and intangible dimension; its value is derived from the conflict and tension between both; both exist in a dynamic and dialectic type of existence. Architecture, too, exists in these two worlds: between the material and tangible, and the idealized, 'abstract' and 'spiritual' dimension. In fact, all forms of artistic expression, and their poetic images, possess these two dimensions: the physical real with its material existence and the intangible dimension that belongs to the immaterial and imaginative spheres (the real and the suggested, the 'perceived and the imaginary'). In every form of art (and in every poetical image) this duality is present.

However, Pallasmaa clarifies, its material nature is reduced and 'supressed' as the imaginary one gains life and comes into being. It is this duality that provokes the 'viewer' into an alternate state of consciousness, evoking an 'imaginative world'. He affirms: '' The change of perceptual consciousness to the imaginative one determines the nature and characteristics of the work.'' (Pallasmaa, 2011, p. 95) [251].

[250] Free translation from: '' A imagem poética transcende a sua essência material e racional.'' (Pallasmaa, 2011, p. 41)
[251] Free translation from: '' A mudança da consciência perceptual para a imaginative determina o carácter e as características da obra.'' (Pallasmaa, 2011, p. 95)

In this sense, it is important to maintain a balance between the 'two worlds', for, if for example the imaginary sphere dominates, the work tends to become too sentimental or too 'disconnected'; if on the other hand the 'material' dimension prevails, the work can be seem as crude and incapable of evoking the 'imaginary world'. The imagination 'rejects', for example, excessive artistic motives; so, Pallasmaa claims, moderation and contention can be seen as requisites for a balanced 'artistic and poetic' architectural and artistic image. One can conclude that, without poetry art wouldn't be able to be significant, for it is poetry that allows for deep communication to occur with the work of art.

> ***Synthesis:*** *Pallasmaa (2005) believes that poetry in art is an 'artistic sensitivity' linked to a transference of consciousness from the 'object' to the 'subject'; that allows the viewer through a process of 'imaginative projection' to re-create a world around them and accept them as part of his own world. The poetical in art further belongs to two realities: 'physical reality of perception' and the 'unreal sphere of imagination'. Thus, without poetry art wouldn't be able to be significant, for it is poetry that allows for deep communication to occur with the work of art.*

What else can be understood of poetry as significance?

…by Umberto Eco: the poetic language of the 'Open Work': information and meaning

For Umberto Eco (1989) poetry is also an important aspect of the work of art as significance. He considers poetry to be a condition and a principle of all art, and even more so of the type of art described as the 'open work' (as previously seen, the types of art that communicate high levels of significances and meaning). The 'universality' of the poetics of the work, he claims, '' (…) imply a series of meanings that expand at every new look, to the point that they seem to offer me a concentrated image of the entire universe.'' (Eco, 1989, p. 25).

Eco comments that the communication of 'poetry', is a 'transactional' process where meanings are incorporated (through memory and past perceptions) into the work of art by the viewer (following Croce's and Dewey's aesthetics). As such, the poetic language involves references, emotions and a process of identification: '' (…) since all emotive reaction is the realization of a field of connoted meanings.'' (Eco, 1989, p. 36). The poetics and the universality of the work lie in this 'cognitive relationship' that binds all of them together in the work and generates various kinds of openness and meanings.

He also explains that there is a correlation between the openness of the work, the poetics it carries and the involvement on the part of the observer. The poetic message, through its 'indeterminacy' and 'ambiguous' (a sort of organized disorder) message created by the artists, generates unusual meanings and emotions by creating new relationships between the elements[252], that allow for all sorts of interpretations to emerge. The amount of unpredictability, and the degree of ambiguity (a fundamental feature), Eco explains, are thus key components of the poetic message within the 'open work', for they force the viewer to address the message and meaning in a different way. Thus, the work of art can be viewed as a message, carried out through it's poetics, but unlike most messages that portray a single meaning, Eco states, it succeeds as a work of art precisely because it is ambiguous and 'open-ended' and

[252] He further explains: '' It is commonly believed that the poetic word is characterized by its capacity to create unusual meanings and emotions by establishing new relationships between sounds and sense, words and sounds, one phrase and the next—to the point that an emotion can often emerge even in the absence of any clear meaning.'' (Eco, 1989, p. 53).

carries within itself multiple significances.

Art, then, through its poetics, tries to increase it's ways of conveying meanings or tries to amplify its 'range of meanings' by creating high degrees of information (which means a 'wealth of aesthetic meaning contained in a given message', and it's aesthetic equivalent is its 'poetic meaning'[253]) through it's poetics. Allowing for the occurrence of these multiple messages, meanings and significance is the essence of the 'open work' and the role of the 'poetics'. The artist, then, is a poet, that creates 'poetic meaning' out of the 'ambiguity of the message' generating emotional and cognitive tensions that resonate in the viewer. In order to do so, Eco claims: '' Every real artist constantly violates the laws of the system within which he works, in order to create new formal possibilities and stimulate aesthetic desire. '' (Eco, 1989, p. 79).

The analysis of the 'information' of a work of art, Eco adds, is not the same as analyzing it's aesthetic values. Meaning exists once the 'information' of the poetic message is filtered and 'understood'. However, Eco (1989) elucidates that the work itself is more than its own poetics: underlying the poetics is a vision, '' (…) a sensual act, a physical relationship not just with the abstract form of the object but with its complex structure, its substance. '' (Eco, 1989, p. 177).

> ***Synthesis:*** *Poetics in art, for Umberto Eco, is that which allows for a communication of information, or 'poetic meaning' to occur in the viewer. The understanding of the poetic message involves memory, emotional and cognitive connections, and is derived from the creation of a system of 'organized disorder', a new 'poetic language', created by the artist, that is able to possess in its form the possibilities of multiple meanings. This 'disorder', is both ambiguous and undetermined, allowing for a specific engagement that permits multiple meanings to occur.*

…by Pérez-Gomez: poetry and the poetic image as spirituality and love

Pérez-Goméz feels that poetry in the arts (specially in architecture) has a very specific essence: it is an essence that establishes a link to the spiritual realm. He makes clear: ''Hans-Georg Gadamer has suggested that the poetic image is also mimesis in its original sense, a representation of the ''star dance of the heavens''.'' (Pérez-Gómez, 2008, p. 70). Likewise, for the author, the poetic image is that which represents the spiritual realm of existence.

Traditionally, poetry is, he continues, associated to the classical understanding of 'poetic madness', that allowed the philosopher and the architect to 'recollect' ideal beauty with which '' Souls thus become winged and are eager to fly upward.'' (Pérez-Gómez, 2008, p. 70). The difficulty of art and architecture, Pérez-Goméz continues, lies in communicating that vision, or ideal; although all souls have ounce beheld their own true being and the ultimate truth (the condition they belonged to, before coming into the form of man), not all souls remember or are easily reminded of that world by things in this world. Man needs '' (…) the poet to disclose '' not a vision of the sphere, but a vision of the sphere incorporated in the image,'' such as Dante's *Paradiso*.'' (Pérez-Gómez, 2008, p. 70). Accordingly, architecture, in the same way, discloses through poetry: as beauty and order through its 'playful making', creating a sense of

[253] He summarizes: '' (…) what we most value in a message is not 'information' but its aesthetic equivalent: its "poetic meaning," its "quotient of imagination," the "full resonance of the poetic word"—all those levels of signification that we distinguish from common meaning.'' (Eco, 1989, p. 59).

both 'wonder and security'. This order is never full or complete, says the author, for it would 'blind us'; it is a kind of *alétheia*: '' (…) a revealing that is never totally acquired, and is therefore also a concealing.'' (Pérez-Gómez, 2008, p. 71). The poetic image in architecture, and reveals an order that generates 'a spark' between the possible and the actual; thus, there remains a space between the building and the poetic image, between the 'architectural idea' (as called by Vitruvius – images that are proposed by the architect) and the actual materiality of space. It is in this difference that eros can be engaged provoking delight in the inhabitant: '' According to Aristotle, delight is a movement of the soul.'' (Pérez-Gómez, 2008, p. 71).

According to Pérez-Gómez (2008) a poetic work is a unique form of communication, that transcends language itself; a building can also be a poem if it transcends its own parts (its ideology, its materials, its identity). Another characteristic pointed out, is that poetry, cannot be reduced to direct symbolization or popular culture, but instead is connected to a universal and spiritual dimension; another characteristic, is that the poetic creation expresses more than one meaning, being polysemic and often inviting silence in simultaneously: ''Indeed, poetic architecture may be polysemic and yet often invites silences, in the most eloquent of significations.'' (Pérez-Gómez, 2008, p. 98). Also, there is an importance of rhythm in the poetic creation; it is rhythm that is at the root of life and culture, thus is part of our human condition; rhythmic experiences transforms geometries into living spaces, and the rhythmic modulation is part of the experience of the poetic architecture. It is grasped only as an echo or evocation. The experience of the poetic can indeed change lives. Poetry, the author summarizes, always creates an image, and in this image lies it's strength: ''Poetic matter has colour, rhythm and texture, yet it is always something else: it is an image.'' (Pérez-Gómez, 2008, p. 97). The image evokes experience (with all it's contradictory qualities).

The author continues to say, that a contemporary poetic and meaningful architecture is possible but it rests on a rich tradition; '' Activated through the poetic image, eros reveals both our limits and our wholeness, the sense of being human.'' (Pérez-Gómez, 2008, p. 108). Although in different times it may have possessed specific symbolic meanings, architecture does not communicate one specific meaning, but the possibility of recognition of completeness and wholeness, dwelling poetically as a full human being. The poetic image ''overrides'' reality, it is never a copy, it augments reality, and it is given by the senses; these senses are part of a complex that generates ''embodied consciousness''. The poetic occurs in an experience, and it's meaning is therefore inseparable from that experience.

Examples of Poetic Images in Art and Architecture…

Pérez-Goméz writes that it was Michelagelo Beonarroti who first embedded the poetic image into architecture; believing that passion and eros, transformed into suffering, was the basic essence of the human condition, he ''celebrated our self-conscious living on our death'', and transformed it into the creative arts: from drawing, to sculpture, to painting, to architecture. He criticised the notions that perspective and geometry were connected to truth, and had no interest in *'lineamenti',* working his architectural projects from sketches and models; he believed in portraying the ''coming to be'' of human life, the Being as Becoming. Another example of poetry in artistic and architectural images, for the author, is the works of Giovanni Battista Piranesi, that sought '' (…) erotic meaning through historical reference.'' (Pérez-Gómez, 2008, p. 87). His techniques, engaging the poetic image in architecture, are more evident in his etchings *Carceri* (the prisons), where he portrays various imaginary spaces, based on a two point perceptive, with theatrical constructions, that seem threatening and dramatic. These spaces introduce a new quality of depth, becoming seductive to the imagination. The author simplifies: '' For Piranesi poetry was the key to history, and memory coincided with imagination.'' (Pérez-Gómez, 2008, p. 90). Yet another

> valuable example is the work of Frederick Kiesler (architect of the twentieth century and his participation in the surrealistic program, and collaborations with **Duchamp** *(see Glossary)*), created in 1950, when he built the first model of his Endless House. The Endless House was a project that incorporated the 'insights of surrealism into architectural work'; it was composed of perforated egg-shaped shells with flowing spaces and walls as ceilings and floors in a continuum; these flows, were a critique of the banal division of space into cubicle like forms; his aim was to induce a state of awareness, correlating the presence with eternity, explains the author. Kiesler believed that a dwelling could be responsive to dreams, acknowledging both the natural world and our inner worlds. He defended that architecture should not follow form and function, but be responsible aesthetically and morally, and follow a vision, seeking reconciliation between dreams and reality: ''His ultimate aim was to induce a heightened state of awareness to correlate the present with the future.'' (Pérez-Gómez, 2008, p. 105).

Poetry as a from of Universal Love…

Perez-Gomez states that Eros (traditional understanding of love) is the invisible force that sustains creation, and is responsible for the comprehension of the poetic image. There is a very deep connection between Eros, creation (and creativity) and poetry. The primordial Eros (unlike Cupid) expresses an abundance of being, a sense of plenitude, a 'completed one', and also the way by which this entity creates or 'gives birth' out of himself. He is represented in the Orphic traditions as androgynous, both male and female, and as an 'artistic power'. This notion, Perez-Gomez explains: '' (…) would be echoed many centuries later by Marsilio Ficino, Giordano Bruno and Paracelsus in the Renaissance; by the Romantic writers and philosophers of the nineteenth century; by the **surrealists** *(see Glossary)* of the twentieth century; and more recently, (…), by phenomenological theories of creation.'' (Pérez-Gómez, 2008, p. 13). This primordial Eros, represents the power of beauty as inspiration and was associated with a creative power and with divine madness; it was seen and understood as a connection to the Gods, which **Socrates** *(see Glossary)* welcomed (unlike the earlier poets that were distressed by the force of Eros). It was this Eros madness, it's associations and incursions that enriched the lives of humans with divinity, that fuelled the spirits of the creators and that 'puts wings on the soul of the *demiourgos'* (Pérez-Gómez, 2008, p. 14), enabling humanity to glimpse true wisdom, as Socrates belived. Both Socrates and Daedalus (the ancient architect), were described to *'iatromantes'* (shaman and healer), helping humanity evolve into light[254].

Pérez-Gómez (2008) suggests that Marsilio Ficcino establishes a link between *eros*, magic and poetry in the Renaissance. He noted that both the lover and the magician manipulate 'images' in the same way, with the same techniques – also similar to the ones used by the architect. The architect, emerges as a 'magus' who '' (…) produces seductive and ethical artefacts that enable others to dwell in accordance with the heavens, in physical and spiritual health.'' (Pérez-Gómez, 2008, p. 17). Furthermore, in *The Book of Life,* Ficino claims man as a magus that possesses a power over a nature, and whose existence is linked to 'hidden ciphers' and signs, that '' (…) contribute to individual physical and spiritual well-being.''

[254] Pérez-Gómez further explains that Socrates was mentioned to be, by Clement of Alexandria (ca. 200 C.E.), an *iatromantes*, a shaman of Ancient Greece; the term is composed by *iatros* (healer) and *mantis* (prophet, related to mania or madness), and these were said to be possessed by Apollo, the sun. Also, the ancient architect Daedalus, was among this group of healers. The architect as an *iatromantes,* '' (…) harnesses the power of the poetic image to engage others in a communion with other worlds within our world. Through light, materials and words, he or she helps us confront the darkness that affects our lives to the point of distress. Like shamans in many cultures around the world, the architect enables us to fly and eventually become healed.'' (Pérez-Gómez, 2008, p. 15).

(Pérez-Gómez, 2008, p. 17,18). This view was also echoed by the Renaissance creators and the Baroque architects[255].

Pérez-Goméz says that Ficcino had two main driving ideas regarding poetics and love: firstly he believed man could become a magus, who could create a better world for all (through producing artefacts and buildings) and secondly, '' Ficino sought a way for the soul (that is, embodied consciousness) to reach a realm of pure Mind and Will, Knowledge and Love, through a poetic, amatory and even priestly ascent.'' (Pérez-Gómez, 2008, p. 75). Both these aims/ideals were shared by the Renaissance painters and architects that created poetic images, proposing spaces for a good life and allowing for desire to emerge. For Ficino, the author continues, the desire to return to the source is called 'love' and the quality that generates this desire is 'beauty'; therefore, man, situated between earth and heaven possessed two kinds of love: earthly love, the desire to procreate inferior beings, and heavenly love the desire to rise to higher levels of being. Furthermore, for Ficino, love is the desire for beauty, and '' (…) beauty is a grace that originates most often in a harmony of several things.'' (Pérez-Gómez, 2008, p. 76). Love, in this context, is both the process and the end result, emphasizes the author, Art and Architecture are only beautiful for the amount of ''light'' that they allow to shine through the desire and the love felt. The value of both the arts (Architecture and Painting) is not in the corporeal essences but in the 'incorporeal light' it exudes as poetry, love and beauty that needed to follow a specific intangible understanding of concepts[256].

For the author, it is love that is at the centre of the artistic creation. Love is thus linked to all other values: it possesses a spiritual dimension (the means by which spirit communicates), a poetic nature (the means by which love communicates to the viewers), a sustainable dimension (the desire to help humanity) and is related to beauty (the way by which it is manifested). For the author what makes architecture an art is a connection to the idea of love, from which spiritual, poetical and ethical desires are made manifest.

… Understanding Poetry: Conclusion

All theories agree that poetry is embodied in art and is a vital component of it's significance without which significance couldn't occur. Poetry is something that is contained in the work itself, embodied in its outer form, just like the previous aspects of beauty and truth.

Each theories added specific attributes that allows us to create a general understanding of poetry itself and how it is embodied in the work of art. Firstly, Poetry itself, was defined clearly by Bachelard

[255] Likewise, for the Renaissance creator, creations were accomplished '' (…) through faith and love, using embodied consciousness to align personal deeds with the divine will.'' (Pérez-Gómez, 2008, p. 20). Baroque architects, motivated by the sensuous richness of God's created world, used light as the substance upon which work should emerge from (reconciled plurality into unity, clarity with wonder); unlike the Renaissance's creators (with their self-consciousness about the 'importance of invention') the celebrated God's time on earth, creating not by geometrical methodologies, but instead, by a synthesis of the 'conceptual and the sensuous'.

[256] For Ficcino, Perez-Gomez (2008) explains, in order for the splendour to shine in a work of art, painters and architects, need to be prepare in terms of a consideration for incorporeal concerns and ideals: these should be Arrangement, Proportion and Aspect: ''Arrangement means the distances between the parts (an interval between incorporeal lines), Proportion means quantity (or rather the boundary of quantity, without thickness or depth) and Aspect means shape and colour (not in matter but in a pleasing harmony of light and shadows).'' (Pérez-Gómez, 2008, p. 78). To summarize: '' Ficino says that architecture seduces and inflames us with love. Although architecture possessed a geometric body, its true beauty comes from incorporeal light.'' (Pérez-Gómez, 2008, p. 78).

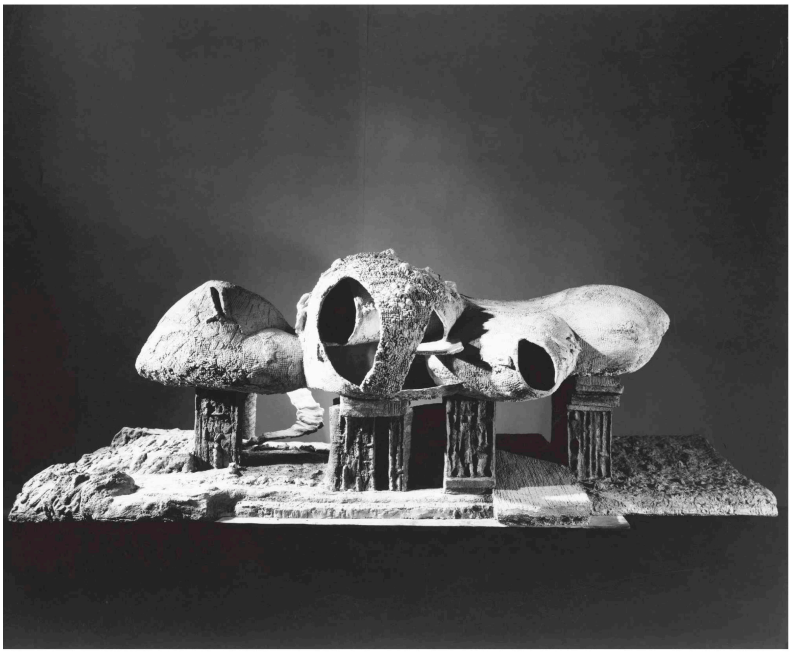
(2005) as a fleeting essence that is un-clear, that reflects an implicit metaphysics and a set of ontological value, that arises as a phenomenon of freedom, is a product of the creative imagination and possesses within itself multiple significances . Pallasmaa (2011) echoing Bachelard's views added that is a complex experience, endowed with life, composed of multiple layers and creates associations.

In regards to the artistic object, we saw that poetry is associated to the dream, it triggers imagination, is a universal language that involves references, emotions and a process of identification (Eco (1982)) belongs to two realities: 'physical reality of perception' and the 'unreal sphere of imagination' (Pallasmaa (2011)) and communicates through 'indeterminacy' and is 'ambiguous' (a sort of organized disorder) (Eco (1982)). All the authors also agree that it provokes a strong response by the audience/observer, triggering consciousness and defining man's existence in the world. It engages the observer through a sort of imaginative projection and makes him co-create that reality, thus generating different kinds of significances.

Poetry, thus, can be understood as an expression that is both universal in its essence, but also personal: derived from personal experience and personal understanding of the artist (and the observer) itself. Poetry, therefore is both connected to all humanity, thus being connected to both universal and spiritual dimensions, rather than particular aspects of popular culture and to the personal aspects of the human being, portraying views that are intimate and personal. Ambiguous in its nature, it is associated to the dream, to imagination and to the senses.







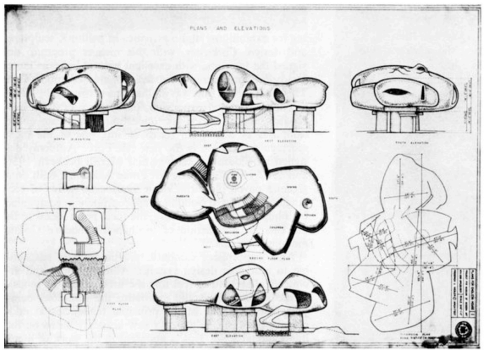


Photo 1: Micheangelo's architecture: Source: http://stlukesguild.tumblr.com/post/56567563654/what-20-works-of-art-do-you-want-to-see-before-you; Photo 2:Giovanni Battista Piranesi: Untitled etching (called "The Drawbridge"), plate VII (of 16) from the series The Imaginary Prisons (Le Carceri d'Invenzione), Rome, 1761 edition (reworked from 1745); Source:https://en.wikipedia.org/wiki/File:Piranesi9c.jpg; Photo 3: Frederick Kiesler (1890–1965), *Endless House, 1960; Source 1: http://www.moma.org/calendar/exhibitions/1529; Source 2:http://www.archdaily.com/126651/ad-classics-endless-house-friedrick-kiesler/*

PLATE 25: EXAMPLES OF POETRY IN ARCHITECTURE FOR PEREZ GOMEZ

Synthesis:

Poetry

1. ***Poetry is a condition and a principle of all art, without which significance couldn't occur (Bachelard (2005)), Pallasmaa (2011) and Eco (1982)).***

2. ***Poetry:***
    - *is a fleeting essence that is less clear and sharp that a dream, acting on the self just like 'an ice of an istance' (Bachelard (2005))*
    - *reflects an implicit metaphysics and a set of ontological value (Bachelard (2005)),*
    - *arises as a phenomenon of freedom, is a product of the creative imagination and possesses within itself mutiple significances (Bachelard (2005)),*
    - *is associated to integrity and freedom, endowed with life, provokes a sensorial experience composed of multiple layers (that interacts with both memory and desire) and directs our emotions and thoughts through associations (Pallasmaa (2011))*
    - *always allude rational, linear and exclusive thinking, and belong to the 'contradictory' and 'illogical' phenomena, by connecting with the emotions, the senses and the imagination (Pallasmaa (2011))*

3. ***Poetry in art:***

    - *is linked to consciousness (Bachelard (2005) and (Pallasmaa (2011))*
    - *is a product of psychoanalytic meditations, possessing an inherent happiness, a product of images 'non-experienced' and 'non-lived' by its creator (Bachelard (2005)).*
    - *transforms man and defines his existence in the world (Bachelard (2005)).*
    - *allows for a sense of 'reverie', a principle that unifies the dream, remembering, thinking, and triggers the imagination, thus allowing for an integration of the being in space (Bachelard (2005)).*
    - *occurs as an internalized experience, an 'embodied' and 'emotional' evocation of the 'world of flesh', (Pallasmaa (2011)).*
    - *allows the viewer through a process of 'imaginative projection' to re-create a world around them and accept them as part of his own world. (Pallasmaa (2011)).*
    - *belongs o two realities: 'physical reality of perception' and the 'unreal sphere of imagination'; (Pallasmaa (2011))*
    - *is a 'transactional' process where meanings are incorporated (through memory and past perceptions) into the work of art by the viewer (Eco (1982))*
    - *is a universal language that involves references, emotions and a process of identification (Eco (1982))*
    - *generates various kinds of openness and meanings. (Eco (1982))*
    - *communicates through 'indeterminacy' and is 'ambiguous' (a sort of organized disorder) (Eco (1982))*

4. ***Poetry increases the significances and meanings contained in the work of art.*** (Eco (1982))

5.4. SIGNS AND SYMBOLS

At this point and because art (as significance) communicates and embodies beauty, poetry and truth as significance, it is necessary to understand in what other ways significance can be communicated. Which lead us, as many other authors point out, to the understanding of symbols and signs, which are part of communication itself, and therefore connect to the semiotics.

Art relates to symbols?
What is semiotics and how does it relate to art?

Understanding signs, symbols and semiology in art…

A sign can be generally referred to as that which '' (…) signifies something other than itself (…)'' (Batu, 2012, p. 2). Batu (2012) announces that anything can act as a sign, (a word, a concept or a work of art) however all signs have the innate function of 'conveying meaning'. According to JP Bonta (1980), referring to Buyssens (1943), signs (a special class of indicator) need to have four aspects: a form, a significance, an interpreter and a sender[257]. Bonta (1980) adds that interpreting signs is a cultural operation, that their signification is constantly changing meanings and significances and that the repeated use of a sign can lead to it becoming stale and lose its meaning. Semiotics, is the discipline that studies any system of signs and their behaviour in society. Bonta (1980) further adds, that the key of semiotics is the distinction between what a form is and what it means for a society, the understanding of the signs significance. The purpose of semiotics is not the study of the work itself, but the interpretation that arises from it [258].

Rudolf Arnheim (1969) defends that all images (including art) can serve three types of functions: they can serve as pictures, symbols (which are signs), or act simply as signs (can be symbols or icons, conscious manifestations or signals unconscious manifestations). An image is a picture when it reflects things at a low level of abstraction (qualities such as movement); it is a sign when it stands for it's content through associations and references and lastly it is a symbol when it 'symbolizes' ideas, concepts or anything else.

Further distinction between picture, symbol and sign*:*

In Arnheim (1969) words: '' The three terms – picture, symbol, sign – do not stand for kinds of images. They rather describe three functions fulfilled by images. A particular image may be used for each of these functions and will often serve more than one at a time.'' (Arnheim, 1969, pp. 135, 136) He further explains each of the function. An image stands for a sign, when it stands for its content but does not reflect its ''characteristics visually''; they serve as mere references to the things to which they represent. An image is a picture when '' they portray things located at a lower level of abstractness than they are themselves.'' (Arnheim, 1969, p. 137); they reflect qualities (colour, movements, etc.) of what is being represented; they are not 'replicas' but reflect

257 On the other hand, 'indications' are indicators that are not purposely used as a communication system, but naturally emerge in a natural process. Bonta (1980) defines two types of indicators: signs (a communication that presupposes intentionality - when there isn't an intentional emitter they are called a pseudo sign) and indications (they 'show' and indicate, does not presuppose intentionality) and both express the meaning of something.

258 On these interpretations, of architecture and art, Bonta claims, that there can be three sources: the interpretation (personal), the field work (interviews, questionnaires) and also the analysis of texts and documents (which describe the reactions of people). Works based exclusively on fieldwork tend to be static and historical, but on the contrary, when they relate to the critical history a system of dynamic structures emerges.

> different levels of abstractedness. And finally, an images is a symbol when '' (…) it portrays things which are at a higher level of abstractness that is the symbol itself. A symbol gives particular shape to types of things or constellations of forces.'' (Arnheim, 1969, p. 138); they ''symbolize'' ideas, concepts or anything else, and as an example Arnheim uses Ambroggio Lorenzetti's murals in Siena, that symbolize the ideas of good and even.

But there are other aspects in which signs can contribute to the understanding of significance. Medway e Clark (2003) say that signs can be an aid (in understanding significance in the process of design) because they are two-sided: they 'comprise a material' (or semi-form) and they possess a 'meaning or an effect in consciousness'. Because of this, signs belong to the outer world with its physical representation and to the inner world with meaning and effect. (Medway and Clark, 2003). Also explaining the connection between signs and art is the author Batu (2012), when, he states that both language and art have a systems of signs at their centres. He emphasizes that it is precisely the 'communicative' aspect of art that exists beyond the aesthetic grounds, that makes the artwork function as a sign[259].

Therefore, artworks can incorporate signs and symbols that communicate significance and they can in themselves be a sign. To study the Semiotics of art and architecture, is to engage in a broader context of it's own system of signification.

The author Bengu Batu (2013) continues to claim that each semiological linguistic school has its own approaches to analysing signs, however there are some commonalities between all of them. Understanding the common grounds between the different schools, he says, is a way of defining a semiotics for art. Firstly, for Batu (2012), a semiotic understanding is more than the sum of its parts, it is an act of reading that involves a methodology and it is an activity that is concerned with the meaning and the significance of structures (its production and its interpretation). Secondly, signs involve a 'meta-language' (complexity of all signs), being through them (and by it) that meanings and significances can be exposed and understood[260]. And also that, understanding signs and in order for the meta-language to emerge, there needs to be a 'conceptualization and a formalization'[261].

Semiotics approaches the work of art through its content ('from the depth to its surface') and sustains that the meaning of a work of art '' (…) resides in the observation of divergences occurring within the content.'' (Batu, 2012, p. 5). However, according to Batu (2012) it is the existence of pre-existing values and meanings (compatible with the qualities of a work of art) that enables the conveying of 'meanings in the consciousness of the subject'.

According to Preziosi (1979), there is a need to define a 'visual semiotics' (a non-verbal sign system associated to artistic creations), from a holistic perspective in architecture. He claims: '' A house is not a 'machine for living' but a system for the production of meaning by its users.'' (Preziosi, 1979, p. 75). Architectural semiotics is the quest for a '' (…) meaningful unit in architecture.'' (Preziosi, 1979, p.

[259] ''The similarities between art and language stem from both of them having a system of signs at their core (Tunal, 1996: 99). It is not possible to fully divorce works of art from language; because works of art produce myriad meanings and cannot function as such independently of language. To understand this essence is to necessarily revert to the partitioning of language (Barthes, 2005; Erdem, 2010). The communicative function of a work of art is not simply a foundational aesthetic trait, it is also evidence of its function as a sign (Kagan, 2008: 269).'' (Batu, 2012, p. 1)

[260] It is by this meta-language that: '' (…) the web of meanings inherent in the subject language (a work of art) can be re-established and exposed.'' (Batu, 2012, p. 2).

[261] According to the author '' Understanding the meta-language used in semiotics requires prior information about the intellectual foundations, methods, objectives and research limitations of the different schools of thought and the models that are involved in the study of semiotics.'' (Batu, 2012, p. 2)

2); it occurs through the understanding of space as a system of relationships among signs (not amongst forms and materials) that produce meaning and significance [262]. This system or matrix, serves for the '' (…) erection of the self and the collaborative consciousness'' (Preziosi, 1979, p. 13). One property of this 'system of relationships' defined by architectural semiotics is spatio-temporality (architecture is as much temporal as it is spatial). It is this understanding of different signs in space that can interpret and define the 'significant organism'. It is important to clarify that the main vector of architecture is dwelling, as we previously showed in chapter two, however, what Preziosi is pointing out, is another aspect of architecture, that should be analysed once the first aspect of dwelling has been considered.

> ***Synthesis:*** *So far, it has been defined that art is composed of a system of signs and symbols, and can also be a sign or symbol in itself.*

How do symbols communicate in art?

… by Nelson Goodman: Art as language and symbol

Nelson Goodman (1976) points out that we use symbols as a way to construct and understand our own experiences of the world[263]. For him, thus, art is one of those 'symbol systems' (art is a symbolic activity and is composed of symbols), that involves cognitive functions and aids in the construction of the world. Understanding art, then, is understanding what the symbols mean and express (what they refer to); it is comprehending their reference (the base of symbols, 'what they stand for') that is both connected to denotation (the relationship between the label and what it labels – its opposite is possession as in possessing a trait) and exemplification (which requires possession and reference). As a synthesis: art works are composed of symbols, that act as 'chains of references' and compose 'complex references' that can both denote or exemplify. Art desires and is concerned with 'truth'; as such, the symbol systems used, are invented, transformed and manipulated into a coherent message that offers itself to interpretation and aids the viewer in understanding the world. It is in being aware of art as this complex entity that advances can be made[264].

For Goodman (1976) then, the symbolic nature of art and its symbols are associated to what the symbol represents and what it denotes. In order for art to represent an object or something, it must be a symbol for it, it must 'refer to it', and in doing so, it denotes it. As such, it is denotation that is '' (…) the core of representation, and is independent of resemblance.'' (Goodman, 1976, p. 5). Representations, then, as symbols, function as 'descriptions' and 'characterization' of something, however in order to do that, they need to possess a degree of 'invention' and active participation from the artist. The artist needs to

[262] He explains: '' An architectonic system is not a system of forms but a system of relationships.'' (Preziosi, 1979, p. 79)

[263] **Nelson Goodman's contextualization:** Nelson Goodman (1976) in his book *Languages of Art* (1976), first published in 1968, explains that his approach to art is not intimately connected to the field of aesthetics, but deals with the aspects of value in art and is related to 'symbols'. Author Alessandro Giovannelli in the article '*Goodman's Aesthetics'* (2015) explains that his Goodman '' (…) has certainly been one of the most influential figures in contemporary aesthetics and analytic philosophy in general (…).'' (Giovannelli, 2015). About his own theories, Goodman (1976) explains that his views are unique, and that the symbol theories defined by other authors such as Pierce, Cassier, Morris and Langer, are in contradiction with his own views on the matter. Giovannelli (2015) summarizes his general views as such: '' Goodman's general view is that we use symbols in our perceiving, understanding, and constructing the worlds of our experience: the different sciences and the different arts equally contribute to the enterprise of understanding the world.'' (Giovannelli, 2015).

[264] Goodman concludes: '' Once the arts and sciences are seen to involve working with – inventing, applying, reading, transforming, manipulating – symbol systems that agree and differ in certain specific ways, we can perhaps undertake pointed psychological investigation of how the pertinent skills inhibit or enhance one another; and the outcome might well for changes in educational technology.'' (Goodman, 1976, p. 265)

possess a 'free and innocent eye' and be interested not in 'recreating' but in 'catching a likeness'; it is this ability to grasp a 'significant relationship' and making it manifest, through the creative action (action that involves a process of creation of 'deceptiveness', 'invention' and 'discovery') that makes representations, as symbols, be effective, and that makes art be art.

So then how do symbols communicate in art?

Goodman (1976) claims that art as symbol involves both representation as denotation and expression that is a distinct form of representation. Expression, he continues, relates to the aspects that 'represent' emotions, feelings or other particularities similar to those, whereas representation is more concrete and usually is of objects or things[265]. Art can exemplify one thing and express another. In this process of exemplification and expression, a metaphor unravels, because metaphors are symbolizations. The metaphor will be further presented in the next chapter.

> ***Synthesis:*** *Nelson Goodman (1976) sees art as a system of signs and symbols: thus, understanding art, it's significance, is understanding what the symbols represents and what it denotes (what it refer to). For symbols to denote (in art) they need to possess a degree of representation and expression (to grasp a 'significant relationship' of what it symbolizes). It is this ability that makes art be art.*

And what does it mean for art to be itself a symbol?

… By Umberto Eco: Creations as Symbols

According to Umberto Eco, in '*Semiotics and the philosophy of language'* (1986), art is symbolic by nature. Traditionally, the artwork is assumed as a message without translation, because the meaning of the artwork and the significance couldn't be separated from the content. This was sustained by Schelling (1775-1854) when he identified the work of art as a symbol in itself. Eco rounds up his ideas: '' (...) instead of signifying an artistic idea, they are that idea in themselves. '' (Eco, 1986, p. 141). It is only with Hegel (1770-1831), that there is an attempt to separate the aesthetic experience of art from its symbolic meaning, he continues. The symbol for Hegel is alive as long as it is an enigma (the symbol exists because it possesses unknown qualities attached to it). Only, by its enigmatic character, does both the artwork and the symbol manage to remain alive. Therefore, a new idea arises, the artwork as an open field of interpretation, which uses new symbols.

… by Merleau-Ponty: The system of signs and symbols as a whole

With Merleau-Ponty (1960) a phenomenological approach to signification in art is presented: signs emerge from the combination of the individual parts with the whole, and from that 'wholeness' emerges the significance. This 'whole', then, is an open structure that is not limited but endlessly open to

[265] Like representation, expression needs to denote and symbolize, what it expresses, however it acts in opposite direction from representation (that acts in direction to the object), towards 'abstraction' (upwards and away from what it expresses); as such, it is more direct, immediate and less literal than representation. '' One tentative difference between representation and expression is that representation is of objects or events while expression is of feelings and other properties.'' (Goodman, 1976, p. 46). As a synthesis: '' Where as almost anything can denote or even represent almost anything else, a thing can express only what belongs but did not originally belong to it.'' (Goodman, 1976, p. 89). The boundaries of expression, thus depend upon the difference between exemplification and possession and also about the difference between the metaphorical and the literal.

new fields of interpretation and is rooted 'within' from an 'interior schema' (similar views to Eco). The 'interior schema' defines a new way of expression and representation: one that does not necessarily use 'universal' codes and signs (such as pure solids and forms), but uses other ways of expression that are in themselves universal. Merleau-Ponty (1960), in *Signs*, further argues that it is because the sign is composed and organized within itself, that it possesses an interior and through this interior sense, can portray a meaning and a significance [266]. But also, the meaning, emerges from the interaction of many signs; so, it is precisely in the totality (as a whole) that is the bases of the 'significance'[267].

> ***Synthesis:*** *Both Merleau-Ponty (1960) and Eco (1986) sustain art as a symbolic nature. Merleau-Ponty (1960) adds that* from the combination of multiple signs emerges a 'wholeness' that echoes as a significance. And Eco (1986) sustains that in order for symbols and signs to remain alive they need to be an enigma.

How does the interpretation occur? How does the significance emerge?

… Types of Signification in Art and the problematic of the symbol

Bonta (1980) distinguishes two types of signification that can be derived from semiotics: the the atomistic approach (analysing the significance independently from its context) and the systemic approach (one that holds that the meaning of an object, comes from a certain system of relations in which it is integrated)[268]. He identifies that art needs to possess both. For both types of signification to occur, there is the need for symbols to be intrinsically generated (where the real significance of the artwork exists)[269]. However, for Bonta (1980), this type of artistic and architectural creation defines a significance within its own 'language' of 'signs' alone, for it relies in an 'arbitrary significance' deeply rooted in cultural and social references. It is a closed system of representation that relies on its own codes, to create meaning. Because of that, these creations are very time specific, and emerge from a specific cultural environment, usually as a definition of a specific 'movement', idea or concept. The cycle is fast, and these symbols easily die from use. A very similar issue, is also raised by Rumiko Handa (1999), in her paper '*Against arbitrariness: architectural signification in the age of globalization',* however with use of different names. She identifies the arbitrary signification (meaning is assigned externally, or the systemic approach) and the natural signification (meaning arises independently from context and culture from the object itself, or the atomistic approach).

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[266] Free translation from: '' (...) compõe-se e organiza-se consigo mesmo, que ele tem um interior e acaba por reclamar um sentido.'' (Merleau-Ponty, 1991, p. 41)

[267] Merleau-Ponty, uses as an example to clarify this point the construction of the dome of Florence Cathedral by Brunelleschi, who wanted a co-relationship between the dome and the site. However, he emphasizes, there is still a lot to be done, before an artistic operation can be seen as the '' (…) definition of space as a means of the universe.'' (Merleau-Ponty, 1991, p. 41); Free translation from: ''Mas ainda há muito que fazer para passar uma operação de arte para o emprego deliberado do espaço como meio do universo.'' (Merleau-Ponty, 1991, p. 41)

[268] Bonta claims: «la indentidad de una pieza no depende sólo de la pieza miesma o de su semejanza con ciertos prototipos establecidos convencionalmente, sino de sus relaciones con las otras piezas del sistema.» (Bonta, 1980, p. 100).

[269] Bonta (1980) further accentuates that in art signs must be intrinsically generated in order to possess a system of signification. The meaning of the art form, thus, lies in this intrinsic generation rather than in form or in the goals it possesses. Examples of a system of signs being intrinsically generated within the artistic creation are the works of Zaha Hadid (that explores signs in paintings and transposes them to architecture) and the De Stijl movement, where 'signs' and 'codes' are defined in two-dimensional representations and then extrapolated and 'blown-up' into the architectural realm.

Further explanation of both types of signification:

Arbitrary signification, predominant in the last half century, sustains that there is no meaning within the piece itself, and that the relation between the work and its meaning is assigned externally by cultural conventions and therefore is 'arbitrary' (attributed by the author or by the cultural frames that supports it). As such, the intrinsic properties of the object have little or nothing to do with its meaning. In the natural signification, meaning comes from the piece's physical attributes and properties (colour, form, etc.), and thus is 'inherently motivated'; the meaning is derived through the observation of the piece itself. Handa explains that natural signification was predominant '' (…) in the eighteenth century and again at the beginning of this century, this theory was eclipsed when arbitrary signification became popular in the middle of this century.'' (Handa, 1999, p. 1) She explains that Arbitrary significance creates a distance that promotes alienation, whereas natural significance is beneficial, promoting availability and accessibility. However in Handa's views, both theories of signification have the problem of 'Fake Authenticity'. In societies of the past, the object had an integrity (being coherent in materials, forms, ways of production and rooted in needs), where-as today, with technology, the problem of authenticity arises, the lack of integrity is general.

The issues raised by Handa, with both types of significance is transversal to all kinds of artistic expression, and not necessarily exclusively to architecture. If, on the one hand, the meaning and the significance is derived from whomever defines it, in the case of the 'arbitrary significance', the art loses its inherent structures of meaning and becomes an 'object', submitted to appreciation, 'previously defined' with a certain 'value'. On the other hand, natural significance, although it might suffer of 'fake authenticity' as Handa pointed out, it searches for connections of meanings and significance within the artwork itself, where 'intrinsic properties' defines the overall substance and significance of the work. For her, it is natural signification that can promote a general accessibility, whereas arbitrary signification promotes alienation (natural opposes to cultural). Just like Bonta (1980), she finds issues with both types of signification, and sustains that art should use both forms, in the search for a universality. A new kind of significance can emerge: neither 'arbitrary' understanding nor exclusively 'natural' signification, but one that coexists with both spheres.

However, are there not, deeper structures of significance and meaning, that stand throughout time? So what are universal signs and symbols?

… Signs as Universal = Significance in art

Umberto Eco (1986) believes that there are indeed signs that are universal and are not culturally related: the system of signs is understood as a product of a 'deep structure' and so, is not culturally rooted but a universal structure, defined by universal general interpretational rules. Furthermore, for Umberco Eco (1986) signs and systems of signs are very complex, and they create an endless cycle of symbols, significations and associations; however, not all signs are endowed with such strong qualities and properties. To further explain the universality of the sign, Eco (1977), in his work '*Signs*', shows that culture has taught 'us' to see and understand creations as a voice of Being, as what was 'given by nature' or defined by an underlying 'unconscious mechanism; this means, that underlying all creations, are interpretational rules, general to all humanity.

He remarks that for the **Port-Royal School** *(see Glossary)*, language reflects thought and thought is transversal and universal, equal to all mankind and to all men; a logic of substance is defined: creations (superficial structures) are a result of 'deep structures', that express significance that is always common and universal to all human beings. One understands these deep structures, through interpretation of its

meaning and significance. Jung, he continues, also sustained the universality of the symbol and of the sign, for they represented the deep and innate symbolism of the unconscious psyche of the being. Hence, it is the sign and symbol that defines the collective unconscious, a universal entity, that is materialized through creations[270]. These symbols, for Jung, are considered to be 'genuine symbols' because they are ambiguous, universal and full of strong significance. Eco also calls attention to the fact that in order for a meaningful artwork to remain significant, it needs to be a symbol in itself and must be an open structure of interpretation. Rumiko Handa (1999) also sustains that there are signs that are universal, and that these should be used in all artistic and architectural creations. It is this universality that defines true 'meaning and signification'. For Rumiko Handa, Tadao Ando's work has been able to maintain meaning and sustain significance through the use of universal signs (materials, qualities of physical extremes and cosmological references)[271].

… The Archetype and Geometry in Art and Architecture as a Symbol

Pallasmaa (2011) writes that it is the archetype that is a universal symbol. He explains that the archetype was originally defined by Sigmund Freud as 'archaic traces of the mind', referring to images and correlations manifested in dreams that have a correspondence to myth and primitive rites. Jung further characterized the 'archetype' as '' (…) patterns and emotions that tend to generate certain types of associations and meanings. (...) They belong to life itself and are inextricably linked to the individual through their emotions, as Jung observed.'' (Pallasmaa, 2009, p. 58). As a synthesis, one could say that for Pallasmaa, archetypal associations function as a connection between the world of conscience and the unconscious world of Instinct, as a symbol. The archetypes, he continues, are essential ingredients of the architectural and artistic expression. An example of this are the basic geometric forms, used profoundly in both art and architecture[272]. Paul-Alan Johnson (1994) also makes known that geometry as that which brings order to spatial connections and relationships and that acts as symbols. Geometry, he continues, along with number science have been used since antiquity by all cultures: it served a philosophical and cosmological Architecture and Art. He concludes that: '' (…) geometry is the means by which architect brings their concepts into being, (…).'' (Johnson, 1994, p. 360)

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[270] He elaborates: '' The contents of the collective unconscious are the archetypes, archaic types, universal images, representations collectives: lunar, solar, vegetal, meteorological representations, more comprehensible in myths, more evident in dreams and visions.'' (Eco, 1986, p. 145)

[271] **Tadao Ando's Universality of Signs:** For this meaning she identifies a number of properties. The first is the limited number of materials used, explored to their 'extreme'; Ando's materials are chosen like a poet chooses his words, and by taking them to their physical extremes, he intends to evoke other qualities, such as a non-physicality. He does not believe in using 'pseudo-authentic' applications of materials, disbelieving in new industrial materials. The second is a space where even a cross, explains Handa, is turned into vertical and horizontal openings 'full of intrinsic properties that pronounce signification' In reference to Tadao Ando's Church of Light, she elaborates: ''By carefully creating the void at the end of the room, the architect succeeds in embodying the sense, so appropriate for the religious practice, of time and space beyond reach.'' (Handa, 1999, p. 14) The third, in regards to Kara-za (a portable theatre), is that Tadao Ando does not use architectural types from tradition, but searches for the inherent qualities of the types. For this, he uses universal symbols and signs, rooted in a cosmological significance that survives past the 'specifics' of a certain culture and prevail through the course of time. This kind of 'form-like' system of signs has its roots in Plato in Timaeus, where he defines the pure solids as possessing the meanings of the universe and thus continue al throughout history manifesting itself in different kinds of creation.

[272] **Geometry as a Symbolical Archetype:** The basic geometric forms (the circle, the square and the pyramid), as archetypes, for example, dominate all fields of artistic creation, from the visual arts, to sculpture to architecture. Either explicitly or indirectly, they dominate the forms and articulate an innate order. Pallasmaa explains that throughout history, these forms have had various symbolic significances in different cultures; the circle for example, has been used in the Buddhists mandalas, in myths, in dreams, in the layouts of cities, indicating always a sense of 'unity of life'. The square on the other hand, is the expression of a materialistic, pragmatic and static way. Symbolically, the author explains, the alchemists desire to unite the circle and the square, in the desire to unite personal identity (the world) with the universe.

Synthesis: *There are two types of approaches to interpretations of symbols (ways to understand their significances): for Bonta (1980) and Handa (1999) it is the atomistic or the natural approach (significance is in the work itself) and the systemic or arbitrary approach, meaning is cultural. However neither of these forms define the real significance of the sign, which is in fact that it can be universal. The universal sign, as defined by Eco (1986), are 'deep structures', that express significance that is always common and universal to all human beings; and it defines the collective unconscious, a universal entity, that is materialized through creations. These universal signs can be understood as as archetypes, as defined by Pallasmaa (2011): universal symbols that belong to life itself and are inextricably linked to the individual through their emotions.*

… by Norberg-Schulz: architectural language and architectural archetypes

For Norberg-Schulz (1985), architecture is partly defined by its language (that allows for dwelling to occur), which can be understood as morphology (how something is built, defining the formal aspects), topology (concerned with spatial order, can be defined as 'spatial organization') and typology. The latter, typology is connected to the archetype. He explains that typological differentiations include the notions of 'tower', 'dome' or 'hall', which are connected to language, and can also be considered to be architectural archetypes. The author adds that architectural archetypes may be defined by modes of dwelling concretized by the general principles of embodiment and spatial organization; thus, typology relates to language and to the creation of archetypal standards. Although archetypes are timeless, he continues, there needs to be a temporal identification, interpretation and modification of the archetypes in order to actualize them. In doing so: '' Being exposed to circumstantial 'forces', they change without loosing their identity.'' (Norberg-Schulz, 1985, p. 29).

…by Jorge Cruz Pinto: Architectural Archetypes

Jorge Cruz Pinto (2007) in his book '*Ver, Desenhar, Imaginar, Projectar*', explains that architecture incorporates mythical-linguistic dimensions, which are founded on archetypes: architectonic archetypes (the cave, the hut, the original temple), biblical archetypes (the garden of Eden, Noah's Arc, the Babel tower and the Salomon temple), and in other mythological prototypes (the Greek Temple, the pyramids, the pantheon). These all define paradigmatic references of architectonic culture. It is, he emphasizes, these mythical archetypes that further define architecture's grammar (the chamber, the patio, the archetypal house, the column, the door, the tower, the labyrinth, the primitive hut, the cave, the castle, the garden). They '' (…) are part of the psychic contents of symbolic character that allow the creation of diverse epochs, forms and cultural expressions. '' (Pinto, 2007, p. 23)[273]. The conceptual process, he accentuates, is grounded on these poetic strategies which include these archetypes of the collective unconscious.

… by Rudolf Arnheim: architectural symbols

Rudolf Arnheim (1977) in his book 'The dynamics of architectural form' explains that the word symbol is used to designate a basic function of visual communication and expression. Architectural

[273] Free translation from: '' (…) fazem parte dos conteudos psiquicos de caracter simbolico que permitem a criação de diversas épocas, formas e expressões culturais. '' (Pinto, 2007, p. 23)

symbolism, he explains, '' (…) begins to come into play when a building's design uses shapes that carry a conventional meaning. '' (Arnheim, 1977, p. 207). The medieval mind, for example, saw messages in every architectural form shape of the Gothic cathedral, from the general to the detail; in this case, every aspect referred to something else: the mortar consisted of lime (stood for love), sand (earth), and water, which in combination represented the union of heavenly love with earthly love.

Architecture symbolism, however, Arnheim (1977) continues, should not be applied consciously and easily otherwise it will be superficial, creating a symbolic correspondence which is relatively shallow. For architectural symbolism to be significant it needs to be used in a way that is not arbitrary, but that tries to create more '' (…) basic, spontaneous means of expression.'' (Arnheim, 1977, p. 208). In order to do so, these visual symbols need to be rooted in shapes and actions of the physical world, establishing correspondences with elementary qualities of the perceivable world; thus, the author adds: '' A work of architecture as a whole and in its parts, acts as a symbolic statement, which conveys, through our senses, humanly relevant qualities and situations.'' (Arnheim, 1977, p. 208). The strength of the symbol depends on the degree of connection to this physical image: the more it connects to this type of everyday life, the more it survives beyond changes of philosophical doctrines. It is through the connections to this basic type of primal life, such as light coming in through a window, the roughness of a detail in wood, or other primary architectural examples, that the create rich sensory experiences and symbolisms, revealing the general in the particular and raising it's significance. It is in this sense, Arnheim adds, that the symbol possesses a universal character: '' These heightened expressive qualities may survive in a building and continue to crate a powerful experience when the specific nuance of the builders message can be retrieved only by historical context.'' (Arnheim, 1977, p. 208). These symbols are what Arnheim (1977) entitles as open symbols.

The aspect of these symbols that is so strong and universal, continues Arnheim (1977), (whether they are used in architecture or in art), act through elementary perceptual sensations and create correlations to practical life and daily practises. He explains: '' The most powerful symbols derive from the most elementary perceptual sensations because they refer to the basic human experiences on which all others depend.'' (Arnheim, 1977, p. 209). It is this aspect, this connection to the basic experiences of human life that allows symbols to be so effective and to prevail over cultural changes. Another aspect that is of vital importance in regards to the symbols in art, and more specifically to architecture, is the fact that symbols create a connection between practical life, physical activity, and abstract thought. On a final note, on the importance of the symbol in architecture and in art, Arnheim (1977) writes: ''Works of art, such as buildings, must now serve somewhat artificially to revive our weakened experience.'' (Arnheim, 1977, p. 210). But in order for symbols to act as significant and to promote significant encounters in architecture, architects need to cultivate the expressive qualities of the shapes they create. For a form to be seen as expressive it needs to seen as dynamic; dynamism, thus allows for a spontaneous symbolism to occur.

The death of symbols and moving beyond them…

Joyce Carey (1984), with an understanding of art as intuition, sustains the idea that the symbol has a short life, and that although all art uses symbols, these are constantly transformed with new artists, that strive to create a new paradigm, moving past the establishment, or trying to find a new way or form for self-expression. The symbolic world, associated with the emotional world in which most of us live in,

is understood as a highly fragile world: it is a realm of the sensitive that is guided by different kinds of associations. In this way, he explains further, all symbols die and fade out of use, by losing their emotional force and their value. However, despite dying and fading away, the artist invents new symbols when he creates; this can be understood as a battle between concept and intuition, a driving part of the creative process. He states: '' There is in fact no escape from this fundamental conflict of intuition and concept, and from the fragility of the symbol.'' (Cary, 1984, p. 97). *However he accentuates:* the symbol, in the same way as the concept, is the enemy of intuition.

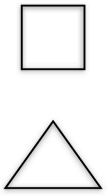
For Roger Scruton (1979), semiology, semantics or linguistics do not contribute and do not share 'insight' to the understanding of the aesthetic experience: ''Let us, then, explore these other forms of 'symbolism' without the supposition of any 'general science of signs'.'' (Scruton, 1979, p. 178). He considers architecture not to be a language and therefore shouldn't be understood as it were. The author thus sustains that to understand architecture is to understand the architectural experience in all it's complexity.

… Understanding Symbols: Conclusion

All theories agree that symbols are embodied in art. They all clarified a duality: that first artworks can incorporate signs and symbols that communicate significance and secondly, that they can in themselves be a sign or a symbol. Firstly, art uses symbols, icons and signals and incorporate them as a part of their significance. Thus, **understanding art, it's significance, is understanding what the symbols represents** and what they denotes (what they refer to). Some authors, like Goodman (1976) give more emphasis to the symbol which he explains, that in order to denote, needs to possess a degree of representation and expression. Merleau-Ponty and Eco both emphasize that signs and symbols create an open structure that is endlessly open to new fields of interpretation. Merleau-Ponty also accentuated that the significance of the artwork occurs through the interpretation of may different signs and symbols. Authors also clarified that there are two types of approaches to the interpretations of symbols (two distinct ways to understand their significances) for both Bonta (1980) and Handa (1999), it can be firstly the atomistic or the natural approach (that defines that significance is in the work itself) or the second, the systemic or arbitrary approach (where significance and the use of signs and symbols is cultural). **However, neither of these forms define the real significance of the sign, which is in the fact that it can be universal as sustained by** Handa (1999), Merleau-Ponty and Eco.

Universal signs, reflect the common aspects and signs between all cultures; they are are 'deep structures', that express significance that is always common and universal to all human beings (Eco (1986)) and they define the collective unconscious (Jung and Eco (1986)). We also saw that when universal, symbols can be understood as archetypes: universal symbols that belong to life itself and are inextricably linked to the individual through their emotions (Pallasmaa, 2011). Examples of universal signs were given as simple geometric forms, that could either be used in the whole or throughout the multiple parts of the overall whole.

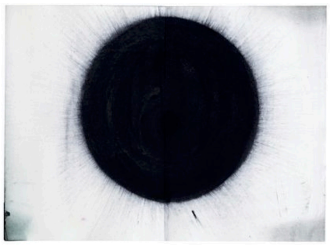
One last aspect is of the essence, and that is the fact that symbols and the process of interpretation is alive (open) as long as the symbol remains an enigma (Hegel and Eco, 1986).

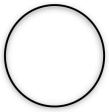












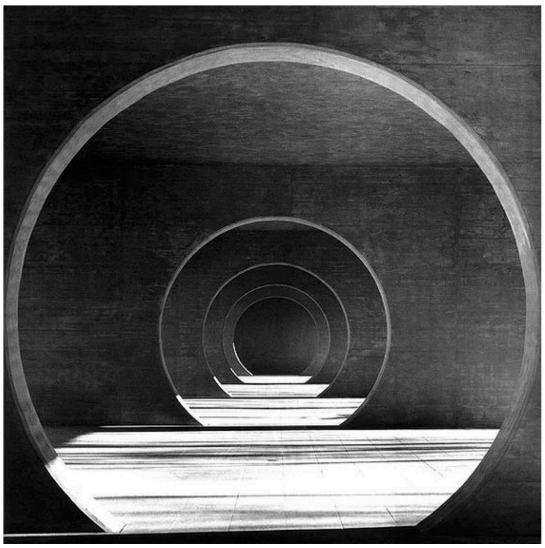


Photo 1: Buddhist Mandala; Source: http://mandalas-art.blogspot.pt/2010_10_01_archive.html; Photo 2: The Egyptian Pyramids; Source: http://en.wikipedia.org/wiki/Egyptian_pyramids#mediaviewer/File:All_Gizah_Pyramids.jpg: Photo 3: Carlo Scarpa, Brion-Vega Cemetery, Near Treviso Italy, 1970-2; Source:https://pt.pinterest.com/pin/251075747954737510/; Photo 4: Anish Kapporr Drawings in his Sketchbook; Source:https://pt.pinterest.com/pin/435652963925844473/; Photo 5: Mario Botta, Wohnsieldlung in Novazzano; Source: https://pt.pinterest.com/pin/218495019399141787/

PLATE 26: GEOMETRICAL SYMBOLS AND ARCHETYPES IN ARCHITECTURE AND PAINTING

Synthesis:

Signs and Symbols

1. ***Artworks can incorporate signs and symbols that communicate significance and they can in themselves be a sign or a symbol.*** *Art is symbolic by it's own nature (Eco, 1986), it is a symbolic activity composed of symbols (Goodman (1976)), it is a combination of many signs that emerges as a 'wholeness' that echoes as a significance (Merleau-Ponty (1960)) and it is in itself a symbol (Eco (1986)).*

2. ***Understanding art, it's significance, is understanding*** **what the symbols represents** and what they denotes (what they refer to):
    - *for symbols to denote (in art) they need to possess a degree of representation and expression (to grasp a 'significant relationship' of what it symbolizes). It is this ability that makes art be art (Nelson Goodman (1976))*
    - ***semiotics approaches the work of art through its content*** *('from the depth to its surface') and sustains that the meaning of a work of art resides in the observation of divergences occurring within the content (Batu (2012))*
    - ***t****he* ***meaning, emerges from the interaction of many signs****; thus, it is precisely in the totality (as a whole) that is the bases of the 'significance' in the work of art (Merleau-Ponty (1960))*
    - *the process is alive as long as the symbol remains an enigma (Hegel and Eco, 1986)*

3. *There are two types of approaches to interpretations of symbols (ways to understand their significances): for Bonta (1980) and Handa (1999) it is the atomistic or the natural approach (significance is in the work itself) and the systemic or arbitrary approach (meaning is cultural).* ***However neither of these forms define the real significance of the sign, which is in the fact that it can be universal.***

4. ***Universal Signs and Symbols in art:***
    - *are 'deep structures', that express significance that is always common and universal to all human beings (Eco (1986))*
    - *are very complex, and they create an endless cycle of symbols, significations and associations (Eco (1986))*
    - *defines the collective unconscious, a universal entity, that is materialized through creations (Jung and Eco (1986))*
    - *are 'genuine symbols' because they are ambiguous, universal and full of strong significance. (Eco (1986))*
    - *are defined by their universality that defines true 'meaning and signification' (Handa (1999))*
    - *when universal, symbols can be understood as archetypes: universal symbols that belong to life itself and are inextricably linked to the individual through their emotions (Pallasmaa, 2011)*

5.5. METAPHOR

> ''Every space, tells a story, with its elements, languages, signs and codes, with its presence and its 'metaphors': this place (a room) includes another (a dream or a memory), etc.'' (Ballantyne, 2002, p. 72)

What is a metaphor?

… Understanding the metaphor

Metaphor, for Goodman (1976), is a new way of saying something that already exists, it possesses some degree of ambiguity, it relies on a 'family' of concepts, ideas or realms and it implies a 'schema' (ordering of labels) that is transferred. A metaphor, like new forms of representation, '' (…) becomes more literal as their novelty wanes.'' (Goodman, 1976, p. 68); a frozen metaphor then, is a metaphor that has lost its youth and strength. These explanations follow the lines developed by Cassier (Goodman explains), however, they do not explain the metaphorical applications of all terms and leaves the issue of truth unaddressed. For Goodman (1976), metaphor communicates truth, transfers truth, and its force is dependent on the combination of '' (…) novelty with fitness, of the odd with the obvious.'' (Goodman, 1976, p. 79). The good metaphor, both startles and satisfies. There are many types of metaphors, but in all of them occurs a 'transfer' of 'schema'.

What is a metaphor in art?

… Understanding the metaphor in art

Metaphors, in art, occur when a symbol refers to something that does not normally belong to its realm of references; as such, they both 'possess' and 'exemplify'. On this issue, Goodman states: '' What is expressed is metaphorically exemplified.'' (Goodman, 1976, p. 85), meaning that they imply a possession of truth, a transference of a 'schema', a degree of ambiguity, a relation of a family of concepts and ideas and lastly a new way of saying things (vitality). Goodman (1976) concludes that this metaphorical character opposes the literal representation, and carries expression qualities within itself; it is responsible, like other forms of expression for conveying meaning and significance.

Barie Fez-Barringten's (2002) in his article *'Aesthetics architecture: the making of metaphors'* (2002) also sustains the metaphor as one of the centres of artistic significance. He defines metaphor as: '' (…) the main mechanism through which we comprehend abstract concepts and perform abstract reasoning.'' (Fez-Barringten, 2002, p. 10). This holds true for linguistic, as it does for the arts. The subject matter of the artwork (from the complex to the mundane) can only be comprehended via the conceptual nature of the metaphor. Metaphor, the author continues, is reasoning in an abstract way, and through it multiple 'truths' can occur and come about in the viewer that were not contemplated by its creator. The author further identifies three steps to understand 'metaphors': first recognition, second reconstruction, and third interpretation; the three steps have to occur, however, they might occur in different times; in a shorter apprehension, the three steps blend together into one single act. A dead metaphor, Fez-Barrington

claims, can be a replica, a copy, or 'someone else's thoughts' but it simply '' (…) does not contain any fresh metaphor, insofar as it does not really get thoughts across. '' (Fez-Barringten, 2002, p. 7). The author explains that each conceptual creation forms thousands of 'conceptual' metaphors, they are grounded in the body and in everyday experience and knowledge.

Scrutton (2009) also makes a connection between significance and metaphor in art. However unlike Goodman, he sustains that art (and beauty), although it contains metaphors, is beyond metaphorical and symbolical understandings. However, even the best attempts to explain beauty in an abstract art (like music or architecture), '' (…) involves linking them by chains of metaphor to human action, life and emotion.'' (Scruton, 2009, p. 123). To understand the nature of meaning and significance in art, then, is to understand the nature of figurative language, it's metaphors and the connections between them. He further explains that: '' Metaphors make connections which are not contained in the fabric of reality but created by our own associative powers.'' (Scruton, 2009, p. 1). As such, the importance of the metaphor is not the property that it **contains but the experience it suggests**. These can either be dead, empty and evoke nothing, or they can be alive in meaning, connecting things, awakening and changing a sense of perception, evoking emotions, new connections and new meanings in the viewer. In a work of art, when the metaphor is alive and fulfills its purpose, it speaks from element to element, and them again through the whole, in an endless cycle of interpretation.

… by Pérez-Goméz: Metaphor for Aristotle

Pérez-Goméz (2008) explains that Aristotle attributes great importance to the metaphor, as playing a central role in knowledge and in being associated to the imagination. It is the metaphor that allows for associations and resemblances can build links between things; it does so, by the imagination, in a ''transference'' or leap beyond logical thinking, and can be found in both the arts and the sciences. '' Metaphor was the very condition of natural (and mythological) language, and it became the domain of poetry and art after speech became normalized in science and philosophy.'' (Pérez-Gómez, 2008, p. 70).

How does a metaphor echo significance?

…by Paul Ricoeur: metaphor, meaning and significance

An author that gives a great contribution in understanding what metaphors are and how they add significance is Paul Ricoeur. Paul Ricoeur's in '*La métaphore vive'* (1975)[274] states that traditionally, metaphor (belongs to the realm of the rhetoric begun with Aristotle) deals with how to persuade, however, metaphor possesses a unique 'structure' with two distinct functions: a rhetorical and a poetical one, and is defined in terms of movement. Metaphor, the author continues, is a borrowing of meanings that is different from the meanings being expressed by the words, it operates within existing terms, however it contradicts those terms in order to create it's meaning.

Metaphors carry the different types of meaning (objective, literal and spiritual), plus a figurative meaning. They are characterized by being free: using 'images' freely to represent other things. Metaphor, Ricoeur continues, possesses a 'cognitive content' and also an 'emotive content', and through them occurs

[274] Paul Ricoeur's '*La métaphore vive'* (1975), (the English version used is entitled '*The Rule of Metaphor: The Creation of Meaning in Language'* (2003)) deals with the problematic of the metaphor in language. Metaphor, for Paul Ricoeur, belongs to the realm of the rhetoric. As an old discipline of oratorical technique that begun in Aristotle, it is philosophies ally and enemy, in the sense that '' (…) it is always possible for the art of 'saying it well' to lay aside all concern for 'speaking the truth.'' (Ricoeur, 2003, p. 10).

what can be described as a 'change of meaning'. In regards to this 'change of meaning' he continues: '' But while changes of meaning are always innovations, the foundation of the explication of innovations lies in the descriptive point of view. '' (Ricoeur, 2003, p. 135). It is the 'vague' character of meaning, the indeterminacy of semantic boundaries, that allows for changes of meanings to emerge. Metaphors, then, are also composed and defined by this phenomenon of vagueness[275] and act as innovations, allowing for new meaning to emerge in a sudden way[276].

> ***Synthesis:*** *Metaphors are understood as a transference of truth, that depends on the force of combination of novelty with old and the odd with the obvious (Goodman, 1976), as that which has a rhetorical and a poetical realm and is defined in terms of movement (Ricoeur, 2003) and that which carries varied meanings objective, literal and spiritual), plus a figurative meaning (Ricoeur, 2003). It is a is a borrowing of meanings (that is different from the meanings being expressed by the words), it operates within existing terms, however it contradicts those terms in order to create it's meaning (Ricoeur, 2003). In art, metaphors imply a possession of truth, a transference of a 'schema', a degree of ambiguity, a relation of a family of concepts and ideas and lastly a new way of saying things (vitality), (Goodman (1976)), has a conceptual nature, that allows for the subject matter to be comprehended (Fez-Barringten, 2002) and are important because of the experience they suggest, and because they create an endless cycle of interpretation (Scrutton, 2009).*

How are metaphors used in artistic creation?
What metaphors does art and architecture create?

…by Juhanni Pallasma: Artistic and Architectural Metaphors

Pallasmaa (2011) also considers the metaphor to be a central part of all artistic creations. For him, although traditionally metaphor is associated to literary uses, it is something that is innate to our human existence: ''(…) it arises directly from our corporeal being in the physical world and from our ways of perception and cognition centered in the body, (…).'' (Pallasmaa, 2011, p.67). Artistic metaphors, then, possess metaphoric representations that become momentarily part of 'our' mental landscape, by evoking and strengthening thoughts, emotions and new connections. But also, he continues, they are metaphors in themselves; as a whole, they are '' (…) metaphorical representations of the world and of the human condition.'' (Pallasmaa, 2011, p.103); in art, the whole world is reflected as a sort of 'existential metaphor'. They provide 'orientation' for the human being and 'condition' the experience and the perception in an existential type of understanding.

For him, the power of artistic creation and more specifically of architecture is precisely that they speak through metaphor and 'embodied imagination' communicating 'unconscious collective mental content'[277] that defines our existence. This content, created through the metaphor, transforms human contexts in '' (…) images and metaphors of life and of an idealized order.'' (Pallasmaa, 2011, p.19).

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[275] '' Vagueness is to be understood not exactly as that abstraction which is itself a phenomenon of order, (…) but in the 'generic' sense, that of not ordered, indefinite, and imprecise, which always demands that a further discrimination be made on the basis of actual context.'' (Ricoeur, 2003, p. 133).

[276] He summarizes: '' It is true that, as such, changes of meaning are innovations, and so phenomena of speech. Most often these innovations are individual and even intentional; unlike phonetic changes, which in general are hardly conscious, 'semantic modifications are often the work of a creative intention' (Précis 238). Furthermore, the blossoming of new meaning is sudden, without intermediate gradations.'' (Ricoeur, 2003, p. 135).

[277] Pallasma (2011) emphasizes: ''The power of the architecture is its deeply unconscious and collectively identifiable mental content that speaks to us through the embodied imagination and metaphor.'' (Pallasmaa, 2011, p.69)

Architecture, then, creates a specific kind of metaphor, defined as a 'metaphor of life', which is a sort of creation of 'an ideal' life.

Therefore, associated to art as metaphor, is an idealizing nature that creates an 'ideal' of what life is and could be. This 'promise' of 'an ideal' (through metaphor) is a condition of 'Art', a prerequisite for a 'meaningful' creation and communication. For architecture to create a 'cosmos', an 'order', which is to say, that in order for it to create an 'idealizing objective' it must embody a certain 'metaphorical' existence of an 'ideal' life itself. Pallasmaa (2011) defines this as an 'idealizing objective' which is part of architecture's central role. Architectural examples, such as Casa Malaparte[278], Casa Melkinov and The Glass House, the author continues, are '' (…) condensed metaphorical microcosms, alive and habituated metaphors, (…).'' (Pallasmaa, 2011, p.104), because they exalt a metaphysical atmosphere, beyond the mundane concerns of consciousness. In this sense, Architecture, materializes a 'metaphoric' existence, its own 'cosmos', its own 'promise of beauty', possesses its intrinsic 'ideal', an idealistic 'order' of life and echoes its principles through its elements and characteristics. Other examples, are the drawings of the 'visionary' Giovanni Battista Piranesi (1720-1780) or the Greek Polis, in Athens. This idealizing objective as a metaphor, in architecture, doesn't contradict other architectural ideals and values (since architecture establishes many different links at various scales between the territory and man), but instead acts as a compliment to the other architectural essences.

> **About The Idealizing Nature of Art as Metaphor:** Alain de Botton (2013) and Louis Armstrong (2013) in their book '*Art as Therapy'* explain the problematic associated to 'idealization' in art. They establish, that idealization in the modern world, is seen as something negative, because it seems to focus only on the positive, portraying '' (…) virtues more glowing that they actually possess, while disguising any imperfections with polish and subterfuge.'' (De Botton and Armstrong, 2013, p.20). In the modern world, this is seen as negative. The underlying concern is that we ignore crucial parts of our existence. The antidote to 'idealization' the authors explain, is 'realistic' representations, that portray all aspects and not just the positive ones. However, idealization has been one of art's central role for centuries, the authors continue; through the creation of ideal images, 'aspirations' are defined, and they help us be in touch with the values we so much wish to possess. As such, creating an ideal nature, shouldn't imply a negation of reality, because there is a place for both: '' We can love the ideal while being perfectly aware of the fallibility and imperfect (…).'' (De Botton and Armstrong, 2013, p. 22); and this balance between 'idealization' and 'reality' can define great art and architecture.

…by Barie Fez-Barrigten: Architecture as metaphor

Echoing Pallasmaa's views is the author Barie Fez-Barringten's (2002), that sustains the artistic creation as a metaphor of life. He considers architecture (as an art) as the making of metaphor: ''Architecture as the making of metaphors not only is the stasis to why architecture is art but also explains the formation of architectural aesthetic vocabulary.'' (Fez-Barringten, 2002, p. 1). Metaphor, he continues, is the link between most creative arts and architectural works. All the arts technically metaphoric, for they: '' (…) they transfer, carry-over and express one thing (some idea) in terms of another (the craft).'' (Fez-Barringten, 2002, p. 2). This metaphoric nature of all the arts is not linguistic, the author adds, thus his studies aim to transfer the knowledge and principles from 'linguistic, psychological and cognitive fields' to art and architecture.

[278] In regards to The Malaparte House, and as an example of this 'metaphorical' idealizing condition in architecture, Pallasmaa describes: '' Lacking any railings for protection, the rooftop terrace becomes an abstract level, a place without weight, a stage and an altar for sacrifices, suspended between heaven and earth. The tapered ladder leading to the rooftop terrace points to the sky, like the ladder of Jacob.'' (Pallasmaa, 2011, p.105) .

For architecture to convey metaphors, it first needs to have consistency, integrity and aesthetics; that which '' (…) do not have these characteristics do not work as metaphors.'' (Fez-Barringten, 2002, p. 10). The real architectural metaphor derives from the 'primordial forms of life', the 'beginning' of existence; architects translate philosophical or psychological principles into forms[279]. Mappings (creative process) and Metaphors are grounded in the body and in everyday experience and knowledge, continues the author. This allows for the observer to process the information into a personal experience, to the 'realm of the familiar'. The architect structures program as much as he structures metaphors, in the stages of architectural creation '' Shifting (…) between the reality and experience to make the metaphor. '' (Fez-Barringten, 2002, p. 13). In this way, each conceptual creation forms thousands of 'conceptual' metaphors: the micro metaphors echo the larger metaphors. Overall, the conceptual system is for its most part, completely metaphorical. As a conclusion note, it is possible to quote: '' So while architecture is the making of metaphors and architects are making metaphors their works, though metaphoric, are not themselves the metaphors but the shadow of the metaphor which exists elsewhere in the minds of both the creator and the user. '' (Fez-Barringten, 2002, p. 18). The real metaphor then, exists in the mind of its creator and user.

The author's example of Frank Lloyd Wright's Prairie House a valid example of a metaphor, announcing the relationships of horizontality and verticality as a metaphor for life; however, it is important to clarify that this is not the best example of architectural metaphor, since it accentuates the relationship between landscape and architecture. Further examples will be announced as follows after the synthesis.

…by Jorge Cruz Printo: Architectural Metaphor

Jorge Cruz Pinto (2007) in his book '*Ver, Desenhar, Imaginar, Projectar*', explains that metaphors allow for the transposition of images from different contexts into creative stimuli for architectural discourse, by establishing analogies and schemes that allow for a different way of perceiving reality. They serve as analogical and symbolical references defining paradigms for the architectural invention and imagination. He adds that the metaphors that are more productive for the architectural imaginary are the mythical-cosmological ones such as the human body, the egg, the web, the shell, the sun, the moon (natural character), or the cross and the spiral (symbolic character). In the article '*A caixa, o espaço-limite, e a ideia de caixa nos momentos da arquitectura portuguesa*' the author also explains that when we consider an architectural box as a metaphor (in opposition to the tradicional ideas of typology and morphology), we introduce the idea of a schematic model between idea and sensitive understanding, which unites the logical and rational aspects with poetical and intuitive ones[280]. These metaphors create a link between man and the cosmos.

[279] As such: '' Hence architects translate their architectural conception from philosophy, psychology, sociology, etc into two dimensional scaled drawings and then to real life full scale multi dimensions convention consisting of conventional materials, building elements (doors, windows, stairs, etc).'' (Fez-Barringten, 2002, p. 12).

[280] '' Ao considerar a caixa como forma metafórica ou metatipo, por oposição aos tradicionais conceitos de tipo, tipologia e morfologia, introduzimos a ideia de modelo esquemático entre a ideia e o sensível, que esta mais alem dos conceitos epistemologicos, unindo de forma sintetica os aspectos logico-racionais com os aspectos poetico-intuitivos que caracterizam a metáfora. '' (Pinto, 2001, p. 30).

> ***Synthesis:*** *From the above analysis, it is possible to summarize artistic and architectural metaphor as: a transference of truth that is innate to our human existence: in a sort of existential metaphor (Pallasmaa, 2011); that derives from the 'primordial forms of life', the 'beginning' of existence; it's principles and translates them into forms (Barie Fez-Barringten, 2002). The power of artistic creation (and more specifically of architecture) is precisely that they speak through metaphor and 'embodied imagination' communicating 'unconscious collective mental content' that define our existence: they create metaphors of life (Pallasmaa, 2011). Metaphor is the link between most creative arts and architectural works, because all the arts are metaphoric in their nature, and it is in that essence that lies it's significance (Barie Fez-Barringten, 2002)*

… Examples of architectural metaphors

It is of the essence to announce some examples of architectural metaphors, to contribute to the overall understanding, besides those announced by Pallasmaa (2011). One example can be made with the works of the architect Ledoux (1736 – 1806), in the eighteenth century, one of the earliest exponents of French Neoclassical architecture *(see glossary)*. Ledoux, following the classical tradition, used pure forms and sculptural elements as an intrinsic part of the architecture, that establish metaphors to other realms in an abstract way: the columns with the use of the orders, for example, act as a metaphor to the different types of human personalities (soft, complex, or simple). Another example is announced in the columns of the Acropolis in the Diana Temple, that use the human figure as a column, establishing a metaphor to humans carrying the weight of the world, or humans possessing the strength of the Gods. Also, the work of the contemporary architectural work of Richard Rogers (1933 -), more specifically with the Lloyds Bank in London (1986); the architectural form of the building creates an association and acts as a complex metaphor to a technological and mechanical way of life; the whole way the building is designed is a metaphor to the functional way of existence. Yet another example can be announced in the Goetheanum (1919), designed by Rudolf Steiner (1819 – 1925) which possesses a strong rough outside form, made out of concrete, made out of strong edges and rectilinear shapes, and a soft interior, made out of soft curvilinear forms such as spirals and a accentuated by a strong use of colour (bright oranges, yellows, and reds); this duality between outside and inside can act as a metaphor to man that has a rough outside (skin and bones, defined by the body) and a soft inside (made out of the emotions, the spirit and the soul).

… Examples of painting and sculptural metaphors

Likewise, it is of the essence to announce some examples in painting and sculpture. Firstly, in painting one example that is essential is the works Georgia O'keeffe (1887 - 1986), *(see glossary),* whose soft organic forms and colours could be seen as a metaphor for the world of emotions, of the spirit and of the soul. Another example is the works of William Turner (1775 – 1851), *(see glossary),* which will further be explained in chapter six; his paintings, which portray a sort of idealized landscape establish a metaphor to a timeless paradise, where humanity is at peace and harmony with the natural world, and where the colours convey a sort perfected and balanced existent. In sculpture, a main example can be announced with the works of Alexander Calder (1898 – 1976), (see glossary), whose 'mobile' sculpture evoke movement and act as a metaphor to the movement and motions of the universe itself.

… Understanding Metaphors: Conclusion

We saw that artworks can both incorporate metaphors and be themselves metaphors. In both ways, it is as a metaphor, that significance is transferred and understood. The authors all agree that Metaphor is the link between most creative arts and architectural works, because all the arts are metaphoric in their nature, and it is in that essence that lies it's significance.

What the authors change their views, is in describing what a metaphor is and how art is in itself a metaphor, where each author accentuates his own specific ideas.

Metaphor, in general, was defined as a transference of truth that says something that already exists (through combining the old and the new), in a new way. Metaphors possess both 'cognitive' and 'emotive' content, a high degree of ambiguity and rely on a 'family' of concepts, ideas or realms and it implies a schema that is transferred. Its force exists in a rhetorical and poetical realm and is defined in terms of movement (Ricoeur, 2003). It always carries within itself varied meanings (objective, literal and spiritual, plus a figurative meaning). They act by evoking and strengthening thoughts, emotions and new connections (Pallasmaa, 2011).

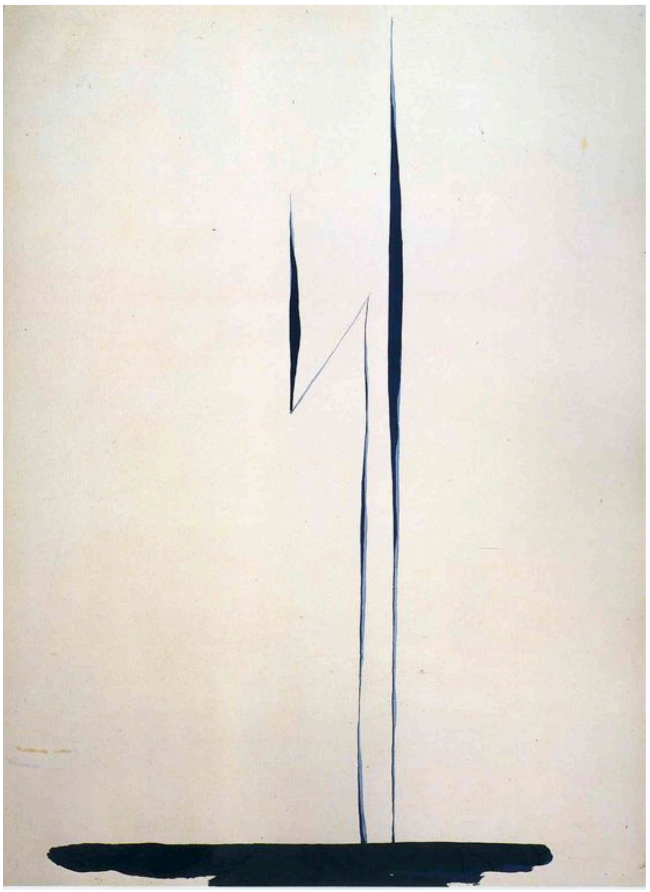
Metaphors in art, possess implies a possession of truth (that is innate to our existence), a transference of a 'schema', a degree of ambiguity, a relation of a family of concepts and ideas and a new way of saying things (vitality). (Goodman (1976)); have a conceptual nature (Fez-Barringten, 2002), suggest experiences in an endless cycle of interpretation (Scrutton, 2009), create existential metaphors (Pallasmaa, 2011).

All authors further agree, that architectural metaphors and artistic metaphors are strongest when they evoke truth about existence (when they create metaphors of life); in order to do so, they derive from 'primordial forms of life' (the 'beginning' of existence), communicate 'unconscious collective mental content' that define our existence, and translate philosophical or psychological principles into forms (Barie Fez-Barringten (2002) and Pallasmaa (2011)).

Lastly, it is important to conclude that metaphors' strength relies on both vitality and novelty derived from the creative process, and that the act in a complex way, through the creation of multiple metaphors in both a small scale and a general one.

In architecture, it is important to note, metaphors emerge as sort od secondary element that complements architecture's main essence which is that of dwelling. Metaphors can also occur, as we saw from the multiple examples, in an unconscious way: occurring as a result of other values. An example of this is the organic architecture (such as the architecture of Frank Lloyd Wright), which one can find multiple metaphors in his work, however, they were not created consciously, but emerged as a desire to create a harmony with nature and the landscape.

In painting and sculpture, too the same can hold true: metaphors can emerge unconsciously, however, the main metaphor of the work, might also result from the main values underlying the work, such as was observed in the work of William Turner.









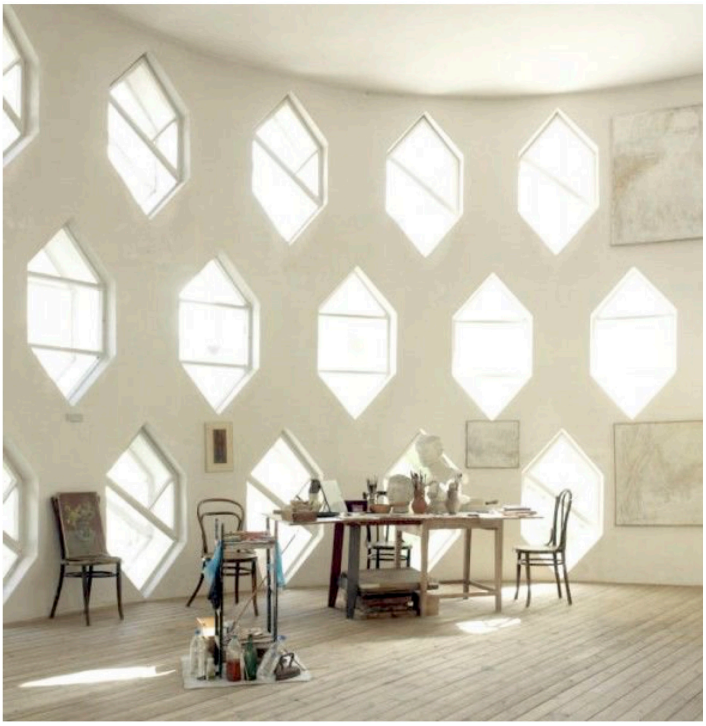


Photo 1: Black Lines 1 by Georgia O'Keeffe; Source:https://pt.pinterest.com/pin/251075747946922667/; Photo 2: The Diana Temple, at the Acropolis; Source: http://bjorngrotting.photoshelter.com/image/I0000aU.LhEmBhBc; Photo 3: The goetheanum exterior; Source:https://en.wikipedia.org/wiki/Anthroposophy#/media/File:Goetheanum_Dornach.jpg; Photo 4: The flamenco, by Alexander Calder, in Chicago; Source: http://chicago-outdoor-sculptures.blogspot.pt/2011/01/alexander-calder.html; Photo 5: Interior of House Melnikov; Source: https://twitter.com/museotamayo/status/572241211081138176

PLATE 27: EMBODIMENT AS METAPHOR: A TRANSFERENCE OF TRUTH (GOODMAN)

Synthesis:

Metaphor

1. ***Artworks incorporate metaphors and are themselves metaphors; through this, significance is transferred and understood.***

2. ***Metaphor is the link between most creative arts and architectural works,*** *because all the arts are metaphoric in their nature, and* ***it is in that essence that lies it's significance (Barie Fez-Barringten, 2002)***

3. ***Metaphor:***
    - *is a* ***new way of saying something that already exists****, it possesses some degree of ambiguity, it relies on a 'family' of concepts, ideas or realms and it implies a schema that is transferred (Goodman (1976)).*
    - *is the main mechanism through which we comprehend abstract concepts and perform abstract reasoning. (Fez-Barringten, 2002).*
    - *is a transference of truth, that depends on the force of combination of novelty with old and the odd with the obvious. (Goodman (1976))*
    - *occurs in three steps: first recognition, second reconstruction, and third interpretation, however they all blend together (Fez-Barringten, 2002).*
    - *has a rhetorical and a poetical realm and is defined in terms of movement; Is a possession of both 'cognitive content' and 'emotive content', and through it occurs what can be described as a 'change of meaning' (Ricoeur, 2003)*
    - *is a borrowing of meanings that operate within existing terms, however it contradicts those terms in order to create it's meaning. (Ricoeur, 2003)*
    - *is that which carries varied meanings objective, literal and spiritual, plus a figurative meaning. (Ricoeur, 2003)*
    - *is the indeterminacy of semantic boundaries, that allows for changes of meanings to emerge. (Ricoeur, 2003)*

4. **Metaphors in art:**
    - *implies a possession of truth, a transference of a 'schema', a degree of ambiguity, a relation of a family of concepts and ideas and lastly a new way of saying things (vitality). (Goodman (1976))*
    - *opposes the literal representation, and carries expression qualities within itself; it is responsible, like (other forms of expression) for conveying meaning and significance. (Goodman (1976))*
    - *has a conceptual nature that allows for the subject matter to be comprehended (Fez-Barringten, 2002).*
    - *are important because of the experience they suggest, and because they create an endless cycle of interpretation. (Scrutton, 2009)*
    - *transfers truth that is innate to our human existence: in a sort of existential metaphor (Pallasmaa, 2011)*
    - *possess metaphoric representations that become momentarily part of 'our' mental landscape, by evoking and strengthening thoughts, emotions and new connections (Pallasmaa, 2011)*

5. ***The real architectural metaphor derives from the 'primordial forms of life', the 'beginning' of existence; architects translate philosophical or psychological principles into forms (Barie Fez-Barringten, 2002)***

6. ***The power of artistic creation (and more specifically of architecture) is precisely that they speak through metaphor and 'embodied imagination' communicating 'unconscious collective mental content' that define our existence: they create metaphors of life. (Pallasmaa, 2011).***

5.6. VALUES

'' As we write, so we build: to keep a record of what matters to us.'' (De Botton, 2008, p.123)

What emerges when we move beyond symbols and metaphors as possessing the significance in art, is the idea of values. It is values that are embodied through signs, symbols and metaphors, and that allow for multiple significances to be contained in the work of art. Three authors clarify this: both Alain de Botton (2008) and Louis Armstrong (2008) and Juhanni Pallasmaa (2010). It is important to clarify, that these authors define only a first approach in understanding what values is and how they are embodied as significance. The issue will be further analysed in chapters 8 and 9, after the analysis of the case studies, in chapter 6 and 7. This brief introduction aims at summarizing the understanding of values as something that can also be embodied as significance.

… for philosophy: defining values

A brief introduction to the definition of values was presented in chapter one, however, at this point we need to better clarify what these values really mean in a general way before understanding through the different authors, how these values connect to art and to creations in general.

The author José Ferrater More for the Dictionary of philosophy (*Dicionário de Filosofia*) (1991), explains that value, in multiple classical doctrines since antiquity, (since Plato where these ideas begun) has been associated and equated with 'the self'. With Nietzsche, the author continues, the concept of value evolved into something that was the '' (…) founding aspect of the conceptions of the world and of life.'' (Mora, 1991, p. 409) [281]. The author explains that values are 'unreal' qualities because they do not possess 'a body'; it's structure is different from an imagined object because whilst the object is constructed by intelligence, values can be perceived and understood through a non intellectual mechanism. He claims: '' Values are timeless and that's why they have sometimes been confused with ideals, but it's form in reality is not it's ideal neither is it it's possibility of being real, but being valuable. '' (Mora, 1991, p. 410) [282]. This defines the main characteristic of values: which is the fact that they are valuable. Other main characteristics include: objectivity (all values are objective in the sense that they define and sustain all actions), non-independence (they always relate to the self and express the self's 'ideals'), polarity (they express themselves through polarity such as beauty and ugliness), quality (they can never be judged through quantity but through quality) and hierarchy (values can be organized hierarchically).

Another main idea brought forth through philosophy is that some values are Incommensurable, meaning that they cannot be reduced to a common measure. This is explained by the author Nien-hê Hsieh (2016), for The Stanford Encyclopedia of Philosophy, under the entry Incommensurable Values, where the author clarifies that abstract types of values such as liberty and equality are always

[281] Free translation from: '' (…) se descobria o valor como fundamento das concepções do mundo e da vida.'' (Mora, 1991, p. 409)
[282] Free translation from: '' Os valores são intemporais e por isso têm sido confundidos às vezes com as idealidades, mas a sua forma não é o ser ideal nem o ser real, mas o ser valioso.'' (Mora, 1991, p. 410)

described as incommensurable. He claims: '' The term "incommensurable" suggests the lack of a common measure. (…) Because the idea of comparison is closely tied to the topic of value incommensurability, this has led to use of the term "incomparable" alongside "incommensurable".'' (Hsieh, 2016). The author also accentuates that these types of values imply an accumulation of values, rather than the idea of one canceling out the other. In other words, 'abstract' values add to each other continuously.

Thus, at this point, we understand that the types of values associated to art are always incomparable and incommensurable because they are abstract values. They are timeless (as most values are, which relates them to idealistic natures), what matters in their understanding is the fact that they are valuable and they add to each other rather than canceling each other out.

… by Alain de Botton: Art as communication of 'associations' as values: moving beyond symbol and metaphor

Alain de Botton (2008) sustains that objects and artworks convey messages and values of ideas and themes that are central to our lives, through their use of symbols, metaphors and other 'associations'[283], that establish multiple connections and allow for multiple meanings to occur and emerge. These associations, that are general and vague, don't need much to trigger our capacity to interpret and generate meanings; they trigger memories and use past references, incorporating links to other realms into their own sphere of existence, evoking meanings and all sorts of significance. These 'associative' connections, can happen at a subconscious level, away from the awareness of the mind and the ability to 'unleash memories', can happen from the tiniest details to the overall experience. Either in an abstract way or in a representational form, these works appeal to us more, when they evoke ''(…) the most attractive, significant attributes of human beings and animals.'' (De Botton, 2008, p.84). De Botton in consequence, sustains that the best kind of associations and messages art can convey, are qualities that are inherent in the human being. Art does this through it's 'character', it's 'attributes', as well as the idea of 'mimesis' and 'representation' of animal and human abstractions. He suggests that this idea can be traced back to Vitruvius that linked the classical orders with specific attributes, human and divine. Art, design, architecture in this sense, acquires a specific 'personality' and equally a certain 'mood'; another way to create associations is through 'quotations'. However the real significance of these forms of creation, it's significance in art, is that they evoke values.

But what are these values?

… by Alain de Botton: embodiment of values as emotional and psychological promises

Alain de Botton (2013) and Louis Armstrong (2013) in their new book '*Art as Therapy'* explain that art 'balances' our emotional needs and psychological 'necessities'. Because of this, our attractions to types of art differ, as each person has their own specific needs. They clarify: '' Since we are not all missing the same things, the art that has a capacity to rebalance us, and therefore arouse our enthusiasms, will differ markedly.'' (De Botton and Armstrong, 2013, p.32). This notion, that art 'rebalances' our

[283] By this he means: '' (…) by referring to, and triggering memories of, the contexts in which we have previously seen them, their counterparts or their models. They communicate by prompting associations.'' (De Botton, 2008, p.93)

emotional needs, answers the question of why people's aesthetics tastes vary so much. The tastes of people depends on the spectrum of 'emotions' that is in need of 'stimulation', and as each work of art possesses it's own 'mood' and emotion[284], the choice relies on that which will balance and compensate the emotional life and inner fragilities of the viewer. The authors claim: '' The art we love is a guide to what is missing in our societies.'' (De Botton and Armstrong, 2013, p.37).

Values and messages encoded in the piece, resonate in the 'hearts' of those 'emotionally' open to its meanings. Artworks, then, respond to our desire to be 'better' and this is innate to the human condition, by reminding us of what is missing. This aspiration to goodness, accompanied by the weakness to fulfil it (always unattainable), is what Aristotle called '*akrasia*', and art helps us be better versions of ourselves. Art in this sense, is moral without being 'moralistic' the authors continue[285]; it possesses a moral attitude (the desire to help and show the way) however it is not moralistic in its nature. As a conclusion the authors clarify: '' The task for artists, therefore, is to find new ways of prizing open our eyes to tiresome familiar, but critically important, ideas about how to lead a balanced and good life.'' (De Botton and Armstrong, 2013, p.38).

> **Examples of art and architecture as values (completeness for human life):** Of reference, in this sense, the authors explain, are the remarks made by the German Poet Friedrich Schiller, where he developed the same idea in his essay 'On Naïve and Sentimental Poetry' (1796). He claimed that in Ancient Greece, their artists and 'artisans' had no need in their artwork for the representation of nature, for they hadn't 'lost it in themselves', they spent their days surrounded by nature, and as a consequence, paid little attention to it in landscapes; he continues explaining, that nature would find its highest representation in art in nations that had lost it in their ways of life. As an example the authors use the Marie Antoinette's mock cottage in the gardens of Versailles, using as a tagline '' A cottage to correct the excesses of the palace.'' (De Botton and Armstrong, 2013, p.35). Another example of this type of search for completion as a moral action, are the paintings of Fra Angelo and his depictions of Hell, ''The pains of Hell'' from The Last Judgment, (c.1431); hell is made clear, in order to create in the viewer a horrific response, and thus, induce viewers into good behaviour. Moral messages are understood as ''(…) messages that encourage our better selves.'' (De Botton and Armstrong, 2013, p.42). These moral aspects of art are common in paintings associated to Christianity. However, in the same way, in modernity, it is possible to outline other versions of 'hell' represented in artworks, where ''(…) hell is just the abandonment of the path to the better self.'' (De Botton and Armstrong, 2013, p.38). A Korean Moon Jar (17th-18th century) from the Choson dynasty, is also a tribute to modesty, the authors explain that the jar is modest because it incorporates into itself its own imperfections and crafting details; furthermore: '' It's flaws merely concede its disinterest in the race of status. It has the wisdom not to ask to be thought too special. It is not humble, just content with what it is.'' (De Botton and Armstrong, 2013, p.42). Within the piece are 'values', 'goodness', 'moral messages' and 'ideals'.

How do they emerge? But what are these emotional and psychological compensations?

To comprehend what kind of emotional and psychological art can aid us with, is to understand the purpose and significance of art, explain the authors[286]. Just as man creates a glass of water to carry water and fill that necessity, so too, art does the same in a psychological, intellectual and spiritual level,

[284] This is linked to the fact that every work of art possesses its own mood, 'feeling' and 'emotion' in itself: '' (…) a painting may be either serene or restless, courageous or careful, modest of confident, masculine or feminine, bourgeois or aristocratic, and our preferences for one kind over another reflects our varied psychological gaps.» (De Botton and Armstrong, 2013, p.34).

[285] The authors claim: '' It is evident, though, that a lot of the best art produced throughout history has been concerned with an explicitly moralistic mission: an attempt to encourage our better selves through encoded messages of exhortation and admonition.'' (De Botton and Armstrong, 2013, p.37).

[286] In this regard, the authors continue, '' To discover the purpose of art, we must ask what kind of things we need to do with our minds and emotions, but have trouble with. What psychological frailties might art help with?'' (De Botton and Armstrong, 2013, p.5);

through the communication of values. As such, the authors identify seven frailties, and to 'compensate' for them, their according seven functions of art. The authors say these are the most common 'functions' and do not extinguish in their selves the totality of the functions that could and should be associated to art.

The psychological frailties, De Botton (2013) and Armstrong (2013) announce, can be summarized as follows: (1) one forgets what matters and needs a correction of memory (remembering), (2) one loses hope and is oversensitive to the negativities of our surroundings and thus need a purveyor of hope (hope), (3) one suffers and is inclined to feelings of isolation and thus need a way for a dignified understanding of sorrow (sorrow), (4) one is unbalanced and loses sight of the best qualities of life (balance), (5) one is not aware of our own existence and self-knowledge is not clear and thus need a guide to self-knowledge, (self-knowledge), (6) one rejects experiences and what we do not understand, thus one needs a way to extent those experiences, and lastly (7) one is desensitized by familiarity and need a re-sensitization tool. The first function, remembering, is characterized by the impulse to record and defines in art, that which is significant and that needs to be remembered; the second function of hope is that which allows for emotions of hope to re-emerge in our day-to-day life, and is associated to beauty as a promise of the ideal; the third, sorrow, is that art which allows us to feel complex emotions of sadness or melancholy; the fourth, rebalancing, creates an overall balance for life; the fifth, self-understanding, accentuates art's ability to teach us lessons about ourselves; the sixth, growth, confronts us with the necessary aspects that we needed in order to grow, and lastly, the seventh, appreciation allows us to be in a grateful emotional existence.

The seven psychological functions of art and examples:

1. **Remembering**: is defined by the impulse to record (events, happenings, people, or experiences), to 'remember', to 'register' and to make it last beyond the short memory of our mental capacities. Of issue in this 'function' is what it is that both 'art' and 'us', as humans and observers, wants to remember[287]. The good artists, are those that appear to make a selection about what to 'commemorate' and what to dismiss, knowing how to identify and define what is significant. Furthermore, ''We might say, that the good artwork pins down the core of significance, where its counterpart, although undeniably reminding us of something, lets an essence slip away. It is an empty souvenir.'' (De Botton and Armstrong, 2013, p.10). As an example about an adequate 'commemoration of the appropriate details', the authors speak of Johannes Vermeer, namely his painting, 'Woman in Blue Reading a Letter' (c.1663). The woman, portrayed in a moment of stillness, opening a letter, portrays an 'essence' of 'unselfconsciousness' and 'absorption'. Vermeer, painted a moment of 'silence' and echoing the 'mind' of the figure, in an 'emotional brightness'. Art is this sense, the authors continue, is a way of 'preserving experiences'.

2. **Hope**: associated with the function of hope is the idea of 'prettiness' and 'beauty'. Our world is not characterised by a 'sentimental' view of life, but by an 'excessive gloom' and an acute 'awareness' of the problems and injustices of the world. In this sense, 'cheerfulness', 'hope' and 'optimism' are important factors of life and of art. As an example the authors use Henri Matisse's painting 'Dance II' (1909), explaining that the dancers in the painting do not allude to a denial of the world, but instead, they put us in touch with the hopeful, carefree and innocent part of ourselves. Furthermore, the authors clarify that associated with this function, is arts power to create 'emotions' in the viewer, and 'move us to tears'. This is partly because 'beauty' gives rise to mixed emotions: on the one hand, we are 'pleased' with the 'awareness' of how life could be; on the other, we are in 'ache' and 'pained' because life is not 'like that'. Beauty is more appreciated and felt amidst the awareness of the troubles of the world. To paint beautiful things (giving an example of flowers in a vase), is, as the authors explains, to be aware of life's ''tragedy of existence''; any doubts of this is clarified, as the authors point out, by the painting and the self-portrait of Henri Fantin-Latour, the first 'Chrysanthemums' (1871) the latter, 'Self-portrait as a

[287] Reference to: ''What we're worried about forgetting, however, tends to be quite particular. It isn't just anything about a person or scene that's at stake; we want to remember what really matters, (…).'' (De Botton and Armstrong, 2013, pp.8, 10).

Young man' (c.1860). Beauty has an appeal, precisely because of the difficulty of life. Furthermore, this kind of 'beauty' and 'hope' presents an 'idealization of life'.

3. **Sorrow**: in this function art can teach us and help us 'suffer more successfully'. Using as an example Richard Serra's 'Fernando Pessoa' (2007-8) artwork, to clarify the embodiment of such emotions; the work does not deny troubles, or possess a 'positive' attitude towards life, but instead it incorporates sorrow into its own being, allowing for the viewer to feel 'accompanied' and 'understood', by presenting sorrow in a 'dignified' way. Associated with the emotions of sorrow is the 'sublime'. The sublime in the Romantic sense (depictions of mountains, stars, heavens and clouds), as the authors explain, allows for understanding of our own nothingness, of our own 'insignificance' by exciting a 'pleasant terror' and '' (…) a sense of how petty man's disasters are in comparison with the ways of eternity, leaving us readier to bow to the incomprehensible tragedies that every life entails.'' (De Botton and Armstrong, 2013, p.30). As an example, the authors use the painting 'Rocky Reef on the sea shore' (c.1825) by Caspar David Friedrich, explaining that it refers to the tribulations of everyday life.

4. **Rebalancing**: art fulfils the need of our rebalancing of our emotions. In the author's words: ''Art can put us in touch with concentrated doses of our missing dispositions, are thereby restored a measure of equilibrium to our listing inner selves.'' (De Botton and Armstrong, 2013, p.32). The Farnsworth House (1951) Illinois, by Ludwig Mies Van der Rohe, for example, would be a house to 'rebalance a nervous soul', a house to restore from too much intensity, stimulation and distractions.

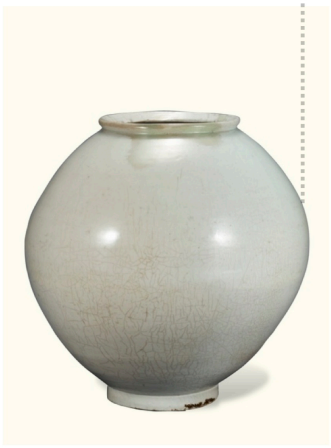
5. **Self-Understanding:** through art, parts of our essence become clearer; elusive and not so clear parts of our thinking and of our own existence, become clear in works of art. These elusive thoughts and experiences are specific 'moods' or 'states mind or of soul', to which works of art become mirrors of. As an example the authors speak of the works of Cy Twombly, specifically 'Panorama' (1957), explaining that it captures a moment where one hasn't quite understood, it is an abandonment of reflexion. The authors summarize: '' Art builds up self-knowledge (…).''(De Botton and Armstrong, 2013, p.47). and lastly, '' They are the media through which we come to know ourselves, and let others know more of what we are really about.'' (De Botton and Armstrong, 2013, p.48).

6. **Growth:** art also allows us to learn and grow, by acknowledging the differences, contrasts and opposing forces at play in life. This is echoed by a 'defensiveness' of character in the 'viewer', and can be overcome by, the authors explain, being 'alert' to its own reality and understanding the 'mind-sets' of its creators; a third step would be to understand connections, between the mind-set of the artist and our own. In this way, growth occurs; in their own words: ''Growth occurs when we discover how to remain authentically ourselves in the presence of potentially threatening things.'' (De Botton and Armstrong, 2013, p.58).

7. **Appreciation:** The last function of art, 'Appreciation', refers to art that is a compensation and triggers our 'awakening' and 'appreciative' emotions, making us pay attention to detail and issues and would otherwise go unnoticed; '' Art is one resource that can lead us back to a more accurate assessment of what is valuable by working against habit and inviting us to recalibrate what we admire and love.'' (De Botton and Armstrong, 2013, p.59). As an example, the authors announce the work of Ben Nicholson '1943 (painting) ' (1943), where he emphasizes the 'basic pleasures of simple things' in the search for an innate harmony of forms and proportions. It is the power of art, the clarify, to « (…) honour the elusive but real value of ordinary life.» (De Botton and Armstrong, 2013, p.62); thus doing the opposite of 'glamourizing life' bringing us closer to the 'real' and genuine aspects of 'normality'.



MODESTY



BALANCE

REMEMBERING

SELF-UNDERSTANDING



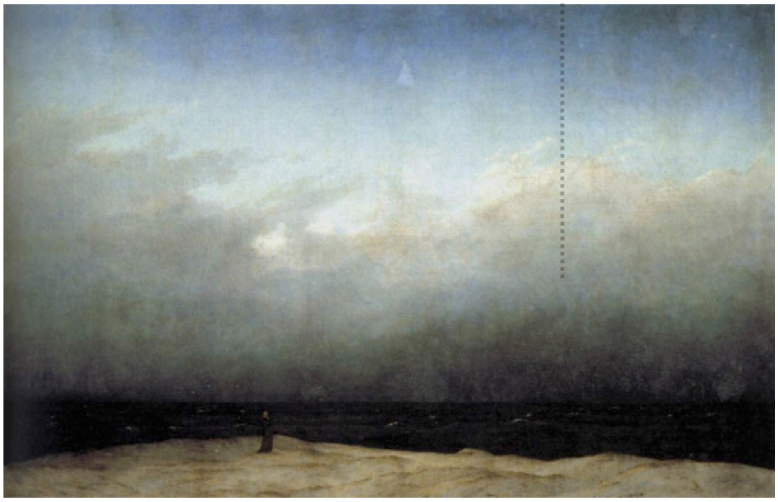


Photo: Farnsworth House by Mies Van der Rohe; Source: http://wallpaperswa.com/Technology/Windows/indoors_houses_interior_furniture_bedroom_farnsworth_house_window_panes_ludwig_mies_van_der_rohe_19383/download_ ; Source: http://designfolio.co.nz/_blog/Design_Folio_NZ/post/Farnsworth_House_by_Mies_van_der_Rohe/#; Photo 3: Korean Moon Jar; Source: http://www.pinterest.com/pin/369998925607737842/; Photo 4:Photo: Cy Twombly, specifically 'Panorama' (1957); Source: http://en.wahooart.com/@@/8XXSDB-Cy-Twombly-Panorama; Photo 4:Photo: The monk and the sea (1808) by Caspar David Friedrich; Source: http://holocaustvisualarchive.wordpress.com/tag/caspar-david-friedrich/

PLATE 28: EXAMPLES OF VALUES AS PSYCHOLOGICAL AND EMOTIONAL COMPENSATIONS FOR DE BOTTON

… by Juhanni Pallasmaa: embodiment and evocations of values

Juhanni Pallasmaa (1996) also accentuates values and qualities as the core significance of the artwork. For him, all art embodies values and qualities, rather than merely signifying them: they become 'real', because they are real, because they are deeply present within the artwork. Pallasmaa calls this 'the embodied image': a lived experience, materialized in a multi-sensorial way, by art. These 'embodied Images of values' simultaneously evoke an 'imagined reality' and becomes a part of the viewer's existence defining and sustaining his personal identity. An example of this is Tintoretto's paintings or Michelangelo's architecture, that embody emotions of melancholy and 'mourn'[288]. The spaces and places enticed by a work of art are real in the full sense of the experience. As examples, Pallasmaa identifies various types of images that connect in a deeper level with the viewer and are transversally applied to all the arts, they are part of the 'artistic imagery' that instils the imagination and allow for emotional and intellectual connections. These are 'images of incompletion' (that evoke intangible significances), 'images of destruction' (that evoke memories) and 'images of time' (that evoke ideas of timelessness and a-temporal realities, the quality of great works of art).

> **Examples of Embodied Values in Art:** 'Images of Incompletion' where incomplete forms and surfaces allow for the stimulation of dreams and for occult 'channels' of the mind to be activated; our perceptual and sensitive system searches the perceptual fields in search of possible 'intangible' significances. As an example Pallasmaa speaks of the works of Jackson Pollock and Henri Michaux, composed of 'accidental stains' that are automatically interpreted as dynamic 'figurative images'. Secondly, 'Images of Destruction', using the example of Leonardo da Vinci, that in his writings, speaks of the search for inspiration in a 'wall in ruins'; 'ruins' are used to evoke 'memories' of the past and a sense of time; this type of image can also be found in the 'Experimental House' by Alvaro Aalto, that uses the brick to create a sense of 'abandonment' and time. Another example, in architecture of this type of 'incompletion' and 'destruction' is the use of the 'angle' in contemporary architectural works, such as the work of Daniel Libeskind, that provokes a dynamic destabilization, by questioning the established primacy of the verticality and horizontality. Both these types connect to another type of artistic image, the 'Images of Time'; these images use 'time' and the experience of time, as a primordial element of expression; for, Pallasmaa emphasizes, '' (…) we do not live only in space and place, but we also habitat time.'' (Pallasmaa, 2011, p.78); all the arts, thus, deal with the 'issue of time', either portraying an experimental time (accelerated, condensed, interrupted, etc. – portraying the plasticity and relativity of time) or, they neglect the progression of time and portray an 'atemporal' time (outside of time), this latter being the quality of the great works of art. Paradoxically, Pallasmaa clarifies, the great works of art deal with both types of time, for the experience of the 'atemporality', the absence of time, is deeply connected to the both the temporal 'dimension' and the 'atemporal' one. The experience of the atemporal qualities, in a work of art, Pallasmaa emphasizes, occurs from the imaginary world and the mental reality 're-created' by the observer. In modern ideology, Vila Savoye of Le Corbusier, is an example, for it aspires towards a 'perpetual' time.

> ***Synthesis:*** *The authors (*De Botton and Armstrong, 2013) *explain that the embodiment of values in art is what grants it's significance. This can occur through the use of symbols, signs or metaphor or as an overall idea of beauty, however, it is values that allows for significances to emerge and communicate to emotional and psychological aspects of the human being. Art in this sense, is a means of 'compensation' for our innate emotional and psychological 'weaknesses' and our encounters with art 'fill emotional lacks'. Because 'Art' leads the way, in embodying values, , compensating for what is 'missing' it enables 'us' to become 'better versions of ourselves'.*

[288] Reference to: ''Tintoretto did not choose that yellow rift in the sky above Golgotha to signify anguish or to provoke it. It is anguish and yellow sky at the same time. Not sky of anguish or anguished sky; it is an anguish become thing. Anguish which has turned into yellow-rift of sky'', writes Jean-Paul Sartre. Similarly, the architecture of Michelangelo does not present symbols of melancholy; his buildings actually mourn.'' (Pallasmaa, 1996, p.48)

For Juhanni Pallasmaa (1996), all art embodies values and qualities, rather than merely signifying them: they become 'real', because they are real, because they are deeply present within the artwork; values in art simultaneously evoke an 'imagined reality' and become a part of the viewer's existence defining and sustaining his personal identity. Types of values as embodiment: can be understood as 'images of incompletion' (that evoke intangible significances), 'images of destruction' (that evoke memories) and 'images of time' (that evoke ideas of timelessness and a-temporal realities, the quality of great works of art).

… Understanding values: conclusion

From philosophy, we saw that values are a founding aspect of the conceptions of the world and of life, and can be perceived and understood through a non intellectual mechanism. We also understood that the types of values associated to art are always incomparable and incommensurable because they are abstract values. They are timeless (as most values are, which relates them to idealistic natures), what matters in their understanding is the fact that they are valuable and they add to each other rather than canceling each other out.

The three authors analysed that related values to architecture and the arts in general (Alain de Botton (2008) and Louis Armstrong (2008) and Juhanni Pallasmaa (2010)), agree that values are indeed embodied and evocated as significance in the works of architecture, painting and sculpture: they are the core significance of the artwork. However, the approaches of both authors differ: Pallasmaa (1996) accentuated that values are more than symbols and metaphors, because they are not something that is evoked but rather they are something real and alive; when values are embodied, they are both an 'imagined reality' and something that defines the observer's existence. For de Botton (2008) and Armstrong (2008), it is values that allows for significances to emerge and communicate to emotional and psychological aspects of the human being and these values can be understood as a means of 'compensation' for our innate emotional and psychological 'weaknesses' and our encounters with art 'fill emotional lacks' (seven functions).

It is important to understand that the functions of values and art, proposed by De Botton and Armstrong (2013), as they pointed out, only announce seven aspects, however many others could be outlined. Another 'function' that could be used as an example, is the opposite of Hope, despair and hopelessness, which is also used predominantly in painting (the works of Francis Bacon). Another aspect altogether, is that it is debatable if those aspects can and should be understood as values or not, since they also define emotions (such as hope and sorrow), and since they accentuate actions, operations or processes (such as growth and the process of rebalancing). Despite this, what is important in the theory, is the idea that there is indeed numerous operating values, embodied in artistic creations (and creations in general) which can be materialized in different ways, that indeed, sustain the creation's significance. Lastly, it is of the essence to understand that values are something that is embodied and evocated through the artwork itself, as part of its own essence. Further understanding of this idea will be given once the case studies have been analysed (the issue will be further analysed in chapters 8 and 9).

Synthesis:

Values

1. *Values are **a founding aspect of the conceptions of the world and of life**, and can be perceived and understood through a non intellectual mechanism.*

2. *The types of values associated to art are always incomparable and incommensurable because they are abstract values. **They are timeless** (as most values are, which relates them to idealistic natures), what matters **in their understanding is the fact that they are valuable and they add to each other rather than canceling each other out.***

3. *Values are embodied and evocated as significance in the works of architecture, painting and sculpture: they are the core significance of the artwork.*

4. ***The embodiment of values in art is what grants it, it's significance**. (*De Botton and Armstrong (2013) and *Juhanni Pallasmaa (1996))*.

5. *This can occur through the use of symbols, signs or metaphor or as an overall idea of beauty, however**, it is the values that allow for significances to emerge and communicate to emotional and psychological aspects of the human being**. (*De Botton and Armstrong (2013))

6. ***'Art' leads the way, in embodying values, compensating for what is 'missing' it enables 'us' to become 'better versions of ourselves'**. (*De Botton and Armstrong (2013))

7. **Values in art:**
    - ***are embodied, rather than merely signifying them**: they become 'real', because they are real, because they are deeply present within the artwork (Juhanni Pallasmaa (1996))*
    - ***simultaneously evoke an 'imagined reality'** and become a part of the viewer's existence defining and sustaining his personal identity. (Juhanni Pallasmaa (1996))*
    - *can **be understood as a means of 'compensation' for our innate emotional and psychological 'weaknesses'** and our encounters with art 'fill emotional lacks'.*
    - *examples: 'images of incompletion' (that evoke intangible significances), 'images of destruction' (that evoke memories) and 'images of time' (that evoke ideas of timelessness and a-temporal realities, the quality of great works of art). (Juhanni Pallasmaa (1996))*

5.7. EMOTION

> '' Art is not, as the metaphysicians say, the manifestation of some mysterious Idea of beauty or God; it is not, as the aesthetical physiologists say, [play or] a game in which one releases surplus energy, ...not the production of pleasing objects, and is above all, not pleasure itself, but it is the means of union among mankind, joining them in the same feelings, and necessary for the life and progress toward the good of the individual and of humanity.'' (Tolstoy, 2013, p. 82)

One of the aspects that can be connected to all the previous forms of significance already seen, is emotions. Various authors (like Leo Tolstoy (1897) and Collingwood (1938)) sustain that it is emotion that sustains significance in the artwork. Some of which will be further presented. But before analysing what each theory claims, in relation to art as emotion, it is of the essence to understand what emotion is and how it can be envisioned.

What does it mean to talk about emotions?

Defining Emotion…

In general terms, there is no consensus on what the word 'Emotion' really refers to. The term 'emotion' has it's origins in the French word '*émouvoir',* which translates to 'to stir up', and it's use is commonly traced to 1579; it's deeper origins find roots in the Latin word '*emovēre*' that means to remove or to displace; from the word *'movēre'* that means 'to move'. The general definition of emotion is: '' a. the affective aspect of consciousness: feeling; b. a state of feeling; (…) '' (merriam-webster.com, 2015); but the word 'emotion' itself covers a wide variety of phenomenon's and it is generally connected to the terms 'mood', 'temperament', 'feelings', 'affections', 'sentiment', or 'disposition'. The meaning of the word in everyday language, usually refers to intense feelings, however this differs from academic and scholarly discourse, where the word is used in a deeper and more complex context. Physiologically, emotions are closely linked to behavioural tendencies, to the arousal of the nervous system. Psychologically, emotions are closely connected, associated to the driving force that sustains different types of motivations. In a scientific view, they are connected to cognition to temperament and personality.

The Stanford Encyclopedia of Philosophy (2014) on the importance of emotions, claims: ''No aspect of our mental life is more important to the quality and meaning of our existence than emotions. They are what make life worth living, or sometimes ending.'' (de Sousa, 2014). This overall importance, has been noticed by great philosophers across time: Plato, Aristotle, Spinoza, Descartes, Hobbes, or Hume, possessed multiple theories on Emotions (further examples are Thomas Aquinas, in the Middle Ages, later Baruch Spinoza or David Hume, and Carl Lange (1834–1900) that developed a theory of the origins of emotions).

> **<u>The evolution of the study of emotion:</u>**
>
> In Ancient Greece, Hippocrates with his theory of the four humours led to an observation of emotions; with the Stoics, emotion was regarded as a 'negative' aspect that could detract from reason and complicate virtuous actions; for Aristotle however, emotions were considered to be an advantage for virtue, for they corresponded to a 'capacity'; Thomas Aquinas, in the Middle Ages, developed the Aristotelian principle; Later, further studies were conducted by philosophers such as René Descartes, Baruch Spinoza or David Hume. In the nineteenth century, two main theorists contributed to the study of emotion: William James (1842–1910), American psychologist and

> philosopher, and Carl Lange (1834–1900), a Danish physician and psychologist; they developed what is known as the James-Lange Theory, a theory that explains the origins of emotions; the theory claims that emotions are feelings that result from a series of physiological conditions (dry mouth, trembling, etc.).

De Sousa (2014) explains that emotions have once again emerged as being of interest in multiple fields and subjects, not only philosophy (neuroscience, psychology, medicine, history, and sociology, to name a few). De Sousa (2014), in regards to emotion itself, defines two important aspects: firstly that they need a 'formal object' in order to emerge, and secondly that they require 'evaluations'. Author Hichem Naar (2014) also defines various aspects of emotion itself (that can be summarized despite their debatable and complex nature): firstly that they are 'cognitive thesis' (relate to objects and thus they have an intentionality), they possess a 'belief requirement' (they depend on beliefs), they require a feeling (related to phenomenological ideas), they are experienced in varied intensities and that they can be both positive or negative[289].

… by António Damásio: Emotions, Consciousness and Reason

António Damásio (2013), in his book 'O sentimento de si: Corpo, emoção e consciência' (Self Comes to Mind: Constructing the Conscious Brain) explains that emotions are highly complex entities because they relate to multiple factors and are intrinsically connected to ideas, values, principles and judgments. However, generally, they can be understood as belonging to one of the two categories or types: the first are the primary or universal emotions, which include all the basic emotions such as joy, sadness, fear, anger, surprise or aversion; the other category are the secondary or social emotions which are all the other emotions (well-being, guilt, shame, pride, and many others that are usually socially related). Emotions, he explains, have a central and primary function of regulating existence at all levels. (Damásio, 2013, p. 76)[290].

An important aspect of emotions, the author continues, is that they connect to feelings which are more private that emotions. Feelings, derive from emotions, and are sensorial patterns than mark pain, pleasure and emotions when transformed into images. It is these feelings that establish the threshold onto consciousness and into the realm of the superior reasoning. Therefore, although emotions are firstly sensorial and connect to the sensitive aspects of human beings, there is an intrinsic relationship between emotion, feeling and reasoning; further, this relationship involves the creation of mental images and only occurs through consciousness.

However, how do emotions relate to art ?

[289] **The properties of emotions:** Hichem Naar (2014) in his article '*Art and Emotion',* explains that although the understanding of what an 'emotion' consists of is highly debatable and complex, there are a few general notions of emotions that should be summarized and clarified; firstly, what the author defines as 'Cognitive thesis': ''Emotions are cognitive states in the sense that they purport to be about things in the world. This means they require objects, they have intentionality, and they ascribe certain properties to them.'' (Naar, 2014); secondly, the 'belief requirement' where the author explains that '' Even though emotions are probably not belief-states, they may always depend on beliefs for their existence and justification.'' (Naar, 2014); and thirdly, the 'phenomenological thesis' that explains that: '' Emotions are typically felt. There is something it is like to be experiencing an emotion; they are 'qualitative' states). Moreover, emotions are experienced with various levels of intensity.'' (Naar, 2014); lastly, the 'Valence Thesis', that claims '' Emotions have valence or hedonic tone. Their phenomenology is such that some of them are experienced as negative and some as positive. Some emotion types seem to be essentially positive or negative.''. (Naar, 2014).

[290] Free translation from: '' (…) as emoções são um componente de nível superior no panorama dos mecanismos de regulação vital.'' (Damásio, 2013, p. 76)[290]

… The search for Emotion in Art

The first artistic movement that defined emotion as a central aspect of art was **Romanticism** *(see Glossary).* Tolstoy (2013) notes that there are many views defended by the romantics but the one that most defines their way of thinking about art, is the focus on emotion as the centre of the artistic creative process. According to the Romantics, the role of the artist is not to portray an objective reality, exterior, but to portray the interior worlds of feelings and emotions. Science itself would observe the exterior objective reality, whereas, art would explore the unobserved and complex world of emotions and feelings (‘’(...) only the artist was apt to finding the best means to express emotion.’’ (Tolstoy, 2013, p. 8)[291]). In this sense, the role and the value of the artist and of art in society is justified as the ‘ means of obtaining knowledge’ of what is beyond the realms of science (the world of emotions); It is, in this meaning, that the vision and the ideas of the ‘tormented artist’ emerge and gain expression, as the artist becomes the one who is in contact with the feelings (no matter how contradictory or profound); through emotion, not only the artwork gains importance but also the artist.

How do emotions become the significance of the work of art?

… by Leo Tolstoy: Art as emotion, feeling and consciousness

The main aesthetic philosophic theory that defines emotion as the centre of artistic creation and experience is defined by Leo Tolstoy (1828 – 1910), in his book *What is Art? (*1897). Overall, he rejects the idea of ‘beauty’ and it’s importance in art and sustains that it is emotion that defines the significance of art. Bellow is an analysis of his views on art, his ideas of art as emotion and the definition and importance of infectiousness and contagiousness.

> **Contextualization:** The preface author of the book writes that he was deeply influenced by both romanticism (emotion) and realism (truth), however he cannot be defined as either. Tolstoy had a different view from the romantics, believing that feelings and emotions should possess a ‘moral’ character and contribute to the overall growing morality of the world, rather than be a mere expression of the emotions of the artist. He approximates ‘realism’ in the search for an ‘authentic art’, expressing genuine emotions and common feelings. For Tolstoy, the author continues, ‘aestheticism’ proposed and led by Theóphile Gauthier, is a perversion of what art is supposed to be; for ‘aestheticism’, art is beyond functionalism and doesn’t serve any other purpose but that of being itself. Decadentism, too, for Tolstoy is an extension of ‘aestheticism’ and so doesn’t qualify as ‘art’; because they held that art and morality were two separate and independent issues. As a brief synthesis: ‘’ (…) neither romanticism, neither realism, neither aesteticism, neither Kant, nor Hegel, nor Schopenhauer, neither Nietzsche can offer any response minimally satisfactory to the questions of the essence and value of art, that for Tolstoy were strictly connected.’’ (Tolstoy, 2013, p. 12)[292] *(see Glossary for details on authors).*

Tolstoy (2013) to explain what art is, once the issues of ‘beauty’ and ‘taste’ are rejected, refers to various authors, each one clarifying a ‘type’ of art definition that he considers to be superior but

[291] Free translation from: ‘’ (...) só o artista estaria apto a encontrar a melhor forma de exprimir sentimento.’’ (Tolstoy, 2013, p. 8).
[292] Free translation from: ‘’ (…) nem o romanticismo, nem o realism, neom o esteticismo, nem Kant, nem Hegel, nem Schopenhauer, nem Nietzsche conseguem oferecer qualquer resposta minimamente satisfatória para as questões da essência e do valor da art, que Tolstoy pensa estarem estreitamente ligadas.’’ (Tolstoy, 2013, p. 12)

incomplete [293]: they refer to the essence of art and create ideas that can encompass all objects. These imprecisions, Tolstoy continues, are due to the fact that they are tied to 'pleasure' concerns. To understand art, one must disregard pleasure completely, and study it as a 'condition of human life'.

Tolstoy (2013) proceeds to clarify his own theory. He defends that the difference between language and art, is that language communicates thoughts and art transmits feelings and emotions that unify people. Man receives these emotions, through art. He clarifies: '' It is this ability of people to be infected by the feelings of other people that the artistic activity is based on.'' (Tolstoy, 2013, p. 80) [294] . Yet, just transmitting feelings is not art; art begins when a man, with the purpose of transmitting a feeling once felt, provokes it again in himself, and expresses it through exterior means. Tolstoy (2013) says that if a person in contact with a work, experiences a state of spirit, that unites that person to others, then the object is a work of art; if it doesn't provoke that feeling, of joy and spiritual unity with another (the creator) and others (observers or spectators) it is not art. There is art, thus, when the viewer becomes infected by the same emotions[295], joining mankind in the same feeling, and creating the ability to progress towards the good of all humanity. A great work of art destroys separation and creates a unity of emotions and feelings[296]. This unique property of true art can be defined as 'infectiousness' or 'contagiousness': art's ability to transmit and provoke the same feelings and emotions in the viewer, as those originally felt by the artist. Levels or degrees of 'infectiousness' manages to separate good art from excellent art[297]. And also, this 'shared' realm of 'emotions' that is created can be understood as a 'consciousness'.

Art, is this activity of transmitting feelings felt by the artist, by means of expression, to others, that can absorb the emotions through infectiousness, and process them as consciousness. Therefore, the immutable eternal essence and significance of art is the creation and communication of emotions (absorbed through infectiousness) as consciousness. Art, in this sense becomes the unity between people and 'eras' and conveys a certain 'timelessness' and a kind of 'immortality', from man to man.

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[293] **The various superior art definitions:** In regards to the physiological and evolutionists theory ''(…) art is an activity that has emerged in the animal world from the sexual instinct and inclination for play (Schiller, Darwin, Spencer), which is accompanied by a pleasant excitement of nervous energy (Grant Allen).'' (Tolstoy, 2013, p. 78) Free translation from: '' (…) a arte é uma actividade que surgiu ainda no mundo animal a partir do instinto sexual e da inclinação para o jogo (Schiller, Darwin, Spencer), que é acompanhada por uma agradável excitação da energia nervosa (Grant Allen).'' (Tolstoy, 2013, p. 78)**)**. In regards to an empirical definition, he claims '' (...) art is an exterior manifestation, by means of lines, colours, gestures, sounds, words, of the emotions lived by man (Véron).'' (Tolstoy, 2013, p. 78) Free translation from: '' (...) a arte é uma manifestação exterior, por meio de linhas, cores, gestos, sons, palavras, das emoções vividas pelo homem (Véron).'' (Tolstoy, 2013, p. 78)); and lastly, in regard to Sully, '' (...) art is '' the production of a permanent object or of a fleeting action, adapted not only to provoke an active delight in the producer, but also to transfer a pleasant impression to certain viewers or listeners, regardless of any personal interest that might result there from.'''' (Tolstoy, 2013, p. 78) Free translation from: '' (…) a arte é '' a produção de um objecto permanente ou de uma acção passageira, adaptada não só para provocar um deleite activo no produtor, mas também para transferir uma impressão agradável a certos espectadores ou ouvintes, independentemente de qualquer proveito pessoal que daí possa advir''.'' (Tolstoy, 2013, p. 78)).

[294] Free translation from: '' Ora é nesta capacidade das pessoas de serem contagiadas pelos sentimentos de outras pessoas que se baseia a actividade artistica.'' (Tolstoy, 2013, p. 80)

[295] And to summarize, Tolstoy claims: ''As long as viewers or listeners are infected with the same feeling that the author experienced, there is art. '' (Tolstoy, 2013, p. 82); Original quote: '' Desde que os espectadores ou ouvintes sejam contagiados com o mesmo sentimento que o autor experimentou, há arte.'' (Tolstoy, 2013, p. 82)

[296] Furthermore: '' A real work of art destroys, in the consciousness of the receiver, the separation between himself and the artist — (…) In this freeing of our personality from its separation and isolation, in this uniting of it with others, lies the chief characteristic and the great attractive force of art.'' (Tolstoy, 2013, pp. 193, 194); Original quote: '' A verdadeira arte elimina na consciencia do espectador a divisão entre ele proprio e o artista, e não so entre ele e o artista mas entre ele e todas as pessoas que estão a contemplar a mesma obra de arte. É nesta libertação do individuo, do seu isolamento e da sua solidão, nesta uniao do individuo com os outros, que consiste a principla força atractice e caracteristica da arte. '' (Tolstoy, 2013, pp. 193, 194)

[297] Reference to: '' The stronger the infection the better is the art as art, regardless of its content, and regardless of the value of the feelings transferred.'' (Tolstoy, 2013, p. 194); Free translation from: '' Quanto mais forte for o contágio, melhor é a arte enquanto arte, independentemente do seu conteudo, ou seja, independentemente do valor dos sentimentos transferidos.'' (Tolstoy, 2013, p. 194)

Tolstoy believes Art is a form of consciousness, communicated through emotion; and in it lies it's significance. This brings out a sort of functionality of art (fulfil the function of uniting men and humanity), and the idea that without the fulfilment of this essence or function, it isn't art. The elevated status of art is this ability to transmit emotions and feelings as consciousness (something that can only be fulfilled by art). The types of feelings and emotions as consciousness that Tolstoy defines are vaguely perceived as that which promotes love and unity, emotions that elevate humanity.

What else can be understood of art as emotion, as defined by Tolstoy?

Gordon Graham (1997) in *'Philosophy of the Arts'* explains that Tolstoy's theories (that can be described as 'expressivism' (an expression of emotion) have one frailty: the fact that the success of a work of art as possessing emotion neglects the value of imagination. In this regard, he claims: '' An imagined emotion need not be felt and the absence of feeling is a mark of true creativity in expressionist model.'' (Graham, 1997, p. 50) [298]. Even Tolstoy says, Graham continues, that the value of art lies not in the 'conveying' of emotions**,** but on the conveying of 'good' emotions. Graham (1997) further affirms that this idea (conveying good emotions) can be linked to the concept of 'catharsis' of the Aristotelian doctrines, where art becomes a means of allowing 'emotional disturbances' to be felt, that otherwise would be repressed and could inconveniently irrupt in day to day life; the Aristotelian concept is linked originally to tragedy and to music, but, according to Graham, if one focuses only on the idea of 'emotional purification' and extends this concept to the arts in general, the value of art (related to the emotion) becomes clear as a contribution to our mental and psychological well being.

> ***Synthesis:*** *Tolstoy (2013) states that all aesthetic and artistic theories are incomplete, because the issues of 'beauty', 'taste' and pleasure haven't been rejected. Art must be understood as a 'condition of human life'. Art, is in consequence, the activity of transmitting feelings felt by the artist, by means of expression, to others, that can absorb the emotions through infectiousness, and process them as consciousness, creating a unity between people. Art, in this sense becomes the unity between people and 'eras' and conveys a certain 'timelessness' and a kind of 'immortality', from man to man.*

Should emotion be connected to the imagination?

… by Collingwood: Art as emotion (imagination and consciousness)

We find explanation to the above statement with Collingwood's (1938) theories. For Collingwood (1938) the thing we call a work of art is only art because of its relation to the 'mental thing', the artistic creation in the imagination (as described in 'imagination' chapter). As such, all attempts to describe art through it's properties, such as beauty, fail completely, because they are trying to describe something that does not exist[299]. The aesthetic experience, art, is an autonomous experience that arises from within. Thus, the 'mental thing' and the 'within' experience, which is that which possesses the real

[298] Free translation from: '' Uma emoção imaginada não precise de ser sentida e a ausência de sentimento é uma marca de verdadeira criatividade no modelo expressiovista.'' (Graham, 1997, p. 50)

[299] **The misunderstanding of aesthetics**: According to Collingwood, the word 'beauty' associated to the aesthetic experience is wrongly applied for it tries to describe a quality that does not exist. As such, he continues: '' When these aestheticians want to use the word as a name for the quality in things by virtue of which we enjoy an aesthetic experience in connection with them, they want to use it as a name for something non-existent. There is no such quality. '' (Collingwood, 1938, p. 41). The theory of beauty, thus, is an attempt to explain the work of art by their characteristics, properties, or qualities: '' (…) this supposed quality, invented to explain the activity, being in fact nothing but the activity itself, falsely located not in the agent but in his external world.'' (Collingwood, 1938, p. 41); but it does so wrongly, searching in the 'object' for something that is not there.

qualities of art, Collingwood (1938) is connected to emotion. It is of the essence to accentuate the contemporary studies of the scientist Ph.D. Elaine Aron, that is currently locating emotion in specific parts of the brain and discovering that aesthetic emotion is highly associated to what she describes as Highly Sensitive People (HSP's) which correspond to only ten percent of the overall population (Aron, 2013).

Collingwood (1938) also considers that firstly, the artist expresses emotion: he is conscious of the emotion but does not have a definite concrete idea of it, therefore he tries to extract it by expressing himself. This expression has something to do with language and with consciousness; the emotion is brought from the un-conscious state, where the sense of oppression has vanished, into light. In this process, what occurs is a 'lightening of emotions' and the expression of the emotion is not addressed at any particular subject, but a result of a desire of the artist that aims to clarify the emotion for himself. Collingwood (1938) continues writing that, expressing an emotion is different from describing it: in expression there is no direct reference to the emotion itself but an indirect approach: ('' A genuine poet, in his moments of genuine poetry, never mentions by name the emotions he is expressing.'' (Collingwood, 1938, p. 112)). Description generalizes and damages the emotion, and expression means expressing its peculiarities and its uniqueness. And this 'expression of emotion' is what defines 'proper art' setting it apart from any other craft.

The artist can use all types of emotions, and his speech must be completely free, there are no good emotions or bad emotions, for when the artist begins, the emotions are still unknown in the first place[300]. In representational art, the 'artist' knows in advance what he is going to create, and the emotions that he desires to arouse. In this sense, Collingwood clarifies that when 'aesthetical emotion' in mentioned, it refers to the process of expressing the hidden emotion successfully. What compels the artist to create is the desire to make those emotions aware for himself and for others.

How does emotion gain body in a work of art?

Graham (1997) states that with Collingwood's theories, expressivism gains the force of imagination, and art is found to be valuable only in the presence of it. In his words, systemizing Collingwood: '' It is by the imaginative construction that the artist transforms the vague and uncertain emotion vague in articulate expression.'' (Graham, 1997, p. 55) [301]. In this sense, the process of making art is not exclusively a means of conveying what already exists or what was felt, it is not only a way of 'exteriorizing', but instead a means of discovery, an imaginative discovery of emotions through the process itself. This creates a value of art, that of 'self-knowledge', 'self-discovery', and 'self-understanding' for the artist itself and for the 'viewer'. In this sense, the value and significance of art evolves into that of self-knowledge of our own 'emotional conditions', so, the process of art becomes linked to that of an 'introspection' and the result of it is a form of consciousness. However, Graham (1997) further defends, that 'emotion' for Collingwood, is connected, or is seen as, ''conscientious

[300] Reference to: '' The artist proper is a person who, grappling with the problem of expressing a certain emotion, says, 'I want to get this clear.' It is no use to him to get something else clear, however like it this other thing may be. Nothing will serve as a substitute.'' (Collingwood, 1938, p. 114).

[301] Free translation from: '' É pela construção imaginativa que o artista transforma a emoção vaga e incerta em expressão articulada.'' (Graham, 1997, p. 55)

sensual experience'' [302]; it encompasses all feelings and includes the consciousness of a certain experience. As a synthesis, one may conclude that: '' He claims too that the field of the artist is sensual experience brought to consciousness.'' (Graham, 1997, p. 64)[303].

> ***Synthesis:*** *For Collingwood (1943) because art is a 'mental thing' connected to the imagination, it is deeply rooted in emotion. The creation of art is a clarification of the emotion felt by the artist, externalized as expression: the emotion is brought from the un-conscious state, where the sense of oppression has vanished, into light, through imagination. There is no direct reference to the emotion itself but an indirect approach that expresses its peculiarities and its uniqueness. The artist can use all types of emotions, and his speech must be completely free. The value and significance of art evolves into that of self-knowledge of our own 'emotional conditions', thus, the process of art becomes linked to that of an 'introspection' and the result of it is a form of consciousness. Emotion is the one faculty that allows art to become art; it guides the artist in his creation process, allows him to discover above other knowledge about himself and about the world .*

But how does the viewer generate these emotions?

How emotion is developed towards the work of art….

Author Hichem Naar (2014), in his article '*Art and Emotion'* writes that good art, provokes emotions and does not leave the spectator unaffected; the fact that emotions are intertwined with art is undeniable, however the issue lies in understanding the link between both and in understanding how emotions, are generated towards the work of art. The author condenses various theories, thus, it is possible to identify a number of principles and ideas that define the emotional response to the work of art (allow for stimulation within the viewer): first, the 'identification of the subject matter', where being able to understand and comprehend the visual image allows for the triggering of memories and meaning can then be defined; second, the pattern recognition, where the identification of principles of form (such as symmetry, etc.) allows for an engagement; third, the idea that artistic creations are analogous to such things that we recall as emotive or emotional, thus echoing those such emotions; fourth, the notion of the 'Pleasurable Experiences', that explains that in order for emotions to emerge there had to be a positive engagement[304].

Independently from these multiple philosophical considerations as to how the emotional connection with the object of art occurs and why, it is generally accepted that the emotional responses are the basis to the experience of art, and that in their force and strength, lies art's significance; and that the value of those emotions in art, is that they allow for a knowledge to be developed about the 'actual world'.

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[302] Free translation from: '' (...) experiência sensual consciencializada.'' (Graham, 1997, p. 64)

[303] Free translation from: '' Diz também que o terreno do artista é a experiência sensual trazida à consciência.'' (Graham, 1997, p. 64)

[304] **How emotion is generated towards the work of art:** The author continues explaining that in order for emotions to be conducted towards a work of art, the theories of Levinson (1990) on 'persona' might elucidate the issue: the receiver creates a certain kind of 'persona' that he identifies as the 'speaker' of the message or content of the work being observed. Another theory, proposed by Davies (1994) and Kivy (1989) is the 'contour' or 'resemblance' theory; the theory explains that art '' (…) can be expressive of emotion in virtue of resembling characteristic expressions of human emotion, a resemblance that we seem pretty good at picking out.'' (Naar, 2014); as such, artistic creations are analogous to such things that we recall as emotive or emotional, thus echoing those such emotions. Lastly, Peter Kivy (1990, 1999)'s theories explain that it is the object itself that is moving and emotionally charged, and as such, it is not 'empathy' that allows for an overflow of emotion in the viewer, but the emotions itself contained within the work (by its properties, qualities and conditions) that allow for emotions to occur. In the authors words: '' When we are moved by 'sad' music, what may move us is how beautifully, or gracefully the music is expressive of sadness, rather than by an alleged persona we may pity.'' (Naar, 2014). Another idea brought forth from the author is the notion of the 'Pleasurable Experiences' explaining that these such encounters bring about positive emotions and as such are welcomed.

A few other considerations…

… by Nelson Goodman: emotions as a condition of the aesthetic experience

For Nelson Goodman, in his book *Languages of Art* (1976), emotions define the aesthetic experience. These emotions are not simple, but are complex, obscure, oblique and often reversed in polarity (observing the sublime gives pleasure); they are connected to feeling, and can be both intense or fleeting. But what makes them exclusively unique to aesthetic experience, is the fact that '' (…) emotions function cognitively.'' (Goodman, 1976, p. 248). The work of art is apprehended through the feelings and through the senses, and they participate and generate cognition work; they are used cognitively, and it involves relating them to the rest of our experiences of the world. This explains the modifications that occur in emotions throughout the aesthetic experience, and they are derived from the object itself. Like so, emotions and cognition function in combination with each other, and with the other faculties of knowing; but they do not act in proportion to one another: an emotion can be weak, and provoke a high cognitive action and a good aesthetic experience; the same holds true for both positive and negative emotions, both can act as stimulating cognitive function and provoke an aesthetic experience that is satisfying. That which cancels out all aesthetic experience, then, is emotional numbness, that acts as a blindness or as a deafness.

… by Pinchas Noy & Dorit Noy-Sharav: Art and meta-emotions

The authors Pinchas Noy & Dorit Noy-Sharav (2013), in the article '*Art and Emotions'* also place emotion at the centre of the art. They consider that the artwork provokes what can be defined as 'meta-emotions' (multiple emotions triggered at the same time). These 'meta-emotions' reflect ''(…) the sum-total of all the disparate and opposing emotions conveyed (…).'' (Noy and Noy-Sharav, 2013, p. 1). Each specific art form, they continue, has it's own means of communication of multiple emotions simultaneously; and it is the meta-emotions, that allow for the integration of contrarieties within the self. They explain that there are four routes by which art can convey specific emotions: the narrative route (where the viewer creates an imaginative emotional narrative), the direct form route (messages and emotions through forms), the indirect route (that provokes the receiver's ego); the 'gifted artist' knows how to use all three systems in conjunction, in order to provoke an intense emotional response. The fourth route are the 'meta-emotions' (which possesses multiple opposing emotions as a coherent whole)[305]. The understanding of 'meta-emotions' can also be defined as an aesthetic experience, where the response from the viewer that experiences the work of art, is an assimilation of all the different complex types of emotions simultaneously.

[305] **Forms of Communication of Emotion:** The narrative route: the 'viewer' is led to associate and identify experiences and emotions to a narrative, by triggering the imagination; they explain:'' (…) the function of interpretation is therefore to reconstruct the hidden narrative (…)'' (Noy and Noy-Sharav, 2013, p. 1). This holds true, the authors clarify, only in interpretation of content and not of form. The second form, the 'direct form', (based on Langer 1942, 1953 and Pratt, 1952), uses messages through their form to activate specific emotions the 'user' is 'interested' in. Lastly, the third route, '' the indirect route, provoking the receiver's ego into that particular organizing activity that, according to the artist's experience, may result in the emotional response the artist intends to arouse (Kohut & Levarie, 1950).''(Noy and Noy-Sharav, 2013, p. 2). As such, the 'gifted artist' knows how to use all three systems in conjunction, in order to provoke an intense emotional response. The fourth route, the 'meta-emotions', are based on the ''emotions produced by the listener himself as the result of his active attempt to process the musical input in his mind.''(Noy and Noy-Sharav, 2013, p. 2).

The authors continue explaining that one of the main differences between 'popular' art forms and 'high' art creations is their levels of complexity[306], where the latter features multiple forms of expression, in one single form; it is an underlying 'polyphonic capacity to transmit different meanings and emotions on several levels' simultaneously.

The authors write that, the creative process in art (the opposite of a neurotic solution), requires the artist to generate a form of 'experiencing' in order to achieve an 'inner equilibrium'[307]; it is through this means of expression of his own emotions, that he finds a new and original means of expression, 'better ways of communication, and higher levels of integration' and also finds an inner balance of his own emotions. Also, according to the authors, art is the most intense form of emotional communication, as such, it is not supposed to be a passive experience, but instead allow the users to experience a form of catharsis, through the work of art; as such, each work '' (…) demands an active effort on the part of the listener. '' (Noy and Noy-Sharav, 2013, p. 1). The greatest works of art, then, continue the authors, manage to reconcile both 'deepness' and 'complexity' of meta-emotions, becoming a symbol of integration[308]. The higher the art, the higher the form of emotional communication, the higher the 'rank of satisfaction'.

… by Peter Zumthor: emotions and the architectural space

Zumthor (2006) explains that his desire with architecture, is not to 'stir up emotions' but to allow emotions to emerge naturally, allowing them simply ' to be' remaining close to the idea of things existing as they are. This is connected to what he defines as '' (…) The hard core of beauty: concentrated substance.'' (Zumthor, 2006, pp. 29, 30). For him, then, emotions are at the centre of the experience of architecture, and are deeply connected to the values of beauty. Zumthor further describes the architectural experience as: '' There is a magical power in every completed, self-contained creation. (…) Emotions well-up. Something moves us.'' (Zumthor, 2006, p. 16). With every artistic and architectural image or space, the 'viewer' feels, projects and creates emotional content.

> ***Synthesis:*** *For Nelson Goodman (1976), emotions not only define art and it's significance, but they also define the aesthetic experience; they are are complex, obscure, oblique and often reversed in polarity; they are connected to feeling, and can be both intense or fleeting. But what makes them exclusively unique to aesthetic experience, is the fact that this function cognitively. That which cancels out all aesthetic experience is emotional numbness, that acts as a blindness or as a deafness. For Pinchas Noy & Dorit Noy-Sharav (2013) art communicates meta-emotions (multiple emotions simultaneously). The greatest works of art manages to reconcile both 'deepness' and 'complexity' of meta-emotions, becoming a symbol of integration. The higher the art, the higher the form of emotional communication, the higher the 'rank of*

[306] Reference to: '' One of the main differences between what is regarded as "popular" music and "high", "sublime" or "fine" music, is in their degree of complexity. While the first kind is mostly presented as a single melodic line without or with some accompaniment, the last is mostly structured polyphonically, presenting simultaneously two or more separate melodic lines. ' (Noy and Noy-Sharav, 2013, p. 2)

[307] The authors continues clarifying that the creative artistic expression is the direct opposite of the neurotic solution: while neurosis are regressive and negative because they repress emotions, the creative solution aims to 'restore an inner equilibrium' in a progressive solution. Furthermore: '' It represents the artist's effort of expressing destructive or forbidden impulses while at the same time mastering them.'' (Noy and Noy-Sharav, 2013, p. 5).

[308] As such, the authors explain: '' The "greatness" of a work of art is judged neither according to its deepness and complexity, nor according to its perfection of form, but according to the right balance between both. '' (Noy and Noy-Sharav, 2013, p. 6). The greatest Works of art, attain that balance between both, and are 'symbols of integration' (phrase of Anthony Storr (1972)), ''(…) representation of unity, order, reconciliation of opposites, and as proof that such integration is attainable.''(Noy and Noy-Sharav, 2013, p. 6).

satisfaction'. For Zumthor (2006), it is the 'stirring up of emotions' that guides his architectural creation.

… Examples of architectural spaces and emotions

A good example of an architectural emotion being embodied through the space is the Jewish Museum, built by Daniel Libeskind in Berlin (1999), which aims to re-create and embody the emotions felt by the Jews, evoking, throughout its space the emotions of oppression, suffering, pain, and hunger. Another example is the work of Peter Zumthor, the Bruder Klaus Chapel (2011), which aimed to create the emotion of hope by creating an enclosed small space with an opening towards the sky (further analysed in chapter 6 as one of the case studies). Lastly, it is possible to announce the Pompidou (1977), designed by the architects Renzo Piano, Richard Rogers, Gianfranco Franchini, Peter Rice and Mike Davies, which aimed to embody and re-create the emotions of a new technological and functional world. Frank Lloyd Wright, in direct opposition, aimed to embody emotions of harmony between man and the environment.

… Examples of painting and sculptural emotions

Francis Bacon is a good example of a very clear emotion that is portrayed and embodied through the paintings: he portrays the emotions of anger, violence and the dissolution of the being. Mark Rothko is another good example; his work will be further analysed in chapter 6, as he is one of the case studies, however, at this point, we can clarify that he embodies the emotions of ecstasy and energy as essences of the spirit. Lastly, in painting, it is possible to emphasize the emotions brought up by Casper David Friedrich, whose works evoke the emotions the of timelessness, triumph of nature, man's helplessness and likewise strength within the midst of the wilderness. In sculpture, a good example is the works of Rodin, that evokes emotions of solitude or hamony, harmony or frailty, love and empathy, varying each emotion according to each specific sculpture. Lastly, Eisenman's sculptural work, the Holocaust Memorial (2005), in Berlin, that aims to capture and embody the emotions of oppression, pain and suffering which were experienced by the Jews.

… Understanding emotions: Conclusions

The analysis above showed that multiple authors agree that the significance of the work of art lies in the conveying and embodying of emotions to the viewer, (Hichem Naar (2014), Collingwood (1943), Tolstoy (2013), Nelson Goodman (1976)). These author consider that art is an activity that conveys and embodies emotions within its core (emotions are a central part of the aesthetic experience), through expression and it is conveyed towards the observer through an action of infectiousness (Tolstoy (2013)). Authors also agree that emotions in art are complex, and are connected to reason, where Goodman (1976) explained that aesthetic emotions are different from any type of emotions felt in the day to day life because they are complex emotions that function cognitively. Thus, emotion is not opposed to reason, but instead they form a very intertwined link.

Each author then added specific aspects of how these emotions are embodied in creations, and what it means to embody them: for Collingwood (1943)) it is associated to both imagination and consciousness, creates a unity between people and 'eras' and conveys a certain 'timelessness' and a kind

of 'immortality'(Tolstoy (2013)). The emotion, the authors explained, is brought from the un-conscious state and emerges through the artists expression and imagination where it becomes clear to the artisti himself (Collingwood (1943) and Tolstoy (2013)). Laslty, it is emotional numbness that cancels out all aesthetic experience.

But which emotions are used in the work of art? Emotions itself comprise a vast array of emotional fields (love, tenderness, hate, emptiness, neglect, appreciation, devotion, awe, surrender, and others), none of the authors, as the research has showed, really clarified which emotions are used specifically in each art form and why. Thereby, the work aimed to present a preliminary study through various examples, in order to understand which emotions are indeed evoked; the examples showed that the emotions embodied could be very varied, ranging from pain and chaos to harmony and stillness. However, this is one of the aspects that will be explored through the case studies in the following chapters 6 and 7, and then again reviewed in a comparative analysis in chapter 8 and 9. The case studies, as the work will show, will clarify this, explaining which emotions are important to be contained in the work of architecture, in the work of painting and in the work of sculpture and why.

Synthesis:

Emotions

1. *The significance* ***of the work of art lies in the conveying and embodying of emotions to the viewer,*** *(Hichem Naar (2014), Collingwood (1943), Tolstoy (2013), Nelson Goodman (1976)).*

2. ***Art is the activity of transmitting feelings felt by the artist, through expression, to others, that absorb the emotions through infectiousness, and process them as consciousness,*** *joining mankind in the same feeling and creating the ability to progress towards the good of all humanity (Tolstoy (2013)).*

3. ***Emotion in art:***
    - *is communicated as infectiousness (art's ability to transmit and provoke the same feelings and emotions in the viewer, as those originally felt by the artist) (Tolstoy (2013))*
    - *is associated to both imagination and consciousness (Collingwood (1943)).*
    - *derives from a clarification of the emotion felt by the artist, externalized as expression: the emotion is brought from the un-conscious state, where the sense of oppression has vanished, into light, through imagination. (Collingwood (1943) and Tolstoy (2013)).*
    - *has no direct reference to the emotion itself but an indirect approach that expresses its peculiarities and its uniqueness. (Collingwood (1943)*
    - *the artist can use all types of emotions, and his speech must be completely free. (Collingwood (1943)*
    - *creates a* ***unity between people and 'eras' and conveys a certain 'timelessness' and a kind of 'immortality****', from man to man (Tolstoy (2013))*
    - ***defines the aesthetic experience*** *(Nelson Goodman (1976))*
    - *are complex, obscure, oblique and often reversed in polarity; they are connected to feeling, and can be both intense or fleeting. But what makes them exclusively unique to aesthetic experience, is the fact that they* ***function cognitively*** *(Nelson Goodman (1976)).*
    - ***act as 'meta-emotions'*** *(multiple emotions triggered at the same time) (Pinchas Noy & Dorit Noy-Sharav (2013))*

4. ***The value and significance of art as emotion:***
    - *derives from a* ***process of self-knowledge of our own 'emotional conditions', thus is linked to that of an 'introspection' and the result of it is a form of consciousness****. (Collingwood (1943)*
    - *lies not in the* ***'conveying' of emotions, but on the conveying of 'good' emotions*** *(Graham (1997) and Tolstoy (2013))*

5. *That which* ***cancels out all aesthetic experience is emotional numbness****, that acts as a blindness or as a deafness. (Nelson Goodman (1976)).*

6. *The greatest works of art,* ***manage to reconcile both 'deepness' and 'complexity' of meta-emotions, becoming a symbol of integration.*** *The higher the art, the higher the form of emotional communication, the higher the 'rank of satisfaction'. (Pinchas Noy & Dorit Noy-Sharav (2013))*

5.8. FORM

> *''Now then, what is form? Which are its primary characteristics? (...) Or is there a deeper meaning infused into form from sources beyond man's apprehension? Or, to put it thus: is art soulless; or does it have a soul?'' (Saarinen, 1948, p. 11)*

Some theories convey that form is the real essence of art, and where the real significance of the artwork can be found. Various authors sustain this idea, each in their own way: following is a brief summary of each, in order to understand this idea of 'form' as a the one essence where significance lies.

What is this Form? What is form as the significance of art ?

… Introductory aspects: understanding form

Human perception is of the essence in understanding form, because it is perception that understands and apprehends form. This aspect of form and the apprehension of both form and colour, through perception, have been made clear in the previous chapter.

Form in general can be understood in two ways: as the total aspect of the artistic creation, or as a geometric characteristic of the creation. Multiple authors, as the work will thus announce, focus on form as a total aspect, a vital component of the creation, that is in itself the foundation and core of significance. Of course, geometric characteristics and details can also be present, however, it is form in general, as an overall condition, that embodies significance as a whole. In architecture, for example, form is deeply connected to space, where form is inhabited; the geometry that is the foundation of the form, in both a large and small scale is of vital importance, however, the work is analysing form in an overall manner, trying to understand what this form needs to 'exude' in order to be an embodiment of the significance.

… by Eliel Saarinen: significance as form (organic order)

Eliel Saarinen (1948), in his book 'The Search for Form in Art and Architecture', relates the quality and characteristics of form to the 'soul' of art: it is 'form' that grants art its meaning and its significance. He defends, form is a result of the essence of man, it evolves and changes with man and is a reflection of man's own understanding of life and the significance of that life. Art, then, is an 'understanding of life' and a finding of a 'form' for the expression of that life: '' To understand life, and to conceive form to express this life, is the great art of man.'' (Saarinen, 1948, p.5). Form, then, can be strong or weak, good or bad, which is what defines good art and bad art. So, when Saarinen (1948) asks ''Which are the basic reasons for a strong or weak form?'' (Saarinen, 1948, p.3) he is trying to uncover which are the roots for a significant or meaningless creation.

Form in accordance with Saarinen (1948), is 'meaning', significance and 'soul' that is innate to human life and that is expressed through art. To understand the 'values' and the 'significance' of form as art, is the same as understanding the 'spiritual significance' of form[309]. Form, then: (1) is related to the

[309] **Spiritual significance of form:** is an expression Saarinen uses that stands for '' (…) spiritual significance – that is, from the viewpoint of that meaning infused into form at its very inception.'' (Saarinen, 1948, p.16). For the author, 'spiritual significance' merely translates to another definition of 'form'. To understand this 'spiritual significance' of form, it is vital to understand that form expresses the 'mentality' that originates it, thus, emphasizing the relation and connection to the spiritual qualities that are either

mentality that originated it (spiritual qualities that are present or lacking), (2) are felt in the intimacy of life and expresses significance in deeper ways than any other subject or creation can, (3) possesses an inner meaning and significance within itself, and (4) it comes into 'expression' in different ways, (it can be strong or vague), as a result of the 'instinctive' power of its creator.

Saarinen (1948) in order to understand the 'meaning and significance of form' even further, uses two types of creation in his analysis: the art of nature, nature itself understood as the source of form from which man should learn from; and the art of man, where Saarinen identifies three types of creations. However, for him, man is part of nature and as such should use the same principles as nature does, therefore, '' (…) 'Art of nature' and 'Art of man' are closely inter-related.'' (Saarinen, 1948, p.27). These are condensed as follows and then briefly presented.

The Art of Nature, for Saarinen, is the source of all forms. For him, only when man is in accordance with the laws of nature, can he thrive and create forms (and art) that are truly significant. Man understands these hidden laws of nature, (where sacredness exists) through his three faculties of intuition, instinct and imagination (as analysed above) and through them reaches the understanding of the universal principle of organic order (with their daughter principles of expressive order and correlative order, explained bellow) that sustains all of nature's creation. In doing so, man is closer to a universal understanding of life, and can re-create, like nature does[310].

In regards to the Art of Man, Saarinen (1948) distinguishes three distinct stages: the 'Subconscious' stage (primitive art, the production of unintentional genuine art that follows the laws of nature, created through self expression to cause a reaction; non creative with a purpose of protection or other), the 'Conscious' stage (cultural art, defined by the creation of a conscious art its own rules and principles and defined the soul of a civilization) and the 'Self-conscious' stage (fine art, where art begun to be created for it's own sake, following it's own individual rules, and the artist begun developing individual skills such as those of creativity).

> **The three stages of the Art of Man:** The ''Subconscious'' stage or primitive art, is related to the primitive man, where, man '' (…) acted subconsciously in accordance with the laws of nature and produces unintentionally genuine art – because of an inner drift.'' (Saarinen, 1948, p.28). Primitive art doesn't have intentionally: relates to 'reaction', by means of a 'subconscious' form of self-expression through ''rhythm and cadence''. The primitive man's creations were '' (…) protective, religious, desirous, joyous, or whatever it might have been, but behold: it was not intended to be creative.'' (Saarinen, 1948, p.32). The ''Conscious'' stage represents the stage of human art development where man became aware of the importance of art in society, yet, '' (…) subconsciously sensing the fundamental laws of art, produced – and produces – indigenous art of such quality (…).'' (Saarinen, 1948, p.28). In this stage, the values of art became consciously felt and became a

lacking or that are present. As such, ''(…) in this manner, one could go on, endlessly, disclosing the spiritual nature of material form.'' (Saarinen, 1948, p.17).

[310] **The Art of Nature:** Saarinen (1948) understands nature as the source of all form. At the beginning of man's existence, man was close to nature and his behaviour was in accordance with the rules of nature; this also progressed in the Ancient Civilizations. However, later, man lost this spiritual communication with nature (loosing nature's guidance) and started learning based on his own reasoning, producing art through his intellect and creating '' (…) doctrines, formulas and aesthetic theories.'' (Saarinen, 1948, p.19) to support it. This led to forms that lack in 'vitality' and significance. For the author, this kind of 'sterile imitation' (the antithesis of beauty) is seen as a blindness to nature's laws and to natures 'form-values'. The laws of nature, related to the 'secrets of life' will always belong to the realm of the unknown; as 'so they must' emphasizes the author, ''For as long as they remain ''secret'', they will remain ''sacred''.'' (Saarinen, 1948, p.24). It is however, the faculties of intuition, instinct and imagination, that can understand nature, and transform it's rules into creation. In nature, the author continues, it is possible to find two principles, the principle of ''expressive order'' and the principle of ''correlative order''; these principles are general and universal to all nature, where order and healthiness exists; they are, the author clarifies, twin-principles, '' (…) they are the daughter principles of the universal principle of organic order – the fundamental principle of architecture in all creation.'' (Saarinen, 1948, p.27). All nature's form is shaped around this principle of 'organic order', and the author claims it to be the 'art of nature'.

> conscious manifestation, and as such, art starts to be born as a desire, or as a demand and becomes the 'profession of only a few'. As examples, various civilizations can be used: the Persian or the Greek, that then continued into the Renaissance. The 'Self-Conscious' stage, is where civilized man, defining doctrines and aesthetic speculations, '' (…) closed the instinctive channels of creation and has produced art that is ''fine'' but rootless.'' (Saarinen, 1948, p.28). In this stage, art stopped to be a manifestation and expression of life and civilization, it was considered something beyond the occupations of 'material' and 'profane' existence; becoming self-sufficient, being created for its own sake; in this sense the ''Fine Arts'' were defined, under the driving motive of ''l'art pour l'art''. The author finds that art became a business, dealing with art-dealers and art-collectors. However, the artist also started growing the 'subconscious intuition'.

Then what is real significant form and what is it composed of?

Form then, should follow both the Art of Nature (the source of all form) and the Art of Man, drawing from both what is of most significance. From the principles of nature, form should follow the principle of organic order. This principle, a fundamental principle of all art, including Architecture, as Saarinen explains, is associated to the 'structural consistency of the universe' and functions around two daughter twin-principles, those of 'expression' and 'correlation' (both derived from nature). In regards to 'expression', in nature, expression is behind the meaning of the form, it maintains 'the growth and direction of a single seed', and is the means by which nature communicates; through its expressive language, nature defines and create forms (including man's body) that are always unique and possess it's own intrinsic significance. Secondly, the principle of correlation assures that all the parts correlate to each other, to the overall significance and meaning of its existence and to the spiritual atmosphere from which it arises; as an example, Saarinen claims that in art, correlation is also present in every decision[311]. It is both these principles of expressiveness and correlativeness that sustain the idea of organic order.

> **Expression and Correlation explained further:** In regards to 'Form and Expression', Saarinen explains that: '' (…) nature's form richness is established through a certain significative 'order', different in each case, and expressive of the meaning behind the form.'' (Saarinen, 1948, p. 121). This language, used by nature, is the '' (…) means by which nature communicates with those able to feel and understand.'' (Saarinen, 1948, p. 121). Nature's form language being 'inventive', with 'nuances' and 'rich in inventiveness' becomes something that can be understood in a ''basic'' way, for it in itself ''basic'' and intrinsic. The same is true for the realms of man, says Saarinen; man himself, his body, is already an expressive language. The same holds true to Art and man's creations. Whereas the principles of expression might direct the growth of a single seed into a tree is matters of expressiveness, the twin-principle, the principle of correlation will direct towards a 'correlated order', thus, becoming organized into a 'functional pattern'. In nature, everything is 'correlated' to each other. Saarinen explains that in all manifestations of form, circumstances play a vital role, and form must fit ''towards'' those circumstances. Another characteristic of the ''correlation'' principle is that it is associated to the corresponding 'spiritual' environment, or ''form-atmosphere'' in which it lives in; this form-atmosphere, should both be a reflexion of 'man' and 'resonance' between the 'spiritual' connections of the community. The 'form' is always correlated to the 'spiritual'.

However, art (form) needs to possess a third principle which can be identified as the principle of vitality – a principle of the Art of the Man. To assure vitality within form, Saarinen remarks that, it has to be present in the creative instinct, at 'the very moment of creation'. In this case only, '' (…) the concentrated vitality is transposed into form, and through form it speaks its convincing language with lasting vibration.'' (Saarinen, 1948, p. 147). It is through this vitality of creation that art becomes 'timeless' in the sense that it communicates across time. Saarinen calls this quality the 'Creative Vitality',

311 Reference to: ''The painter's problem is to correlate form and colour, light and shadow, into the patterns of his paintings. (…) And finally architecture is the art-form of correlation par excellence. It is the mother of the arts under whose correlating wings all the other arts must be interrelated.'' (Saarinen, 1948, p. 137).

and defines it as the '' (…) constructive force which in the course of time brings art onto a high wave of evolution, and which, because of its continuance and consistence, keeps it there.'' (Saarinen, 1948, p. 156). In opposition is the 'imitative indolence', which is a destructive force that brings art down to a low fase. Vitality, flexibility and 'richness' of form should be the characteristics of the language of art, for it shouldn't be limited to 'academic formulas' but should remain dynamic and free [312].

> '' One should never forget that the highest artistic quality is not achieved by mere refinement of surface but by **expressiveness of form**.'' (Saarinen, 1948, p. 151).

> ***Synthesis:*** *Saarinen (1948) believes it is 'form' that grants art its meaning and its significance: that grant's it its soul. Saarinen explains that in order for form to possess the significance of art, for it to be the 'soul' of art, it needs to possess the principles of 'expression' (expressive language) and 'correlation' (correlation of all parts and of meanings), both derived from nature; and a principle of vitality, derived from the art of man, which is expressed by the presence of the creative instinct.*

…by Kandinsky: form as inner meaning.

Kandinsky (1977) affirms that every form has a meaning and says something; in the most common sense, he explains, it is the 'separating line between surfaces of colour', and this portrays its 'outer meaning'; but form is not only outer meanings: '' (…) form is the outward expression of this inner meaning.'' (Kandinsky, 1977, p. 29). Concluding that the 'outline' the external form, is well applied when and only when **it expresses its inner meaning**. If form remains abstract, it describes only 'non-material spiritual entities', whereas in the other extreme, it expresses material expression; between the two lie intermediate forms that exist between both. He understands that this selection of forms is part of the artistic process, and the search for form is guided by an impulse of 'idealization' of the immaterial essences that describes an object: '' Many genuine artists, who cannot be content with a mere inventory of material objects, seek to express the objects by what was once called ''idealization'', then ''selection'', and which tomorrow will be called something different.'' (Kandinsky, 1977, p. 30). Idealization, he continues aims at 'beautifying' the organic forms, in order to provoke a poetic harmony; while as selection lighlights a specific attribute or character, by 'omitting the non-essentials'. Both are what defines the impulse for form, this quest for 'form-harmonies' is the desire to create '' (…) corresponding vibrations of the human soul, (…) '' (Kandinsky, 1977, p. 29), expressing inner needs.

How does pure form relate to the significance of art?

…by Luigi Pareyson: 'Pure Formativity' and Interpretation

Pareyson's theories *(see Glossary)* of art as 'pure formativity' do not contradict Saarinen's and Kandinsky's, but instead accentuate and clarify even further what he had begun defining. They establish a link between the overall generation of pure form (art as pure form) and the apprehended significant work of art. Umberto Eco (1989), in an analysis of Luigi Pareyson's aesthetics, explains that his idea of 'art as vision' and art as 'pure formativity' opposes the notions of art as form (organism), and that of art as expression. Pareyson's views are that everything man creates and does (either intellectual or artistic)

[312] Reference to: '' The same flexibility and richness must be the characteristic even of the language of art. The language of art, therefore, must not be permitted to stiffen into academic style formulas and it must not be made dry and stereotyped. That is, the language of art must remain dynamic – for only as long as form is free, in this sense, can it remain vital. '' (Saarinen, 1948, p. 188)

results in 'forms' (this includes all forms of life and artistic expression); all human life and work is basically 'artistic', however artistic forms are those that are created by a 'uni-totality' of the artist that lends the 'forming activity' an artistic direction, and is derived from a 'purely formative intention'[313]. Artistic action, as pure generation of form (pure formativity), involves morality (as a commitment and a duty), emotion (as the driving seed and component of creation) and intelligence (as a conscious judgment of the work). It is form that unifies thought, feeling and matter in a harmonious activity (art). In this formative action, the work of art reveals the personality of the artist, because through his work the artist gives himself form.

In Pareyson's aesthetics, the artist proceeds in a process of discovery, by trial through matter, and in 'forming', invents 'new laws and rhythms' that derive from both a cultural tradition (aesthetic laws) and the physical world (natural forms), and also contains a dynamism[314], that is witnessed and retraced through aesthetic contemplation; it is the form that contains the memory of the process that gave it life, and in re-designing the formative action, is the pleasure of its aesthetic contemplation and the meaning of the work of art. The formative action opens up to multiple interpretation through the retracing back of the formative steps; to 'interpret' therefore, is to understand the viewpoint of the creator, both outwardly as form and intuitively (what the work wants to be). As such, a statement is presents as a summary, '' Form is the culmination of a process of figuration and the beginning of a series of successive interpretations.'' (Eco, 1989, p. 163), upon which lies the value of the work of art and the opening up of meanings. Eco conveys briefly the theory claiming that Pareyson's views define an intimate relationship between genesis, form and the meanings and significances derived from the viewer.

> ***Synthesis:*** *For Pareyson (1989), art as pure form, means that art is generated from a process of form development that contains the significance and meaning of the work of art. The form generation process of art (that involves emotion, imagination and intelligence), is retraced back by the viewer in the aesthetic contemplation of the work, and from those multiple interpretations arises the significance of the work. 'Forming' for the artist, invents 'new laws and rhythms' that derive from both a cultural tradition (aesthetic laws) and the physical world (natural forms), and contains a dynamism that is grasped through the retracing of the formativity processes (the artistic process). Art then, is art, (significant), when it creates pure forms.*

[313] As such, '' (…) what distinguishes art from other personal initiatives is the fact that in the artistic process all an individual's activities share in the same purely formative intention.'' (Eco, 1989, p. 155)
[314] As such: '' Form, once it has reached completion and autonomy, can be seen as perfect only if it is dynamically considered. Aesthetic contemplation is this active consideration that retraces the process which gave life to form.'' (Eco, 1989, p. 163).









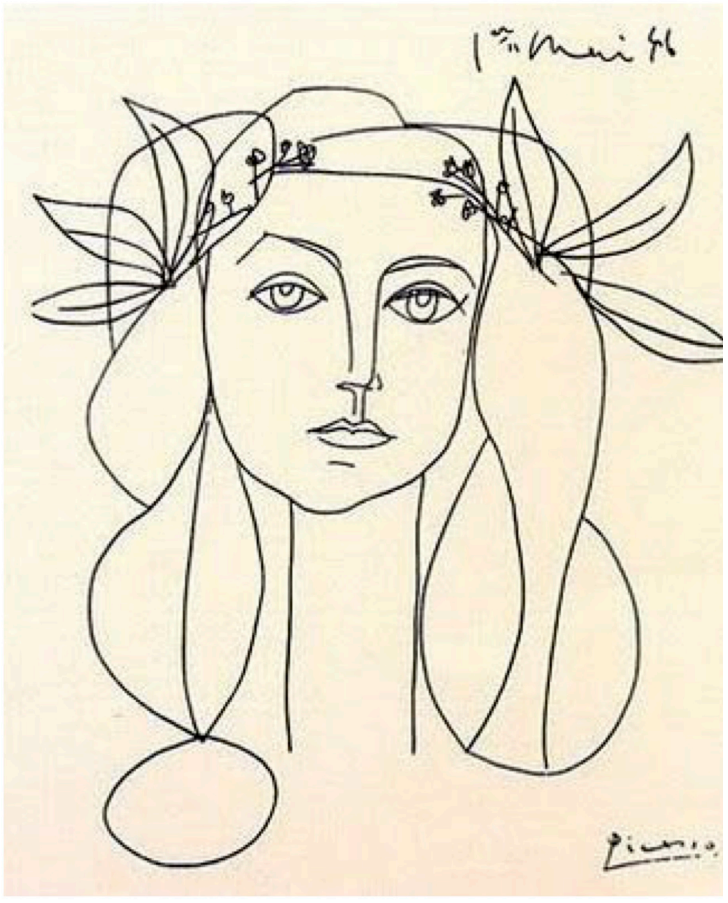


Photo 1: Blue and Silver by Whistler; Source: https://pt.pinterest.com/SarahFDias/art-paintings/; Photo 2: The inverted model of the Sagrada Familia created by Gaudi; Source: https://chrispythoughts.wordpress.com/2012/09/15/la-sagrada-familia/; Photo 3:Capadoccia, Turkey; Source:https://pt.pinterest.com/pin/251075747955768409/; Photo 4: Jean Arp sculpture; Source: https://pt.pinterest.com/pin/251075747955768581/; Photo 5: Picasso drawing of francoise gilot;; Source: https://pt.pinterest.com/pin/251075747955768501/

PLATE 29: EMBODIMENT OF 'FORM' AND FORMATIVITY (PAREYSON)

… by Rudolf Arnheim: form as content and significance

As we previously saw, for Arnheim (1964) the main aspect that defines the work of art is the underlying forces that define its significance. They rely, on a first level, on balance. Simultaneously, that balance and those forces depend on both their shape and their form. Arnheim (1964) explains that shape and form are often used in the same way, however that is not the case. Shape refers to the spatial aspects of appearance, whereas form refers to that which is beyond itself; one can say that '' (…) all shapes is the form of some content. '' (Arnheim, 1964, p. 65).

Shape, he explains is one the essential characteristics of the things that define our existence and that are grasped by our eyes. The shape of something doesn't necessarily correspond to its outline but to it's main axis, it's main form. Overall, shape is connected to a form of simplicity, which means that it captures the essential aspects of what it means to define: '' The unity of the artist's conception leads to a simplicity that far from being incompatible with complexity, shows its virtue only when it masters the abundance of existence (…).'' (Arnheim, 1964, p. 38). Simplicity, thus requires a correspondence of structure between its meaning and its shape or its tangible pattern. These structural correspondences, Arnheim adds, have been entitled 'isophormisms' by the gestalt psychologists. Thus, the striving for balance can be defined as a striving for simplicity, by eliminating ambiguity and disunity. Multiple means can be used to create shapes that are simple in a work of art: rhythms, subdivisions, proportions, use of individual parts, repetitions, curves, patterns, and others, but ultimately, what all of them accomplish is the overall balance of the composition.

Whereas, as we have seen, shape defines spatial appearances (mainly through simplicity), form captures content. The content captured by form is not the same as its subject matter; it is beyond it. It is form that has to invented by the artist. Orientation, for example, is a vital component of form, it defines the main axis of the work; a new orientation for example can create changes of perception and visual understanding such as projections of shadows; other aspects that connect to the form of a work of art can be described by the ideas of overlapping things, the idea of foreshortening (change of perspective), of transparency and solidity, and, for example, the interplay's of depth and planes. All these things contribute to the development of form. In modern art, these ideas are often changed, disregarded or questioned in order to create new types of forms. This type of discovery of form, Arnheim adds, implies a detachment that may to penetrating insight. He claims: '' The concentrated statement of these abstractions is valid as long as it retains the sensory appeal of life that distinguishes a work of art from a scientific diagram.'' (Arnheim, 1964, p. 106). It involves a sense of play and discovery because play means the borrowing of the stimulation of sight and the ease of patterns, '' (…) without accepting the responsibility that goes with its significance. '' (Arnheim, 1964, p. 106).

Formalism, Arnheim (1964) claims, that is an expression often used to describe art that lacks content, cannot be used to everything that uses a reduction of geometric form. Modern art, he continues, is not formalistic in this way. Formalism can indeed carry content and significance in art.

Form is also associated to the imagination, continues Arnheim (1964). Imagination is indispensable, because the subject does not offer itself completely, it needs to be discovered by imagination itself. Form must be invented, and it is the role of each individual artist to invent it with the use of his own imagination. The process of form discovery, the creative process, doesn't occur in any

specific order, but jumps from the universal to the specific and from the specific to the universal, and therefore: '' It's trail cannot be read in the finished work.'' (Arnheim, 1964, p. 116). The only common thread between the different processes of form discovery, is indeed, the use of imagination.

All form exists beyond the copying of physical reality. What form tries to capture are the properties that define the object being observed or being imagined. Lastly, the author emphasizes, that there is a rule that claims that the expression being conveyed by form, '' (…) will only be as clear-cut as the perceptual features that carry it.'' (Arnheim, 1964, p. 125); which means that the form will only convey the significance it tries to embody and convey, if the elements that compose the form itself are in themselves those qualities and those aspects. An example can be found in Durer's drawings, where he uses rough, curved and strong lines to capture the movement and the strength of the character of Christ's face. Another example, Arnheim (1964) adds is: '' A clearly curved line will express the corresponding swing or gentleness with equal clarity; but a line whose over-all structure is confusing to the eye cannot carry any meaning.'' (Arnheim, 1964, p. 125).

The artist, in order to create these 'forms' (art), has to have the ability and the '' (…) wisdom to find significances in individual occurrences by understanding them as symbols of universal truths.'' (Arnheim, 1964, p. 133). The artist's ability, then, is the ability to apprehend these significances and capture them in a tangible form. Associated to the notion of form, Arnheim (1964) also accentuates the notions of space, of light, of colour, of movement and of tension, explaining that each have a vital role in defining form as significance in artistic creations.

How does pure form come about and why?

… by Paul Klee: formation of form as meaning

Pareyson's views on the creation of form as the real significance of art, or that art is pure formativity, are also echoed by Paul Klee's ideas on form. Giulio Carlo Argan, in the preface of Klee's book '*The Thinking Eye'* (1961), explains that Klee is more concerned with the formation of form as a process, than with the end result of the art object; there is an underlying awareness that the creative 'manner' by which the artist generates form, is where the significance of art lies. What is of value in the generation of form, is precisely the artistic process itself, (the values and principles it incorporates and recreates) rather than form itself.

Paul Klee, clarifies Argan, in this way, is much like Leonardo da Vinci, for both of them, relate their artistic practices to a 'way of being', and thus, both of them, '' (…) take in the entire universe.'' (Klee, 1961, p. 11). The form formation process, then, considers the whole 'way of being' that defines the artist[315], and is usually born out of a 'contradiction', between our awareness of existence (in the world and in space and time) and the 'uncertainty of everything'. This paradox and contradiction is what defines and sustains Klee's creations, and Klee's ideas about form generation, emphasizes the author.

Klee's Theory of Form, tries to define and capture 'moments of life', with the purpose of a didactic function of education, that he also believed was one of the roles of art[316]. According to Klee, the

[315] Argan (1961), on his work, continues: ''Since art brings into being, albeit only through what is termed the visible, a cosmic awareness of reality, there is no moment or aspect of being which can be considered foreign or irrelevant to the experience which is acquired in artistic creation.'' (Klee, 1961, p.11).

[316] **Paul Klee's Theory of Forms:** Klee creates images that are in themselves disassociated, fragmentary and hasty like, in an enigmatic way – not a single 'grandiose image' imposing itself orderly in our system. Klee's body of work, he continues explaining,

way by which an artist creates implies, this 'didactic requirement', not only to others but also to the self: it is by the work itself that the artist defines and understands his own reality, and his own experience and existence. Discovering pure form as art, then, is a way of understanding oneself, and communicating that knowledge to others.

> ***Synthesis:*** *For Paul Klee (1961), it is pure form that defines significance, and pure form is achieved through the creative process (which is a generation of form). What is of value in form is the values and principles it incorporates and recreates) rather than form itself. Discovering pure form as art, then, is a way of understanding oneself, and communicating that knowledge to others. Pure form is derived from the form formation process: which echoes the whole 'way of being' that defines the artist, and is born out of a 'contradiction', between our awareness of existence (in the world and in space and time) and the 'uncertainty of everything'.*

How does the artist then imitate nature? What is he trying to grasp and capture in form?

…by Nadir Afonso: form as energy derived from nature's laws

Nadir Afonso (2010) also has the same ideas in regards to form, however he reiterates the fact that form should be generated by intuition and emotion in the creative process, and should be derived from nature's mathematical principles and laws (the very one thing that defines art). The artist, through the understanding of these nature principles, these 'constant mathematics provided by emotion', derives and understands 'energies', such as space and movement[317]. He claims: '' (…) everything is space and movement.'' (Afonso, 2010, p. 27), and it is this energetic understanding that grant meaning to life and art. All other understandings are rational man made constructions, that are not derived from nature and therefore should seize to exist, such as time. Therefore: ''The paramount action of the artist, a sensitive soul, is to imitate nature.'' (Afonso, 2010, p.53). From this imitation of nature, with a 'discerning intention' he 'selects' and chooses the 'qualities' that 'impress' him, working with both qualitative attributes (related to the function) and with quantitative attributes (related to the form that are only felt by intuition). The artist is filled with a quantitative and intuitive understanding of the proportions of nature of its laws and 'mistake's' them for 'the language of his own soul'[318].

So what are these laws of nature that generate form?

The laws of nature, explains Nadir Afonso (2010), are 'active' components that are responsible for evolution; they can be understood as 'pre-existences' that can be felt by an intense emotion of

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is a life of research, developed by a 'number of fragments' in his 'rapid' paintings, notebooks, and experiments. With his Theory of Form, there is an attempt to 'fix' the moments, and to give meaning to 'arbitrary' forms. Klee saw in education the same didactic function of art, that of 'communication': ''It is a matter of teaching others how to walk along thin invisible wires, stretched out in the darkness, trying to penetrate an unknown dimension.'' (Klee, 1961, p.13). In his 'Theory of Form' there is a combination of drawings, theories, where he speaks of laws of gravity, of time and space, of forces, of creation and destruction, of both the 'individual' and the 'cosmos'; it does not aim at being scientific, neither a system, but '' (…) it does reveal a complicated construction in which everything seems to find its proper place.'' (Klee, 1961, p.13). What is important, is to clarify a 'dimension' or a 'perspective', where 'one's own existence' becomes clear. This is derived from his overall idea of reality as a 'never-ending' metamorphosis: ''Reality is a never-ending metamorphosis; this is a thought Klee had inherited from Bosch, and shared with Kafka.'' (Klee, 1961, p.14).

[317] Reference to: ''When the aesthete believes that, in his work, the artist is seeking the specific qualities of function – perfection, originality, evocation – he disregards the fact that it is not those qualities but rather the exact, mathematical qualities that determine the essence of universal art.'' (Afonso, 2010, p.18).

[318] Reference to: ''The laws of the forms cannot be seen at the level of intelligence and of reasoning but are felt at the level of intuitive perception, so when the true artist seeks perfections, he does in fact apply himself intuitively to that mathematical and universal exactness. To the eyes of the sensitive contemplator, from that moment on the work of art appears as a spectacle of exactness. A spectacle of exactness that the author himself mistakes for and calls ''the language of the soul''. '' (Afonso, 2010, p.59)

harmony and are associated to energies, the one element that they govern. In this sense, energy, for Nadir Afonso is the means and the way by which the laws of nature are communicated and materialized. But energy, underlines the author still 'remains misunderstood', man does not understand its origin, however, man can understand its 'effects'. Form then is energy derived from nature.

> **Form as Energy derived by Nature:** For Nadir Afonso (2010) the work of art is connected to the intuition and to the sensitivity of man, and these, in turn are connected to 'nature', its principles and laws. He explains: '' The work of art has its own particular, unique, original property, accessible to the intuition specific to sensitive beings.'' (Afonso, 2010, p.18). To understand this, man has to distinguish nature's 'particularity' which is connected to the mathematical qualities, from the other factors observed in nature, through intuition. It is these mathematical properties derived from nature that alone determine the 'essence' and the 'universality' of art. The real geometric form Nadir Afonso was searching for in his art-works and paintings, a search latent for over 30 years, has its essence in what he describes as a 'constant mathematics provided by emotion'. Furthermore, this 'geometry', is intrinsically connected to nature, and not exclusively to any human construction (mental or physical). Within this, nature expands through energies, such as 'space' and 'movement' that determine existence and therefore grants meaning to life and art. He claims: ''Time does not exist. There are laws. There is space. There is movement. All evolution in nature, as we shall see, requires an outlay of energies.'' (Afonso, 2010, p.21). He thus urges for a 'dissolution of time' in life and in art, and all other human constructed values.

The laws, he continues, are unchangeable and universal; what changes is our ability to feel them and therefore, our manifestations of them. These laws ('geometrical' and mathematical energies, derive and existe in nature), generate 'quantitive' attributes of art, a particular aspect of art that has been neglected in aesthetics, and that allows man to believe, that he is creating from 'an inner world' (as an 'appearance of eternity') when in fact he is materializing nature's laws of form[319]. The understanding of nature's essential property of geometry is defined by Afonso as 'Morphometrics'; it is exact and 'imperishable', and ''(…) it is the only one that characterizes the universal work of art.'' (Afonso, 2010, p.41).

Is form then, capturing these universal laws of nature?

…by Kant

Kant (1976) sustains there is also a profound connection between the generation of form in art and nature. Firstly, he believes that art (and it's form) should resemble nature in a 'free and unstudied' manner. Secondly, he defines that the artist is guided by intuition, genius and an 'aesthetic idea' that was beautiful inasmuch as it recreated the ideas and principles that sustain nature. Art then, recreates nature, through it's aesthetic idea, stimulating man intellectually and emotionally. This idea was continued to be developed with Kant's views on the aesthetic experience.

Form, Geometry and Harmony: an interpretation of Nature…

> '' The universal laws are recognized in our intimacy as eternally true.'' (Hemenway, 2005, p.9)

[319] Nadir Afonso clarifies that there is not one single aesthete that is able to take into account the quantitative aspects of art, the quantitative attributes, the ''play of mathematical proportions''. To conclude this concern, he explains that artists, as a consequence of this neglect by 'aesthetics', believe they are expressing an 'inner world' when in fact, they are expression the laws of 'geometric mathematics' by intuition. The essence of art, these quantitative aspects, remain unaddressed. These quantitative attributes, Afonso (2010) further explains, are felt by the artist in a 'geometry of the form' as '' (…) the only eternal and universal quality able to stand against the irrepressible transitoriness of things.'' (Afonso, 2010, p.41).

The idea that form, for the creation of art, as was seen in some of the above theories, should have it's root in nature is not new. Using nature to discover harmonies and proportions has fascinated artists, scientists and philosophers throughout the course of history.

One of the reasons for this, author Priya Hemenway (2005) writes in her book *Divine Proportion: Phi in Art, Nature and Science*, is that through the understanding of the 'Divine Harmonies' (in the discovery of a relationship of harmony, equilibrium and symmetry in the natural world, and the understanding of these universal laws of form) that man also understands that he too is part of the 'Divine Creation'. What underlies the geometrical and mathematical understanding of these universal laws of form derived from nature, is the number Phi the mathematical and geometrical ratios of 1:1.618, derived from the Fibonacci Series (0,1,1,2,3,5,8,…) and the Phi proportion[320]. The geometrical symbol's, numbers and geometries, are recreated in art and architecture, and used as a way of mirroring an intrinsic natural order, balance, harmony and essence of the universe. Examples of this fact in both architecture and art are numerous.

> **Examples of the searching for universal laws of form in nature for Art**:
> As mentioned before, there are multiple examples: the classical ideals about facial and body proportions that are echoed by Leonardo Da Vinci's drawings and studies, used geometrical proportions and harmonies derived from the observation of nature. Aiming to connect man and nature, Leonardo searched for the underlying geometrical principles in all of nature's elements, but primarily, those pertaining to the human figure. He applied the 'proportions' and 'canons' in numerous paintings and drawings. As an example are his various studies of the human face and the underlying proportions of the Mona Lisa. The Mona Lisa is generally understood as the 'perfect' example of how to construct a 'portrait'. Another example, is the Vitruvian Man, Leonardo da Vinci clarifies the principles outlined by Vitruvius Pollio in his Ten Books of Architecture, where he described the human proportions. His drawing clarifies what is known as the 'ideal human proportion'. The Phi Proportion has been used by various architects and architectural creations throughout history: from the Egyptian Pyramids, to the Gothic Cathedral or to the Parthénon, in Athens, to the more contemporary examples such as the works of Le Corbusier; and also in various works of art.

As such, 'geometry of life', nature and the universe, define the 'geometry of art', thus granting the artistic creation with the universal order, harmony and beauty of nature. This is also explained and studied by **Matida Ghyka** (1946) *(see Glossary)* in his research book '*The Geometry of Art and Lif*e'. Contextualizing the use of 'geometry' in history he states that from Pythagoras and Plato, principles of proportion were established, leading to the Vitruvian ideal of 'symmetry' and 'eurhythmic', where numbers define the code of composition, from which everything should be arranged; this way the order of the Cosmos was maintained, and every creation would mirror the universal ideas of harmony, thus assuring an order between the cosmos (macro cosmos) and man (micro cosmos). Ghyka (1946) in this sense claims that the use of geometrical proportions in both the architecture and decorative art throughout history, is '' (…) without any doubt, conscious'' (Ghyka, 1946, p. 174). For him, although inspiration and passion are key components for the creative arts, the knowledge of the 'theory of proportions' far from being limitative for the artist, grant him with infinite choices and possibilities, within the 'realm of

[320] **The Phi Proportion:** also defines the Golden Rectangle, that has a defining property that is: if one removes the square (dimension of the shortest side), this will define another Golden Rectangle. This process can be repeated infinitely, and is also known as Fractal Forms. From the Golden Rectangle it is possible to define the Golden Spiral and other geometrical forms such as the Golden Pentagram. In the Nautilus Shell, for example, the increments of growth possess a constant and common ratio of expansion: the Phi Proportion. It is found 'everywhere' in nature. (Hemenway, 2005, p. 30)

symphonic composition' and assures that the work of art is 'schematic' (co-ordination of the parts)[321]. In modern art, also, the use of the golden section is still found as a compositional structure. However, the author asserts that, it is unknown if they were used consciously or unconsciously, using Seurat's painting Le Pont de Courbevoie and Guardi's painting Lagoon of Venice as examples.

In a synthetic way, it is possible to claim that form grows naturally with the aid of geometry (intrinsic and intuitively) and as a (conscious process), a mental analytical understanding that organizes and understands. Just as the life of the painting exists, because it is a duality of both abstraction and reality, so too, harmony prevails in a natural order, because it is a balance of intuitive forces and conscious processes; intuition and knowledge of nature's laws.

> ***Synthesis:*** *Art uses the laws of nature as geometry, in order to capture nature's form generation principles: through number and proportions. In doing so, the art form belongs to the universal laws and allows man to belong to the 'divine order' that creates the universe.*

… by Rudolf Arnheim: architectural form

Rudolf Arnheim (1977) in his book 'The dynamics of architectural form' explains, that architectural form should convey the use of the building. Form thus is primarily defined in order to accentuate it's use: '' There is something wrong with a lobby which people looking for the elevator constantly end up in the boiler room.'' (Arnheim, 1977, p. 205). This defines a simple principle in architecture, which is that in a well-designed building there is a correspondence between visual properties and functional characteristics, between appearance (form) and function. He adds: '' Similar function should be reflected in similar shape; different function in different shapes. Visual accents should occur in places of importance.'' (Arnheim, 1977, p. 205). The image of the building, thus, should lead people both in it's overall arrangement and in its details.

Arnheim (1977) explains that another main issue regarding Architectural form is whether it should resemble nature itself becoming immersed into the natural world (as sustained by Adolf Loos and Frank Lloyd Wright), or whether it should, in opposition, '' (…) man can use the forms of architecture to declare himself a rational creature creating rational shapes.'' (Arnheim, 1977, p. 212). The latter creates an antagonistic attitude towards nature, and tries to assert man's rational abilities over nature; an example is the French gardens of the seventeenth century and the equally formalized architectural palaces. Despite this dichotomy, Arnheim emphasizes the need for an expressive form, cultivating the expressive qualities of the shapes themselves, despite the relationship to man or to nature. An expressive form creates dynamism, thus allowing for a spontaneous symbolism to occur (previsouly analysed).

Dynamic forms, continues Arnheim, is not exclusive to the fine arts and to architecture: it is a property and primary quality that defines any perception. However, in regards to architectural dynamics Arnheim (1977) accentuates that there are some properties that need to be clarified. One of the first aspects that defines architectural formal dynamics is the idea of proportions that aim to create a sense of equilibrium; another aspect is the consideration of perceptual weight, which is derived from mass and voids in the architectural space; other aspects that contribute to architectural dynamics are the idea of

[321] As a synthesis, he writes: ''As Claude Bragdon said: '' A work of architecture may be significant, organic, dramatic, but it will fail to be a work of art unless it is also schematic. It means (this word) a systematic disposition of parts according to some co-ordinating principle.'' (Ghyka, 1946, p.174)

contrast (between solid and void), the idea of verticality and horizontality, the idea of suspension or 'holding mass' in the air and lastly, the openness and closeness quality of buildings, which directly influences the overall perceptual idea: '' When open and closed spaces are given equal shares, the effect is of a screen which is dynamically neutral and simply provides the surface if the building with some transparency.'' (Arnheim, 1977, p. 227), and lastly, the placing of the building on the ground that creates a sort of displacement for the viewer and creates a visually expressive form. All these ideas and formal aspects announced can create visual dynamic of architectural form and multiple symbolic associations thereby generating a significant encounter.

Although expression is absent from most architectural discourse, explains Arnheim (1977), it is deeply connected to the dynamics of form and to architectural significance. These dynamic encounters are experienced '' (…) as ways of being and behaving, to which we find analogies, for example, in our own mind.'' (Arnheim, 1977, p. 253); it is perceptual dynamics that is the carrier of expression. It is the combination of these expression elements as dynamics of form, that allows architecture to be an art. As a synthesis: for Arnheim, visual expression and dynamics is an indispensable attribute of architectural form, and thus is of vital importance in promoting significance.

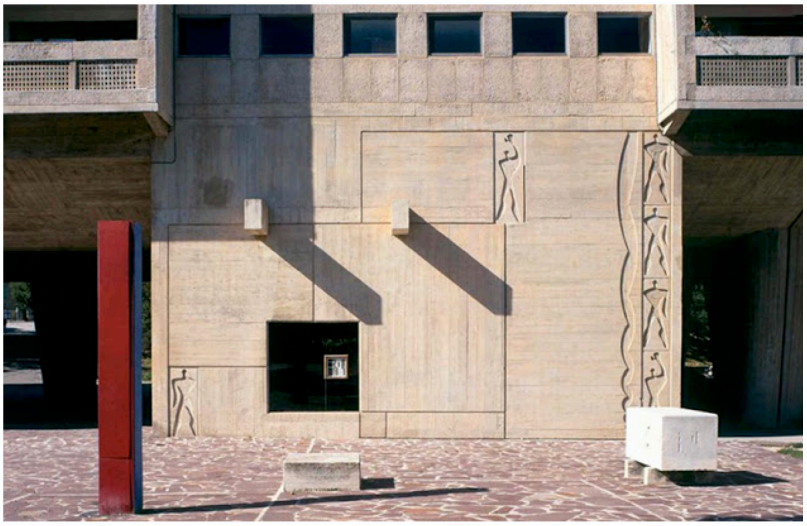
… Architectural examples of Form as 'Soul' and 'Wholeness' and formativity

One example that is of the essence to understand architectural form as this entity which embodies signfificance and act as a wholeness is La Ronchamp, by Le Corbusier, which will further be analysed in chapter 6; the form of the chapel which was conceived through a process of formativity, between consciousness and unconsciousness processes of form development as defined by Pareyson, acts as the 'soul' of the architectural space: it is not an envelope, or a skin, or even an applied geometrical pattern, but instead is something generates for it's own sake (exclusively for that site, for that set of circumstances) and is conceived and lived as a whole, as an entity.

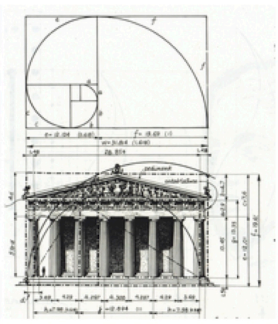
… Painting and Sculpture examples of Form as 'Soul' and 'Wholeness' and formitivity

In painting, it is a vital example the works of Leonardo da Vinci, whose drawings echo a form generation process, an overall sense of wholeness and possess all the aspects pointed our by the authors (expressive language, correlation of all parts and of meanings (both derived from nature), and vitality). Another example, in sculpture, is the works Rodin for the same reason.









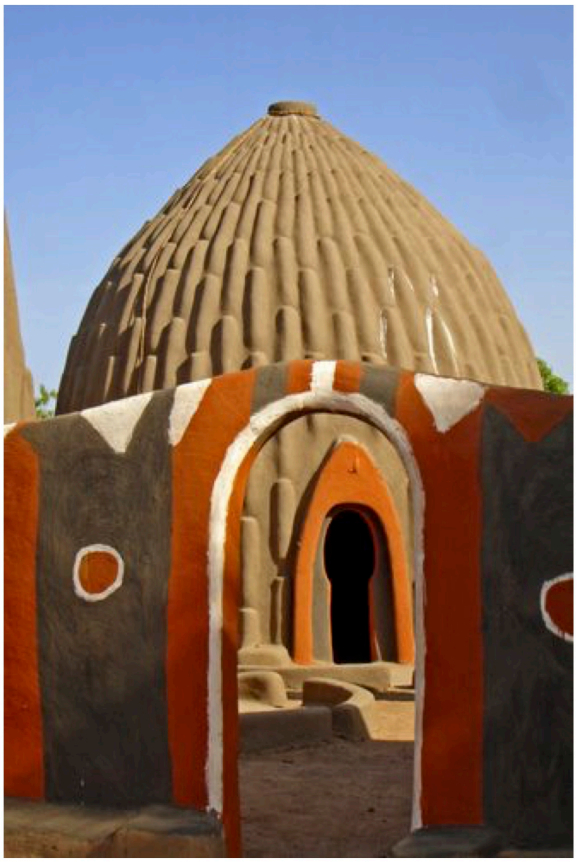




Photo 1:Proportions of the Face and Eye, c. 1489, by Leonardo da Vinci; Source:http://www.drawingsofleonardo.org; Photo 2: The Modulor by Le Corbusier; Source: http://www.moderndesign.org/2012/04/le-corbusier-cite-radieuse-marseille.html; Photo 3:The Parthenon and the phi proportion; Source: http://www.huffingtonpost.com/lance-hosey/the-rectangle-is-still-go_b_8325280.html; Photo 4: Traditional Obus house & entrance way in Cameroon, West Africa; Source: https://pt.pinterest.com/pin/251075747955778206/; Photo 5: Marc Chagall (1887-1985) " the lovers of vence."; Source: https://pt.pinterest.com/pin/251075747955768721/

PLATE 30: EXAMPLES OF SEARCHING IN NATURE FOR PROPORTIONS AND UNIVERSAL HARMONIES

… Understanding form: conclusion

Multiple authors, as the work showed, explains that it is form that grant art it's significance; for them, art is art when it creates pure forms, granting it it's soul (Saarinen (1948), Pareyson (1989), Paul Klee (1961)). We defined that form in general can be understood in two ways: as the total aspect of the artistic creation, or as a geometric characteristic of the creation. However, geometric characteristics and details can also be present, multiple authors focused on form as a total aspect, a vital component of the creation, that is in itself the foundation and core of significance. The work, thus, understood form in an overall manner, trying to understand what this form is and what it needs to be in order to be an embodiment of the significance.

Form, thus, in a general way was defined as significance and 'soul' that is innate to human life and that is expressed through art (Saarinen (1948)). The author further accentuated other aspects of form that are of vital importance: (1) that it is related to the mentality that originated it (spiritual qualities that are present or lacking), (2) that it is felt in the intimacy of life, (3) that it possesses an inner significance within itself, and (4) that it comes into through the 'instinctive' power of its creator.

We also saw that in order to retain it's strength, it needs to possess the principles of 'expression' (expressive language) and 'correlation' (correlation of all parts and of meanings), both derived from nature, and a principle of vitality, derived from the art of man, which is expressed by the presence of the creative instinct.

Thus, the authors also agree that the form generation process itself is of vital importance: a process of 'Forming': that invents 'new laws and rhythms' that derive from both a cultural tradition (aesthetic laws) and the physical world (natural forms) (Pareyson (1989)), and this generation of form relates to a 'way of being' (Paul Klee, 1961), since it is intimately defined by the expressice and intuitive aspects of the artists, it's creator.

There is also, a strong connection between form as embodied in the artwork, and the forms of nature, which explains why man has turned to nature in search of underlying geometries and harmonies to re-create in his own creations. It is nature that acts as the underlying rule of form.

Through the examples we also begun to understand that architectural form is defined as a wholeness, acting as the main essence of the architectural space; it is through the architectural form that the space is understood and lived in; therefore, it is the form that possesses the innate values, principles and significances that are echoed throughout the space as a lived form. The form generation process, in architecture is equally important, as La Ronchamp showed. One aspect related to architecture that was not mentioned by the authors is the aspect of scale. In painting and sculpture, we also saw that although form is not lived (like in architecture), it needs to possess the same sense of wholeness.

Thus, it is form, through its formativity, that defines a sense of totality and wholeness of the creation.

Synthesis: Form

1. ***Art is art when it creates pure forms. It is pure form that grants art its meaning and its significance: that grant's it its soul*** *(Saarinen (1948), Pareyson (1989), Paul Klee (1961),*

2. *For Pareyson,* ***art as pure form, means that art is generated from a process of form development that already contains the significance*** *and meaning of the work of art. (Pareyson (1989))*

3. *Form is* ***'meaning', significance and 'soul' that is innate to human life and that is expressed through art****. (Saarinen (1948))*

4. ***Form:*** *(1) is related to the mentality that originated it (spiritual qualities that are present or lacking), (2) is felt in the intimacy of life and expresses significance in deeper ways than any other subject or creation can, (3) possesses an inner meaning and significance within itself, and (4) it comes into 'expression' in different ways, (it can be strong or vague), as a result of the 'instinctive' power of its creator. (Saarinen (1948))*

5. ***Form in art****:*
    - *is a result of the essence of man (it evolves and changes with man) and is a reflection of man's own understanding of life and the significance of that life (Saarinen (1948))*
    - *needs to possess the principles of 'expression' (expressive language) and 'correlation' (correlation of all parts and of meanings), both derived from nature; and a principle of vitality, derived from the art of man, which is expressed by the presence of the creative instinct (Saarinen (1948))*
    - *echoes the form generation process (that involves emotion, imagination and intelligence), and is retraced back by the viewer in the aesthetic contemplation of the work, and from those multiple interpretations arises the significance of the work. (Pareyson (1989))*
    - *derives from a process of 'Forming': that invents 'new laws and rhythms' that derive from both a cultural tradition (aesthetic laws) and the physical world (natural forms), and contains a dynamism that is grasped through the retracing of the formativity processes (the artistic process). (Pareyson (1989))*
    - *relates the artistic practices (generation of form) to a 'way of being' (Paul Klee, 1961)*
    - *is derived from the form formation process: which echoes the whole 'way of being' that defines the artist, and is born out of a 'contradiction', between our awareness of existence (in the world and in space and time) and the 'uncertainty of everything '(Paul Klee, 1961)*
    - *has a didactic requirement to the self and to others (Paul Klee, 1961)*
    - *is generated by intuition and emotion in the creative process, and should be derived from nature's mathematical principles and laws (Nadir Afonso, 2010).*
    - *is energy derived from nature and the understanding of nature's laws (Nadir Afonso, 2010).*
    - *should resemble nature in a 'free and unstudied' manner (Kant)*

6. *What* ***is of value in form are the values and principles it incorporates and recreates) rather than form itself*** *(Paul Klee, 1961).*

7. *When form is derived from nature (principles, harmonies, geometries and numbers are understood) and* ***thus art mirrors the universes ways of creation****, thus assuring an* ***order between the cosmos (macro cosmos) and man (micro cosmos****) (Matilda Ghyka (1946) and Priya Hemenway (2005)).*

5.9. COLOUR

In a similar way to form, there are multiple theories that hold colour to be a special significance in itself and that it is through colour, that art is significant.

Firstly, it is important to clarify that there is an indissociable connection between colour and form. Also, colour, as a light phenomenon, is a central aspect of visual perception (described in the previous chapter); we understand the world around us with colour, and thus is of the utmost importance to architecture, painting and sculpture. But how does it possess and act as an embodiment of significance? We will begin by understanding the phenomenon of colour itself.

What is colour?

… Understanding colour:

Colour is the focus of various studies and multiple disciplines, ranging from artistic fields including architecture and painting to the various scientific fields: these encompass natural sciences, technology, biology, medicine, psychology, philosophy, fine arts, architecture and design. The growing contemporary studies on the field of colour have allowed it to become a vital tool in these multiple fields. Maria João Durão in her paper *'Colour in the built environment'* (2002) explains that colour is a multidisciplinary complex phenomenon, and this '' (…) is evident in the different meanings it has in disciplines such as psychology, physiology, neurophysiology, linguistics, philosophy, social and art history, physics, psychophysics, architecture and art.'' (Durão, 2002, pp. 1, 2). Each branch studies colour in its own specific realm. Faber Birren (1970) also explains this complexity when he says that colour is a fleeting and intangible essence, a resonance that escapes mental formulations and cognitive understanding[322]. For Saarinen (1948), colour is a fundamental principle pertaining to all things (just as Form), and communicates with the sensibility of man, whom understands colour through an 'inner sensibility'. Colour is a significant language associated to life itself and subsequently is essential for cultural growth. Saarinen emphasizes that the richness of colour in nature is associated to the 'underlying life': '' Thus, the seasons constitute a continuous colour-symphony – rich, animating, and with expressive colour-movements.''(Saarinen, 1948, p. 277). Colour, Saarinen continues, is the 'significant language', that speaks for its own sake. The world of colour, he emphasizes, is ''essential'' for ''cultural growth''.

How does colour relate to art?

Colour understood in the artistic realm, is not a decoration element or something applied post production, but an integral part of the design process and integrated in the definition of the significance and meaning of the creation. For Birren (1970), the artist is interested in colour effects from both physiological and psychological aspects, 'mediated' by the eye and the brain, and in its associations to mental and spiritual phenomena; he also adds, that colour needs to be understood as: Impression

[322] In his words: '' The primeval essence of colour is a phastasmagorical resonance, light becomes music. At the moment when thought, concept, formulation, touch upon colour, its spell is broken, and we hold in our hands a corpse.'' (Birren, 1970, p. 8).

(visually), Expression (emotionally) and Construction (symbolically)[323]. Saarinen (1948) mentions that it is the essence of colour that allows art to be expressive in it's nature. But before understanding this deep significance of colour in art, we will firstly contextualize colour theory and it's profound impact in the arts.

Synthesis:
Colour is: a fleeting and intangible essence (Birren (1970)), a multidisciplinary complex phenomenon (Durão, 2002), a fundamental principle pertaining all things (just as Form), and communicates to the sensibility of man, who understands colour through an 'inner sensibility' (Saarinen (1948)) and a significant language associated to life itself and thus is essential for cultural growth (Saarinen (1948)). Associated to art it can be understood is a three fold way: Impression (visually), Expression (emotionally) and Construction (symbolically) (Birren (1970)).

What is Colour theory?

… Colour theory: Contextualization and connections to the arts

Colour theory is a very broad subject encompassing everything that relates to colour itself as a subject. Colour theory ranges from the more physical properties in connection to physics, the visual arts components, connected to the colour combinations and their results, the psychological effects of colours connected to psychology and philosophy. Although its origins as a subject are difficult to trace accurately, colour theory principles can be found in the writings of the architect Leone Battista Alberti and the notebooks of Leonardo da Vinci, in the Renaissance.

It was the publication of Isaac Newton's (1642-1726) theory of colour in his book '*Optics or a Treatise of the Reflections, Refractions, Inflections and Colors of light'* (1704) that brought colour theory to light in the 18th century. Newton's work Opticks (1704), showed that white or light, when directed through a prism would split into its component colours. He defined the first rainbow and the refraction effects of white light through a prism, resolving it into its defining colours (red, orange, yellow, green, blue and violet). It is Newton that first ascribes the colours in a colour circle, organizing them in their primary and complementary colours (defining the primary colours or 'primitive' colours (red, yellow and blue) as capable of creating every other colour by their various combinations). This circular system became the model for colour systems that followed[324].

In the nineteenth century, Johann Wolfgang von Goethe (1749 – 1832) published his Theory of Colours (1810). His work, from the perspective of a poet and a painter, clarifies the nature of colours and how these are perceived by human beings in different circumstances; explaining various phenomena associated to colour such as the process of refraction or the effect of coloured shadows. Goethe considered Isaac Newton's observations and findings to be specific only to special cases, and thus, only explained colour phenomena and perception in a broad and scientific state. Unlike Newton, Goethe was not

[323] He explains that: '' Visual, mental and spiritual phenomena are multiply, interrelated in the realm of colour and the colour arts. '' (Birren, 1970, p.12) In this sense, according to Birren (1970), colour aesthetics may be approached from three directions: '' Impression (visually), Expression (emotionally), Construction (symbolically).'' (Birren, 1970, p.13).

[324] **Newton's contributions to colour:** On the contribution of Newton's work, Durão (2011) summarizes: ''Newton's *Optiks* (1952) opens with a definition of the fundamental unit of light out of which his optics was built. This mathematical language translates archetypical phenomena wherein the 'ray of light' representing the fundamental unit travels through space unchanged by reflection, refraction or scattering.'' (Durão, 2015, p. 4). The author Philip Ball (2003) questions Newton's choice of colours for the rainbow, claiming them to be arbitrary: '' And so the Newtonian rainbow acquired its indigo and violet where I defy anyone to see other than a blue deepening to purple.'' (Ball, 2003, p. 26). However Newton's discoveries changed the world of colour theory.

concerned with the physics aspect of colour (optical spectrum), but with the phenomena of colour itself in the natural world and how it appears to the human eye, connecting it to the perception aspects through experience, defining the first human colour perception studies.

> **Goethe's further contributions:** Goethe also proposed a symmetric colour wheel (1809), opposing colours to each other, according to their own nature: yellow to violet, orange to blue and red to green. In his colour wheel, he also established a series of aesthetic and psychological qualities (that he defines as 'allegorical, symbolic, mystic use of colour', establishing for the first time a kind of colour psychology. The associations were as follows: red to 'beautiful' or Schon, orange to 'noble' or Edel, yellow to 'good' or Gut, green to 'useful' or Nutzlich, blue to 'common' or Gemein, and violet to 'unnecessary' or Unnothig. These six categories, one for each colour, were also assigned to four categories of the human condition the rational (*Vernunft*) to red and orange, the intellectual (*Verstand*) to yellow and green, the sensual (*Sinnlichkeit*) to green and blue, and imagination (*Phantasie*) to purple and red. Goethe did an earlier version of a colour wheel, associated to psychological aspects, in 1798, with Friedrich Schiller. In this wheel, *Die Temperamenterose* (1798), they match twelve colours to human occupations and organized them in accordance to four temperaments (the four personality types) relating them to a specific colour. (Von Goethe, 1840).

Both authors deeply influenced the arts and their connection to colour: specifically the notions of atmospheric space and the colours it produces, the poetical and emotional connections of colour and the associations of colour (the colour wheel). Multiple other theories elaborated and added to the traditional concept of the colour wheel; some of these theories are: '*Tratado das Cores/que consta de tres partes: Analytica, Synthetica, Hermeneutica'* (1787) was written by the Portuguese Diogo de Carvalho e Sampayo in the eiteenth century, George Field's 'Chromatography' (1841), the Romantic painter Philippe Otto Runge (1777-1810) that represented a spherical colour wheel in 1809 and others and the more contemporary understanding of the colour wheel, defined by science, the Comission Internationale de l'Eclairage (CIE), called the CIE chromaticity curve and also known as the CIE 1931 system[325]. Colour theory also expanded greatly, as artists, architects and scientists tried to understand colour connections and the overall principles that sustained colour. Some of these theories are: Ewald Hering (1834-1918), a physiologist published his theory *'On the Theory of Sensibility to Light'* in Vienna (1878), opposing the purely physical and scientific understanding of colours and distancing his publishing from the world of physics, he tried to define the colour phenomenon from subjective colour experiences; Michel Eugène Chevreul (1786-1889), a French chemist, published his treatise 'De la Loi du Contraste Simultané des Couleurs' or ' The Law of Simultaneous Colour Contrast' (1839), that aimed to identify underlying colour principles that produced harmonizing effects and defined the laws of simultaneous contrast (two colours, side by side, interact with each other and change our perception); Albert Munsell (1858-1918), American painter and art teacher, in his book 'A Colour Notation' (1905) and other further publications defines the 'Munsell colour system', the first attempt to create a system for numerically identifying colours, in a way that possessed a meaningful connection to the colour itself[326]; Faber Birren (1970), in his book '*Colour*

[325] **CIE colour system:** '' (…) is based on perceptual-physiological measurements and represents an internationally agreed method of colour identification based on the additive mixing of light.'' (Silvestrini, 2011). It is a mathematical, objective and scientific colour system that is able to specify and identity colours precisely.

[326] **The 'Munsell colour system':** is a three-dimensional classification of colours, thus organizes in space each colour with its own values; the system allows for new colours to be considered and added. His classification system is as follows: each hue possesses a number (indication of the tone's weight) and letter for each colour (red is R, blue is B, and blue plus red is BR, and another two numbers to indicate value and intensity. Munsell's system is widely used, but his contribution created a link between scientists and artists, allowing for a colour visualization and catalogazition to be implemented in a logical and simple way. Author Silvestrini (2011) explains that ''Munsell's efforts at constructing a system in which the spacing between each colour and its neighbor could be

principles' (1970) tried to understand colour harmony principles, sustaining that in order for a 'perceptual' harmony to be achieved, an innate 'colour harmony' needs to exist; this colour harmony, where the eye is satisfied and in equilibrium, requires relations of complemental colours and contrasts[327].

So is colour theory used to achieve significance? How do artists and architects use colour?

The author Philip Ball (2003) says that artists have expressed diverse opinions in regards to the value of scientific colour theories. He further claims that some artists such as Veronese, Rubens or Delacroix are better equipped than any other scientist to speak and explain the phenomenon of colour. Echoing Jean Georges Vibert when he stated that this is because '' (…) 'with their colors they created a language that speaks to the soul, which communicates emotion and life'.'' (Ball, 2003, pp.26, 27). This idea is also echoed by Klee when he claims that: '' 'Trying to paint according to scientific rules of colour, said Paul Klee, 'means renouncing the wealth of the soul.' '' (Ball, 2003, pp. 26, 27).

Thus, artists and architects, although aware, of the different colour theories, use colour in an intuitive way. They are guided, not by rules, but by intuition and they aim not to understand the intrinsic scientific nature of colour, but it's essence.

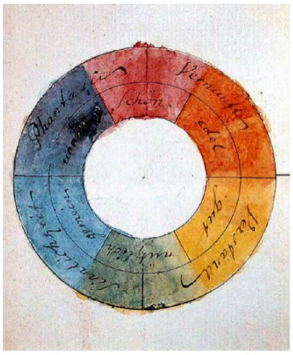
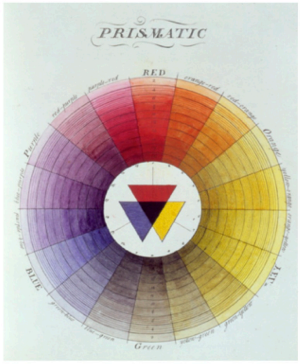
Faber Birren (1970) to clarify different 'intuitive' and 'creative' approaches to colour in painting in a historical context announces various examples such as Leonardo da Vinci (1452-1519) or El Greco (1545-1614)[328]. Some examples of colour use in paintings, that use both intuitive and scientific theories are: J.M.W. Turner (1775-1851) applied Goethe's colour theory directly to his paintings. Using non-representational forms and starting the departure from classic forms of representation, he expressed the naturalistic appearance of a specific atmosphere in an intuitive way; the impressionists, that used Chevreul's colour theory and applied it through an intuitive filter that aimed to capture the atmosphere's essence, with the works of Claude Monet's (1840-1926). Uses of free colour associations can be defined by the works of Gauguin and Matisse, that searched for new colour significances in art (which will be analyzed further).

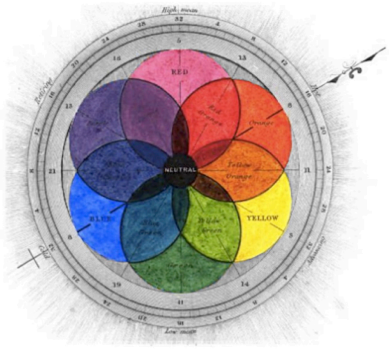
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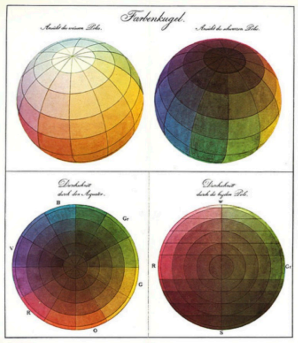
perceived as equal culminated in the publication of his Colour Atlas in 1915.'' (Silvestrini, 2011). This system is also known as the 'colour tree', due to its central grey axis structure. This system is considered to be the most widespread colour system.

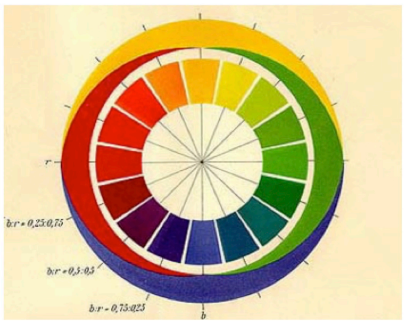
[327] **Faber Birren's colour harmony:** On natural laws of harmony of colour, Birren explains: « According to Guilford, people like colour combinations based on (I) closely related colours and (2) complementary colours.» (Birren, 1978, p. 178). Furthermore, with single colours, some universalities can be drawn: '' (…) pure hues should be rich and intense; pastel tints should have a light, delicate quality; shaded colours should be deep and autumnal. Where a colour may lie on a borderline, compromising the above ''forms'' ugliness might result.'' (Birren, 1978, p. 178). Also, in colour combinations, in harmonizing modified colours, Birren explains that pure hues combine better with tinted colours and white, pure hues also combine well with dark tones and black, and greys blend and combine well with every other colour. Birren claims, in regards to colour contrast that ''We speak of contrast when distinct differences can be perceived between two compared effects. When such differences attain their maximum degree, we speak of diametrical or polar contrasts.'' (Birren, 1970, p. 32). Contrast, can both intensity or weaken colour effects.

[328] **Examples of intuitive uses of colour:** As examples of masters and their intuitive use of colours, or of 'master uses of colour', Faber Birren elaborates on the works of Francesca (1410-1492) for his sharp outlines and '' (…) clearly expressive areas with balancing complementary colours.'' (Birren, 1970, p.9), Leonardo da Vinci (1452-1519) for his rejection of strong coloration and the use of 'infinitesimal' tonal gradations and the predominant use of sepia tones, light and 'shades'; the work of Titian (1477-1576) for his use of «homogeneous colour areas against each other is isolation.» (Birren, 1970, p.9), using as an example the 'Ecco Homo'; El Greco (1545-1614), Titian's pupil, for his use of large expressive colour areas, sharp tones bounded by grays and blacks; Grunewald (1475-1528) use of colour against colour and his sense of unity: '' (…) the psychologically expressive power of his colours, their symbolic verity, and their realistic signification – all these three potentialities of colour are, in a deeper sense, fused into unity.'' (Birren, 1970, p.10). Also, Rembrandt (1606-1669), as the master of the chiaroscuro painters, his use of colour in order to create a sense of depth.

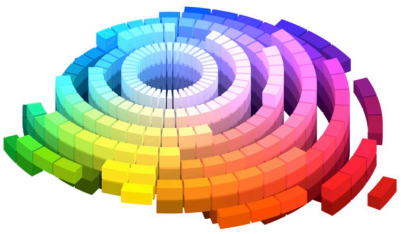
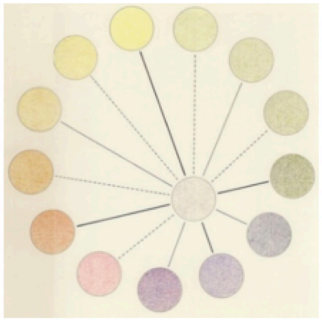
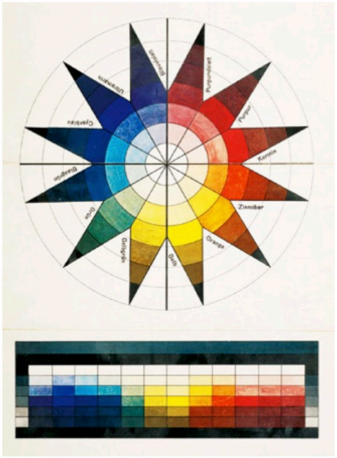











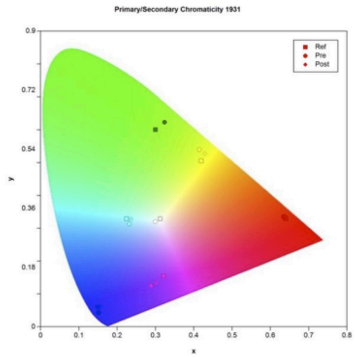


Photo 1: Goethe's colour wheel; Source: http://en.wikipedia.org/wiki/File:Goethe,_Farbenkreis_zur_Symbolisierung_des_menschlichen_Geistes-_und_Seelenlebens,_1809.jpg; ;Photo 1: Moses Harris colour wheel 1766; Source: http://facweb.cs.depaul.edu/sgrais/color_wheel.htm; Photo 2: George Field's 1841 Chromatograph; Source: http://en.wikipedia.org/wiki/File:Chromatography_1841_Field.png; ; Photo 4: Philipp Otto Runge's Color Sphere (Die Farbenkugel), 1809/1810; Source: http://en.wikipedia.org/wiki/File:Runge_Farbenkugel.jpg; Photo 5: Ewald Hering colour wheel; Source: http://www.colorsystem.com/?page_id=831&lang=en; Photo 6: Birren's colour circle: Source: http://www.colorsystem.com/wp-content/uploads/42bir/01bir.jpg; Photo 7: Chevreul's colour wheel; Source: http://www.holidayclubrecordings.co.uk/post/michel-eugene-chevreul-science-colour; Photo 8: Itten's colour sphere, seven light stages and seven tones, 1921; Source: http://kaufmann-mercantile.com/johannes-itten/; Photo 10: CIE System of 1931; Source: http://www.anandtech.com/show/4960/benq-ew2420-monitor-review/6

PLATE 31: COLOUR WHEEL EVOLUTION

So what is it about colour that allows to be significant? What is it's essence?

… Colour: healing and symbolism

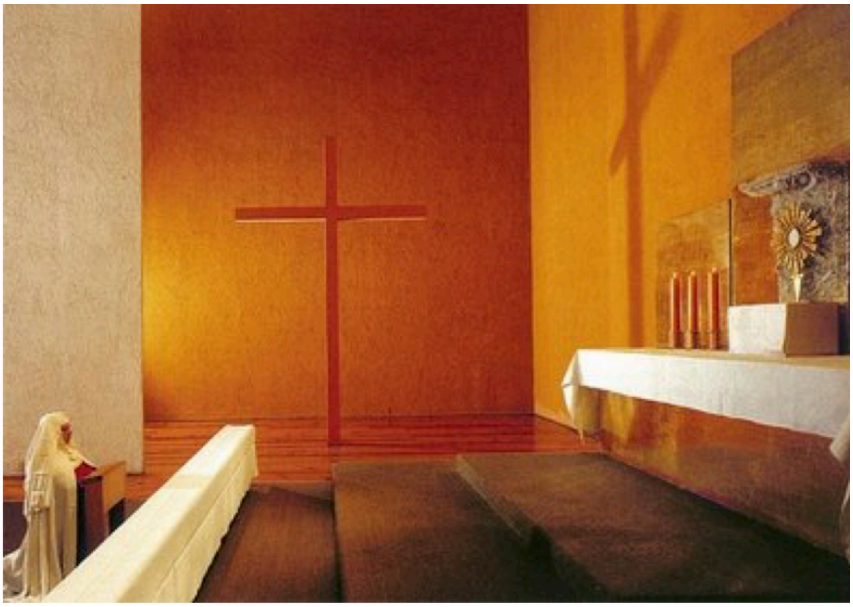
Associated to colour, as a significant essence to two main properties are related, that derive from classical traditions and are still considered valid today: colour as a healing entity and colour as creating symbolic associations and connections.

Firstly, colour as a healing entity, as explained by Faber Birren (1978), colour is understood as possessing healing properties; this idea is derived from a traditional primitive understanding (man's struggle against the forces of nature led him to use colour as a healing entity) that was expanded in Egypt when colour began to be associated to alchemy and to mystical healings; an understanding that was explored by the alchemists across time, specially with Paracelsus that joined colour to medicine and re grouped them with the spiritual and the magical; these healing properties of colour were also explored in more contemporary scientific therapeutic approaches (where each colour was believed to possess its own individual healing qualities vital for the cure of various specific symptoms and illnesses)[329]. Secondly, colour symbolism, is understood as colour possessing it's own symbolic nature and refers to colour being a representation or meaning of something else. Traditionally, Faber Birren (1978) points out that colours in the various ancient cultures were associated to the races of man (Ancient Egypt and the Assyrians Civilization) and to the quarters of the earth, (to each cardinal point and direction one specific colour); these associations between colour, nature, and spiritual realms, are transcultural and almost universal: '' Such symbolism, has been found in lands as remote from each other as Egypt, Ireland, China and America.'' (Birren, 1978, p.8). This symbolism is usually understood as being culture related depending on the culture or society, colours symbolize different things, for example, the colour of mourning in the west is black and in chine is white). However, what all symbolisms have in common, the author Teresa Táboas Veleiro (1991) explains, from antiquity to modernity is that it is always associated to three languages: the divine, the sacred and the profane[330]. Colour, thus, is employed in arts (specially the classical religious traditions in painting and architecture) according to it's symbolic associations and significances, creating links between physical and spiritual realms. Birren (1978) further explains that this symbolism, has been built on centuries of 'history, traditions, religion and superstition' and is '' (…) an expression of man's feelings and associations as developed in the course of his civilization.'' (Birren, 1978, p.172) which led to the acquired symbolic associations that are still valid today, independently of cultures. Author Turner (2005) also explains that the way we perceive colour is associative and symbolic rather than merely empiric.

[329] Birren continues explaining that many studies were also conducted with light, and the development of 'colour therapy'. An example of the use of colour in modern psychology is the Rorschach test: '' (…) an emotional responsive person will react quite freely to colour in general.'' (Birren, 1978, p.137), allowing the test of emotional results from different colour diagrams.

[330] **The three associations of colour:** She further clarifies: '' Divine language. It originates in all men, and is the revelation of the existence of God. Sacred language. Born in sanctuaries and governs both the symbolism of architecture, painting and sculpture, such as the ceremonies of worship. Profane language. It is the material expression of the symbols and at the same time, a degradation of the sacred language.'' (Veleiro, 1991, p. 89). In classical representations, there is a union between architecture, painting and sculpture, in a loyal representative of the religious thinking. These often possessed a double significance and symbolism, explains the author Veleiro (1991): firstly they possessed a common understanding for the general people, an intuitive and general reading, secondly another deeper understanding for those that possessed the mystical understandings. Such is the case in the '' (…) windows of the Christian churches, as well as paintings, that had a single meaning, one apparent, focused on people; another cult, aimed at those who knew all of the mystical beliefs.'' (Veleiro, 1991, p. 89). Colour, in this context and tradition, represents a religious idea.







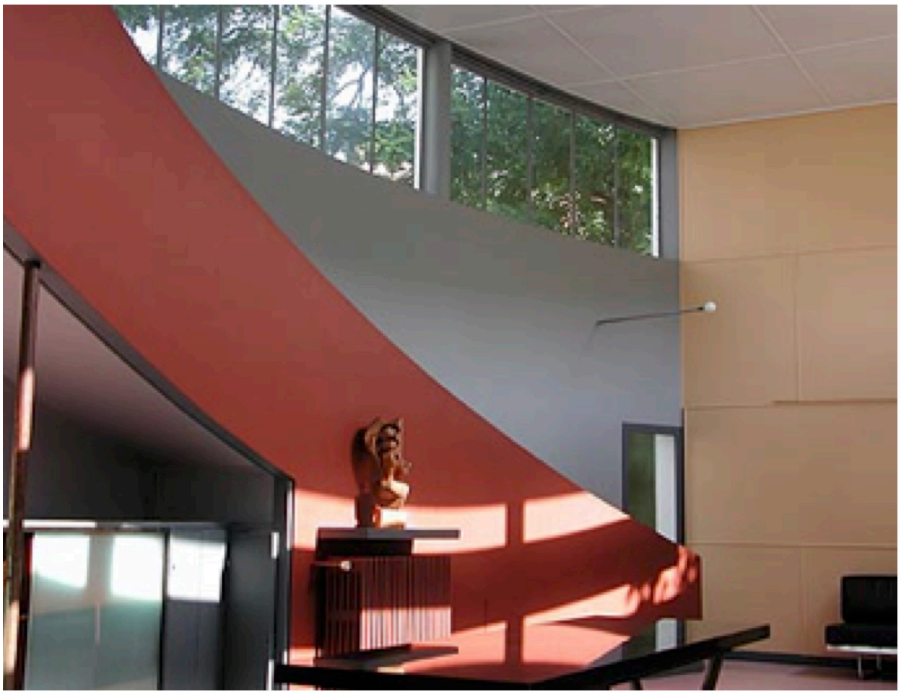




Photo: Capilla de Tlalpan, Mexico City, 1953-1960, Luis Barragan Source: http://designmuseum.org/__entry/3830?style=design_image_popup; Photo 2 and 3:Photo: Claude Monet's Rouen Cathedral Series; Source: http://www.wikiart.org/en/claude-monet/rouen-cathedral-the-portal-at-midday; Photo 4: J.M.W. Turner's Light and Colour (Goethe's Theory) – The Morning after the Deluge – Moses Writing the Book of Genesis (1843); Source: http://en.wikipedia.org/wiki/Light_and_Colour_(Goethe's_Theory)_%E2%80%93_The_Morning_after_the_Deluge_%E2%80%93_Moses_Writing_the_Book_of_Genesis; Photo 5: Bruno Taut design and colour analysis; Source: http://www.fulltable.com/vts/c/colour/ZZ.jpeg; Photo 6: Vila La Roche, completed in 1925, Le Corbusier; Source: http://www.galinsky.com/buildings/laroche/

PLATE 32: APPLIED COLOUR THEORY IN PAINTING AND ARCHITECTURE

What else?

… Colour: a universal essence

Author Turner (2005), in his book '*Color and Culture'* (1995), echoes John Gage's views in regards to the universality of colour: '' Color has different meanings in different cultures, but Gage writes, ''there seems to be a universal urge to attribute affective characters to colors''.'' (Turner, 2005, p. 1). He further explains that artists approach to using colour, (such as Kandinsky, Klee, Mondrian) is grounded in the belief, that there is this universal aspect to colour that is beyond the basic colour culture associations; it is colour that can provide a universal language[331].

Moreira da Silva (1999) (explaining the author Marcoli (1978) on Colour as Meaningful, or phenomenological colour) also explains this universality of colour: ''Color is the spirit of things, of shapes and acts; colour is 'to seem', because it has a pre-conscious life, which is stronger that the conscious life, prevenient from the observer's background.'' (Moreira da Silva, 1999, p. 29). On this sense, the author explains that colour holds within itself a 'pre-conscious life, which is transmitted within itself as it is observed; this pre-conscious life, is beyond personal inclinations, and part of a universal aspects of the human being and of the world.

John Gage (1995) in his contribution to the book 'Colour: Art & Science' under the theme 'Colour and Culture' indicates that there are underlying criteria's of the experience of colour that are in fact universal and as such, beyond any cultural limitations and explanations. Associated to colours and to the experience of colour are sensations that are not subjective but completely objective and universal. The author, continues saying that this sense of 'colour universal' and of 'basic' experience of colour has become widespread. However, the author affirms that, this basic experience of colour shouldn't oversight the variety of colours and the richness of the event itself. It is, precisely the '' (…) wide-ranging understanding of the phenomenology of 'colour' (…)'' (Lamb and Bourriau, 1995, p. 186) that should be in focus, rather than the spectrums and hues location and accurate identification that has been the focus of scientific research since Newton. This 'wide-ranging understanding of the phenomenology of 'colour'' is found, the author explains, on the works of artists such as the works of Kasimir Malevich and also the paintings of the Rowan Cathedral, by Monet, in which the surface texture and the minute colour differentiations, were of the essence.

> ***Synthesis:*** *It is the essence of colour that guides the artistic process (in both art and architecture) in an intuitive and creative way. The essence of colour can be understood as healing (possessing healing properties), as symbolic (creating multiple associations and significances) and as being universal (communicating independently of culture) and that communicates to man's sensitivities as significance.*

[331] In his words, the author explains: '' This belief in the powerful corporeal effects of colour influenced avant-garde artists such as Gaugin and Kandinsky, who thought of chromo-therapy as a useful tool in developing a non-representational art, because it provided the grammar for a supposed universal language of colour.'' (Turner, 2005, p.1).

… by Rudolf Steiner: The spiritual dimensions of colour

> '' The word and its sound, form and its colour, are vessels of a transcendental essence that we dimly surmise.'' (Birren, 1970, p.8)

Rudolf Steiner (1861 – 1925) *(see Glossary),* in his book '*Colour*' (1992), approaches colour from an anthroposophical and artistic dimension, demonstrating that colour can provide the basis for a spiritual-scientific understanding for artists. For Steiner (1992) '' Colour uplifts the human being from the material into the spiritual.'' (Steiner, 1992, p. 8) emphasizing that it is through colour that a transition occurs from the material corporeal dimensions into a spiritual dimension; he further explains that colour possesses it's own nature that exudes through itself onto the human heart as one of the many manifestations of 'beauty' (of 'shining' self-revealing quality). All colour possesses this 'shining' quality that emanates in the hearts of men. This complex experience is felt within the human condition, as life, and also, it connects to 'imagination, inspiration and intuition' (the faculties through which colour can be understood as a spiritual dimension. Steiner believes that the value of colour, and of colour in art, is the feelings, emotions and character that they provoke in the soul: being that each colour possesses their own specific associations. Colour, he continues, needs to be understood by comparison (to nature), and in these comparisons, driven out by instinct, by true feeling, emerges colour's significance.

The author thus defines two types of colour associations associated to their significance; colour-images (that create images): green, the image of the plant life, peach-blossom the living image of the soul, white is the soul's image of the spirit and back is the spiritual image of the lifeless[332]; and lustre colours (that shine): yellow, shines outwards joy, blue shines inwards in retrieve and red is the balance between the two[333]. Colours, as a result, possess essences or values, that interconnect between themselves and are all dependent on each other; these values of each colour reflect in the forms in which they are applied to, and allow for a return to the principles that made them arise in themselves, in the first place; the soul understands the principles through the experience of colour. So, the emotional responses to each colour varies according to their own nature. Although people might feel them more actively or passively, they are

[332] **Colour-Images:** In regards to green, life is the essential characteristic of the plant; thus, the colour green is the image of that plant life. Thus, the author summarizes: '' Green represents the lifeless image of the living.'' (Steiner, 1992, p.20). Also, in regards to peach-blossom, the colour of the human skin, in understanding its essential nature, as done with green, the author explains, that peach-blossom is the colour of human life; thus, the colour of the human being, is the colour of the human soul. In such a way: '' Peach-blossom represents the living image of the soul.'' (Steiner, 1992, p.22). White, is not fixed to something, but exists always in full movement, as light; this light, the author explains, gives something of the spirit; it descends and comes down into the world, into the human being; thus: ' White or light represents the soul's image of the spirit.'' (Steiner, 1992, p.24). Black on the other hand, is the colour of darkness, with this darkness there is no life; ''life then can do nothing in darkness.'' (Steiner, 1992, p.25). But, the author continues, the spirit can flourish there, can assert itself. Thus, '' Black represents the spiritual image of the lifeless.'' (Steiner, 1992, p.25). In each of these colours, there is an image of some kind. These colours in a circle, allow for an understanding of the real significance of studying colours in such a way; these are objective characteristics.

[333] **Lustre Colours:** Opposing the 'image-colours' are the 'lustre colours': namely yellow, red and blue. Yellow, in its essence, cannot be contained by definite boundaries, but must irradiate outwards and fade away into white; it must be ''paler at the edges'', being less concentrated and weaker at the sides; yellow cannot be bound but must radiate in this way: '' Yellow must shine outwards.'' (Steiner, 1992, p.32). Blue, in contrast, demands the opposite of yellow; it must shine inwards from the circumference, being at its fullest in the edges, and diffusing inwards softly, being weaker in the middle; '' Blue shines inwards.'' (Steiner, 1992, p.33). Red, thus is the balance between the two; we can accept red completely as a surface; ''Red affects me through its stillness.'' (Steiner, 1992, p.34)**.** Lustre means that something shines, therefore, the author continues explaining the qualities that shines through these lustre colours. Yellow, firstly, the colour of joy, the colour that allows for an understanding of ''I'', filled with spirit; blue on the other hand, ''gathering itself inwardly'', the spirit retrieving, and red filling space evenly, with energy. Steiner emphasizes: '' The essential nature of these colours lies in their radiant quality: yellow radiating outwards, blue radiating inwards, towards itself, and red the balance between them, radiating evenly.'' (Steiner, 1992, p.37)

felt by everyone in the same way. To conclude, a thought from Steiner on the impact of such understandings: '' Think what this signifies for art. The artist knows that when he handles yellow, blue or red he must induce in his picture something that expresses an inwardly dynamic quality which itself gives character.'' (Steiner, 1992, p. 40)

Because art uses colour, in a way that doesn't only relate to cultural understanding, it is these intrinsic qualities of colour that allow for a meaningful and significant encounter with art (and colour) to emerge naturally. Steiner (1992) states that, for art to be art, it needs to result from an elemental life and it's innermost soul. In order for this to occur, there is an urgent need to dwell in the spiritual dimensions of humanity, re-capsulate the aspects of colour with it. In order to do so: '' The essential thing is to know how to open our souls to what speaks to us out of colour.'' (Steiner, 1992, p.71).

Steiner accentuates, that to colour a form, is to give it a soul; it is 'ensouling it'[334]. This is what he understands, as the living movement of colour; by 'ensouling' it, the form is raised from its mere structural character to a more dynamic and soulful experience. For Steiner, this is the only way by which art, in its significant and meaningful aspect, can be created, having colour at its core. Art thus arises as a consequence, out of this significant understanding of the real nature of things.

Steiner continues saying that art (specially painting), as a revelation through colour, of 'spiritual essence', reveals as 'beauty' and demands an inward experience. In order to do so, art must not use colour palettes, for these are not free and present themselves contrary to very essence of what art and painting is: only through liquid colours does life come alive through colour. It is this living quality of revelation that makes art be art, in its most significant and meaningful aspects; and in order for it to exude through painting, one must apprehend this living quality of the world and of nature and allow it to be formed in the creation. So, applying colour to art, in a way that caters the innate properties of each specific colours, amplifies the 'radiance' quality of 'beauty' of nature through art, granting art it's own deeper significant values. As a synthesis, he summarizes: '' Above all one needs to develop a feeling for the change that takes place in a colour when it is transformed into an image.'' (Steiner, 1992, p.55). For this, colour needs to be understood in an artistic, alive way, through the development of a 'colour perspective', as to the natures of colours (images and lustres). This kind of colour perspective (that can be found in old masters of the Renaissance, for example) in itself connects again the colour to the spirit, and can create the basis for significant Art.

The Goetheanum, designed by Steiner[335], is an example of colour not only as the essence that allows to create a significant connection to the spiritual realms, but also of colour being the main significance of two arts: architecture and painting.

[334] '' You could say that when you colour a form you should feel that what you are doing is ensouling it. You are breathing soul into dead form when you breathe it colour. '' (Steiner, 1992, p.72).

[335] **The Goetheanum:** was designed as a cultural centre to house all the arts. It was housed in two distinct buildings, being that the second version was constructed after the first caught fire and burned. Both were located in Dornach, Switzerland, and housed theater spaces as well a center or school for the movement (spiritual science). The first, begun in 1913, opened in 1920 and destroyed by fire on New Year's Eve of 1922. In 1924 Rudolf Steiner presented the project for the second, made of reinforced concrete, constructed between 1925 and 1928, still standing and running at the present day.

Synthesis: *Steiner (1992) sustains that colour has another dimension: a spiritual essence; thus, it is colour that allows for a transition to occur from the material corporeal dimensions into a spiritual dimension. Colour possesses it's own nature that exudes through itself onto the human heart as one of the many manifestations of 'beauty' (of 'shining' self-revealing quality) and connects to 'imagination, inspiration and intuition'. It needs to be understood by comparison (to nature), and in these comparisons, driven out by instinct, by true feeling, emerges colour's significance. Applying colour to art, in a way that caters for the innate properties of each specific colours, amplifies the 'radiance' quality of 'beauty' of nature through art, granting art it's own deeper significant values. Art arises out of the significant understanding of the real nature of things: colour being the essence that gives forms their souls and their ultimate significance.*

How are these ideas further embodied in art and in architecture as significance?

… by Matisse: colour, expression and significance

Matisse (1869-1954), whom is quoted in the book *Matisse on Art* (1908), compiled and commented by Jack Flam, claims that the main function of colour is to serve expression as well as possible. Colour, for him, is captured in a purely instinctive way derived from the sensations captured by perception; it is based on observation, feeling, sensitivity and sensations. He broke away from the traditional understanding of colour (defined by the impressionists) and sustained a new colour idea. He explains that in his view, the theory of complementary colours is not absolute; colour combinations are intuitive and instinctive understandings. Flam (1995) explains, that colour is thus understood in terms of its 'expressive' nature: '' Like Matisse's drawing, which is based on an aesthetic of condensation of meaning through essential lines, colour is considered to be a reduction to essential, the finding of an equivalence.'' (Flam, 1995, p. 36). Matisse's search for colour as significance, points to the transfiguration of sensations, led by the 'painter's perception of nature' into it's equivalent 'form', through instinct. For him, it is colour (combined with form) as expression, that captures the significances he wishes to embody in his art.

Synthesis: *For Matisse (1908) colour in art is captured in a purely instinctive way derived from the sensations captured by perception and it is based on observation, feeling, sensitivity and sensations; is associated to the transfiguration of sensations, led by the 'painter's perception of nature' into it's equivalent 'form', through instinct. For him, it is colour (combined with form) as expression that captures the significances he wishes to embody in his art.*

… by Corbusier: colour as symbolism and significance

According to the author Scavuzzo (2010), Corbusier's colour palettes (in theory, in architecture and in painting) was a way of creating a system of signs that possessed their own meaning and significance; colour turns each of his creations into a 'symbolic machine'[336]. He further defends that his colour schemes were a way of creating 'timeless archetypes', 'symbols' and 'figures with a mythical origin'; he created, through colour, systems of signs that had their own significance, and allowed the work

[336] Colour allows '' (…) each work by Le Corbusier, in architecture, painting and poetry, into a kind of symbolic machine.'' (Scavuzzo, 2010, p.432); and he further explains: '' The music colour parallel indicates that what changes is not only the role of colour, but the nature of the composition itself, once it has become a system of signs referring to a system of meaning, saved from arbitrariness to a level higher even than the laws of history and nature, in a transcendent dimension.'' (Scavuzzo, 2010, p.437).

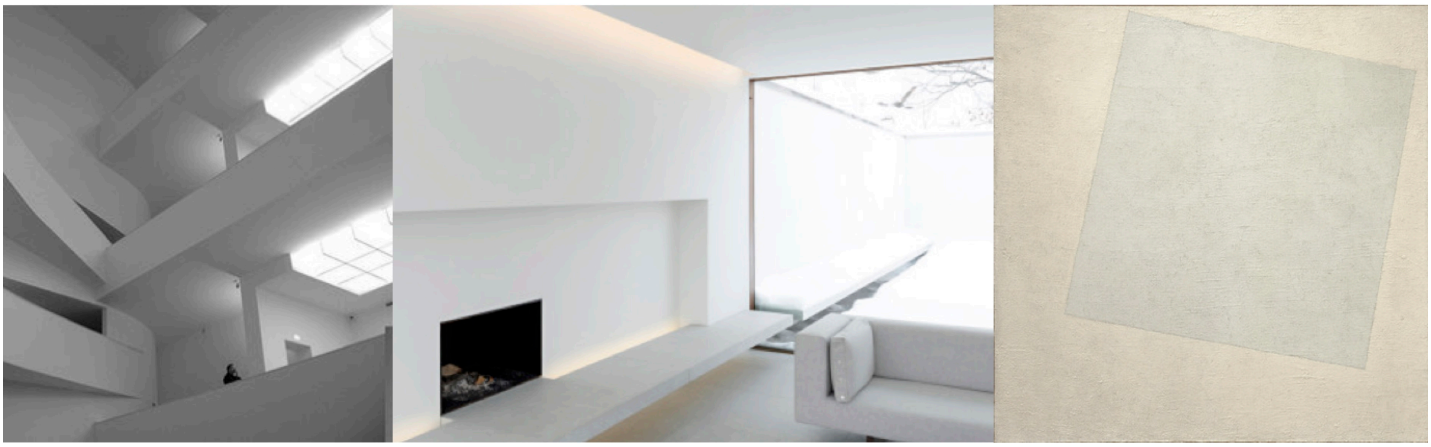
to communicate to a transcendent dimension. This is expressed mostly by the second Salubra collection: the colours, closer to prismatic ones, evoke ‘’metaphysical references’, but also, continues the author, the colours are immaterial essences themselves, just like the dawn painted by Corbusier when he was flying over Chandigarh. The keyboards, and the way in which they are defined, are a way to reach ‘’ (…) the real destination, that is a poetry that can touch the soul of man, making him aware of being part of a greater mystery.’’ (Scavuzzo, 2010, p. 438).

> ***Synthesis:*** *For Corbusier (2010) colour associations in art can create systems of signs that have their own significance, and allow the work to communicate to a transcendent dimension. It is through colour, the author Scavuzzo (2010) explains, that is a poetry that touches the soul of man could be reached. Colour allows each creation to be turned into a ‘symbolic machine’.*

… Uses of colour as significance in contemporary architecture

The history of the use of colour, in architecture, is mostly associated to its symbolic and cultural meanings and to semiotics. In contemporary architecture it is possible to identify two types of creations: the ‘white’ approach and the ‘colour-material-space’ approach. Firstly, the white approach echoes modernism, and uses white as the only colour applied to most interior spaces and outside surfaces; it is a contemporary quest for purity, depuration and cleanness through the significance of colour. Continuing this ‘white tradition’, are the architects John Pawson (1951 -), Richard Meier (1934 -) and Alvaro Siza (1933 -) *(see Glossary)*. Secondly, there are the contemporary architects that use colour abundantly, either with a polychrome approach or a more restricted palette, in a broader and freer way. In some cases colour is applied as a way to ‘animate surfaces’ making both colour and architecture significance disappear, as explained by author Pimlott (2009)[337]. According to the author, exceptional uses of colour found in the works of Luis Barragan (1902 -1988), that focuses on colour and tradition, Carlo Scarpo (1906 – 1978), that focuses on detail and was profoundly influenced by Frank Lloyd Wright and John Hejduk (1929 – 2000) *(see Glossary),* that used geometric forms. These architects, the author continues, used colour to reveal ideas, intensifying the viewer’s attention to architecture itself; in this way, colour is inseparable from architecture itself and in doing so, it both becomes significant and it makes architecture significant. In this sense, colour is used to create identity, to define space, to heighten the experience of the building, to create unique atmospheres, to reveal ideas, to expand architecture itself or even to create a poetic encounter. These architects, sustain the use of colour in two ways: the natural colour of materials itself (such as the works of Peter Zumthor and Mario Botta *(see Glossary)*, or applied colour through it’s significance (following neo-plasticism).

[337] In more recent contemporary architecture, although colour is still seen as it was in the Modernism, it has been used for its ability ‘’to animate surfaces’’, explains the author Pimlott (2009). He continues: ‘’Buildings such as the Federal Environment Agency in Dessau (2005) and the Brandhorst Museum in Munich (2008) stand out as being at once present as colour and absent as architecture.’’ (Pimlott, 2009, p. 7). Colours employed in such a way, explains the author, in a decorative shimmering way, makes architecture’s meaning disappear.



(a) the use of white in architecture and painting

Photo 1: John Pawson's Palmgreen House (2014); Source: http://design-milk.com/palmgren-house-john-pawson/; Photo 2:Kazimir Malevich, Suprematist composition White on White, 1918; Source: http://www.bloombergview.com/articles/2014-11-14/why-pay-15-million-for-a-white-canvas; Photo 3: Fundação Iberê Camargo, Porto Alegre de Siza Veira; Source : http://antreus.blogspot.pt/2009/03/fundacao-ibere-camargo-em-porto-alegre.html



(b) the use of white in architecture and painting

Photo 1: Neues Museum, Museum Island Berlin, 1997-2009, by David Chipperfield; Source: http://www.davidchipperfield.co.uk/project/neues_museum; Photo 2: David Chipperfield Alessi's Tonale tableware collection by David Chipperfield; Source: http://glitzkrieg.typepad.com/glitzkrieg/2010/03/david-chipperfields-tonale-for-alessi.html Photo 3: Caruso St.John's brick house (2001–2005), Source: http://www.carusostjohn.com/projects/brick-house/;



(c) the use of bright colours: the Goetheneum

Photos: Goetheanum II interiors, contemporary pictures. Source: https://ettagirl.wordpress.com/2012/01/29/goetheanum/; Source 2: http://grassfood.me/2014/08/14/architecture-of-the-goetheanum/

PLATE 33: EMBODIMENT AS COLOUR: EXAMPLES OF DIFFERENT COLOUR TYPES

… Uses of colour as significance in contemporary painting and sculpture

In painting many other examples could be announced of colour as an essencial essence embodied as significance: the works of the impressionists, the works of William Turner, Matisse, Van Gogh. More contemporary examples can include the work of Elsworth Kelly, the paintings of Anselm Kiefer (more specifically the flower paintings), and the paintings of Richard Diebenkorn. In sculpture one can announce the works of Annish Kapoor, which use colour in such a way that it is intrinsic and vital to the artistic objects created: it defines it's significance. Likewise, Donald Judd's 'specific objects' use colour as a vital tool that defines the artworks significance (further analysed in chapter 6).

… Understandign Colour: conclusions

It is colour (combined with form as expression) that captures and embodies the significances of art (Matisse (1908), Steiner (1992), Birren (1970)). The authors also defined that it is the essence of colour that guides the artistic process (in both art and architecture) in an intuitive and creative way and that colour is the essence that gives forms their souls and their ultimate significance.

In general, colour was understood as an intangible essence, a complex phenomenon, and a fundamental principle pertaining all things (just as Form) that communicates to the sensibility of man. Colour was also understood as an essence that connects to 'imagination, inspiration and intuition' and that possesses a spiritual dimension (Steiner (1992)).

Colour in artistic creation was further defined not as something that was like a decorative element or something applied post production, but as an integral part of the design process and integrated in the definition of the significance and meaning of the creation. Matisse (1908) further explained that colour is captured in a purely instinctive way derived from the sensations captured by perception and is based on observation, feeling, sensitivity and sensations. Further aspects of colour as it relates to art were accentuated by each specific author: allows for the creation of a 'symbolic machine' (Corbusier (2010)), creates symbolic associations, allows for a poetry that touches the soul of man to emerge (Scavuzzo (2010)) and allows for a transition to occur from the material corporeal dimensions into a spiritual dimension (Steiner (1992)).

In regards to architecture, it was understood through the multiple examples, that colour in architecture needs to be intrinsically generated as part of form in order to possess and echo significance. Likewise, it easily relates to emotion and to poetry, creating multiple connections at various levels. Colour in architecture, is also deeply connected to the material, which always possesses colour. In painting and sculpture, we also saw that a very similar notion was defined. For colour to embody the significance of the creation, it needs to be generated intrinsically, as part of the overall form generation process.

As an ending remark, it is important to accentuate the indissociable connection between colour and form.

Synthesis:

Colour

1. *It* ***is colour (combined with form as expression) that captures and embodies the significances of art*** *(Matisse (1908), Steiner (1992), Birren (1970))*

2. ***Colour is:***
    - *is a fleeting and intangible essence (Birren (1970))*
    - *multidisciplinary complex phenomenon (Durão, 2002)*
    - *a fundamental principle pertaining all things (just as Form), and communicates to the sensibility of man, whom understands colour through an 'inner sensibility' (Saarinen (1948))*
    - *a significant language associated to life itself and thus is essential for cultural growth (Saarinen (1948))*
    - *a spiritual dimension (Steiner (1992)).*
    - *possesses it's own nature that exudes through itself, onto the human heart as one of the many manifestations of 'beauty' (of 'shining' self-revealing quality). (Steiner (1992)).*
    - *connects to 'imagination, inspiration and intuition' (Steiner (1992)).*
    - *needs to be understood by comparison (to nature), and in these comparisons, driven out by instinct, by true feeling, emerges colour's significance. (Steiner (1992)).*
    - *possess essences or values, that interconnect between themselves, are all dependent on each other and reflect to the forms in which they applied (Steiner (1992)).*

3. *It is the* ***essence of colour that guides the artistic process*** *(in both art and architecture) in* ***an intuitive and creative way****. The essence of colour can be understood as healing (possessing healing properties), as symbolic (creating multiple associations and significances) and as being universal (communicating independently of culture) and that* ***communicates to man's sensitivities as significance****.*

4. *Because art uses colour* ***in a way that doesn't only relate to cultural understanding, it is the intrinsic qualities of colour (as images and lustres) that allow for a meaningful and significant*** *encounter with art (and colour) to emerge naturally (Steiner (1992).*

5. ***Colour in art:***
    - *is not a decoration element or something applied post production, but an integral part of the design process and integrated in the definition of the significance and meaning of the creation (Birren (1970))*
    - *can be understood is a three fold way: Impression (visually), Expression (emotionally) and Construction (symbolically) (Birren (1970))*
    - *is captured in a purely instinctive way derived from the sensations captured by perception and is based on observation, feeling, sensitivity and sensations; (Matisse (1908)*
    - *is associated to the transfiguration of sensations, led by the 'painter's perception of nature' into it's equivalent 'form', through instinct. (Matisse (1908))*
    - *allows each creation to be turned into a 'symbolic machine'. (Corbusier (2010))*
    - *can create systems of signs that have their own significance, and allow the work to communicate, to a transcendent dimension. (Corbusier (2010))*
    - *as symbolic associations, allows for a poetry that touches the soul of man to emerge (Scavuzzo (2010))*
    - *allows for a transition to occur from the material corporeal dimensions into a spiritual dimension (Steiner (1992)).*

- *reveals a 'spiritual essence', 'beauty' and demands an inward experience (Steiner (1992)).*

6. *Applying* ***colour to art, in a way that caters for the innate properties of each specific colours, amplifies the 'radiance' quality of 'beauty' of nature through art, granting art it's own deeper significant values.*** *(Steiner (1992))*

7. ***Art arises out of the significant understanding of the real nature of things: colour being the essence that gives forms their souls and their ultimate significance****. (Steiner (1992))*

Summary Chapter 5:

In the present chapter 5, we defined what significance in art embodies, defines and is understood as:

5.1. Beauty

Firstly we saw that beauty in wide sense: *is founded both on rationality and sensitivity, creates connections to the sacred things of life, exists in degrees (being at it's most intense in the artistic object), (Scrutton (2009))* ***and is*** *that which possesses a 'shining, self-revealing quality', that allows for the true nature of the world to come forth. (Steiner (1992)). Theories that sustain beauty as the significance of the work of art claim:* ***Works of art, created as objects of 'contemplation', convey messages, significances and meanings through their beauty*** *(Scrutton (2009) and Hegel).* ***Thus, we further understood beauty, as meaning and significance (related to the artistic object) as*** *that which emerges as content and as the expression of freedom of the spirit (Hegel), that which is an 'emanation', of the intangible world of the absolutes (Plotinus, St. Augustine and Ficcino), as that which is a promise of inner wholeness because it echoes (resonates in us) as the virtues we are missing. (De Botton (2008)). It is beauty as significance, that allows man to understand his own innate condition and his own place in the world (metaphysical and existential values) (Scrutton (2009) and allows for emotional and spiritual growth. (Steiner (1992)). It is a quality of the spirit, (that which shines through), that makes art become art. (Steiner (1992)).* ***Overall, Beauty, as meaning and significance (related to the artistic object) is something deeper than mere physical attributes and connects to an idea of 'truth'.***

5.2. Truth

We saw that multiple theories consider it to be Truth that describes and defines the work of art (Heidegger), and that defines it's significance *(Saarinen (1948), Heidegger and Ruskin (1903)).* ***Art, as a free creation of the spirit, as truth and beauty*** *(the two essences contained in the spirit)****; then, it's aim (and significance) is to bring truths about ourselves into existence, embodying the free spirit and revealing the true character of freedom and it communicates to man's spirit through consciousness*** *(Hegel).* ***Truth in art means different things, however they all relate to same idea: means 'indigenously creative'*** *(direct, true, creative and expressive), (Saarinen (1948));* ***reflects modes of existential and embodied thought, is a deep connection with the world that projects a sense of life*** *(of having roots and a sense of totality) defining a sort of 'new temporality' (Pallasmaa (2011)),* ***allows man to understand his own spirit as freedom thus growing and expanding his consciousness*** *(Hegel),* ***is that which is communicated as a 'great ideas'****: the thought that sustains it and where the real 'excellence' of art can be found. (Ruskin (1903)) and lastly, is that which emerges* ***through 'fight' and combat between the creation of 'world' (connected to being), and 'earth'*** *(related to matter) (Heidegger) being is both* ***'timeless and supratemporal'*** *(Heidegger). Art's essence (and significance) lies in these qualities as a 'thing' that is communicated as truth through poetry (Heidegger).*

5.3. Poetry

Thus, Poetry emerges as a condition and a principle of all art, without which significance couldn't occur (Bachelard (2005)), Pallasmaa (2011) and Eco (1982)). We defined Poetry as *a fleeting essence that is less clear and sharp that a dream (Bachelard (2005))****, as that which*** *reflects an implicit metaphysics and a set of ontological values and that arises as a phenomenon of freedom, is a product of the*

*creative imagination and possesses within itself mutiple significances (Bachelard (2005)). **Poetry in art** is linked to consciousness (Bachelard (2005) and (Pallasmaa (2011)), is a product of psychoanalytic meditations, possessing an inherent happiness, a product of images 'non-experienced' and 'non-lived' by its creator (Bachelard (2005)), belongs to two realities: 'physical reality of perception' and the 'unreal sphere of imagination'; (Pallasmaa (2011)), is a 'transactional' process where meanings are incorporated (through memory and past perceptions) into the work of art by the viewer (Eco (1982)), generates various kinds of openness and meanings. (Eco (1982)) **and increases the significances and meanings contained in the work of art.** (Eco (1982)).*

5.4. Signs and Symbols

*Another idea defined was that of symbols and signs, identifying art as being symbolic by it's own nature (Eco, 1986), a symbolic activity composed of symbols (Goodman (1976)), a combination of many signs that emerges as a 'wholeness' that echoes as a significance. (Merleau-Ponty (1960)) and it is in itself a symbol (Eco, 1986). Thus, **Understanding art and it's significance, is understanding what the symbols represents** and what it denotes (what it refer to). It was seen that for symbols to denote (in art) they need to possess a degree of representation and expression (to grasp a 'significant relationship' of what it symbolizes). It is this ability that makes art be art (Nelson Goodman (1976)). **Semiotics approaches the work of art through its content** (Batu (2012), the significance **emerges from the interaction of many signs** (Merleau-Ponty (1960)) and the process is alive as long as the symbol remains an enigma (Hegel and Eco, 1986). We also understood that significance in art is defined by universal symbols and signs: they are 'deep structures', that express significance that is always common and universal to all human beings and create an endless cycle of symbols, significations and associations (Eco (1986)); these define the collective unconscious, a universal entity, that is materialized through creations (Jung and Eco (1986)), are 'genuine symbols' because they are ambiguous, universal and full of strong significance. (Eco (1986)), are defined by their universality that defines true 'meaning and signification' (Handa (1999)).*

5.5. Metaphor

Artworks incorporate metaphors and are themselves metaphors; through this, significance is transferred and understood. Metaphor is the link between most creative arts and architectural works,** because all the arts are metaphoric in their nature, and **it is in that essence, that lies it's significance (Barie Fez-Barringten, 2002). We saw that Metaphor,** is a **new way of saying something that already exists**, it possesses some degree of ambiguity, it relies on a 'family' of concepts, ideas or realms and it implies a schema that is transferred (Goodman (1976)), is the main mechanism through which we comprehend abstract concepts and perform abstract reasoning. (Fez-Barringten, 2002), is a transference of truth (Goodman (1976)) and Has a rhetorical and a poetical realm defined in terms of movement; Is a possession of both 'cognitive content' and 'emotive content', and through it occurs what can be described as a 'change of meaning' (Ricoeur, 2003). Thus, **Metaphors in art:** Implies a possession of truth, a transference of a 'schema', a degree of ambiguity, a relation of a family of concepts and ideas and lastly a new way of saying things (vitality). (Goodman (1976), Has a conceptual nature that allows for the subject matter to be comprehended (Fez-Barringten, 2002), Are important because of the experience they suggest, and because they create an endless cycle of interpretation. (Scrutton, 2009) and lastly, transfers truth that is innate to our human existence: in a sort of existential metaphor (Pallasmaa, 2011). As a summary: **the power of artistic creation (and more specifically of architecture) is precisely that it speaks through metaphor and 'embodied imagination'

communicating 'unconscious collective mental content' that define our existence: they create metaphors of life. (Pallasmaa, 2011).

5.6. Values

Also, it was shown, that it was the embodiment of values in art is what grants it it's significance*. (De Botton and Armstrong (2013) and Juhanni Pallasmaa (1996)). This can occur through the use of symbols, signs or metaphor or as an overall idea of beauty, however****, it is values that allows for significances to emerge and communicate to emotional and psychological aspects of the human being****. (De Botton and Armstrong (2013)).* ***'Art' leads the way, in embodying values, compensating for what is 'missing' it enables 'us' to become 'better versions of ourselves'****. (De Botton and Armstrong (2013).* ***Values in art: Are embodied, rather than merely signifying them****: they become 'real', because they are real, because they are deeply present within the artwork (Juhanni Pallasmaa (1996)),* ***simultaneously evoke an 'imagined reality'*** *and become a part of the viewer's existence defining and sustaining his personal identity. (Juhanni Pallasmaa (1996)).*

5.7. Emotions

Other theories defended that *the significance* ***of the work of art lies in the conveying and embodying of emotions to the viewer,*** *(Hichem Naar (2014), Collingwood (1943), Tolstoy (2013), Nelson Goodman (1976)). For Tolstoy (2013),* ***art is the activity of transmitting feelings felt by the artist, through expression, to others, that absorb the emotions through infectiousness, and process them as consciousness,*** *joining mankind in the same feeling and creating the ability to progress towards the good of all humanity. Thus,* ***emotion in art:*** *is communicated as infectiousness (Tolstoy (2013)), is associated to both imagination and consciousness (Collingwood (1943)), Creates a* ***unity between people and 'eras' and conveys a certain 'timelessness' and a kind of 'immortality****', from man to man (Tolstoy (2013)),* ***Defines the aesthetic experience*** *(Nelson Goodman (1976)) and* ***act as 'meta-emotions'*** *(multiple emotions triggered at the same time) (Pinchas Noy & Dorit Noy-Sharav (2013)).* ***The value and significance of art as emotion:*** *Derives from a* ***process of self-knowledge of our own 'emotional conditions', and is linked to that of an 'introspection' and the result of it is a form of consciousness****. (Collingwood (1943) and lies not in the '****conveying' of emotions, but on the conveying of 'good' emotions*** *(Graham (1997) and Tolstoy (2013)). That which* ***cancels out all aesthetic experience is emotional numbness****, that acts as a blindness or as a deafness. (Nelson Goodman (1976)). The greatest works of art,* ***manage to reconcile both 'deepness' and 'complexity' of meta-emotions, becoming a symbol of integration.*** *The higher the art, the higher the form of emotional communication, the higher the 'rank of satisfaction'. (Pinchas Noy & Dorit Noy-Sharav (2013))*

5.8. Pure Form

Other theories explain that art is art when it creates pure forms. It is pure form that grants art its meaning and its significance: that grant's it its soul *(Saarinen (1948), Pareyson (1989), Paul Klee (1961)). For Pareyson,* ***art as pure form, means that art is generated from a process of form development that already contains the significance*** *and meaning of the work of art. (Pareyson (1989)). Form is* ***'meaning', significance and 'soul' that is innate to human life and that is expressed through art*** *(Saarinen (1948)). It was defined that* ***Form:*** *(1) is related to the mentality that originated it (spiritual qualities that are present or lacking), (2) is felt in the intimacy of life and expresses significance in deeper ways than any other subject or creation can, (3) possesses an inner meaning and significance within itself, and (4) it comes into*

'expression' in different ways, (it can be strong or vague), as a result of the 'instinctive' power of its creator. (Saarinen (1948)). Also, it was seen that ***Form in art****: is a result of the essence of man (it evolves and changes with man) (Saarinen (1948)), needs to possess the principles of 'expression', 'correlation' (correlation of all parts and of meanings and vitality, (Saarinen (1948)), echoes the form generation process (that involves emotion, imagination and intelligence), and is retraced back by the viewer in the aesthetic contemplation of the work, and from those multiple interpretations arises the significance of the work. (Pareyson (1989)), relates the artistic practices (generation of form) to a 'way of being' (Paul Klee, 1961), has a didactic requirement to the self and to others (Paul Klee, 1961) and should resemble nature in a 'free and unstudied' manner (Kant). What* ***is of value in form are the values and principles it incorporates and recreates) rather than form itself*** *(Paul Klee, 1961). Lastly, we saw that when form is derived from nature (principles, harmonies, geometries and numbers are understood) and* ***thus art mirrors the universes ways of creation****, thus assuring an* ***order between the cosmos (macro cosmos) and man (micro cosmos****) (Matilda Ghyka (1946) and Priya Hemenway (2005)).*

5.9. Colour

Other theories sustain that it ***is colour (combined with form as expression) that captures and embodies the significances of art*** *(Matisse (1908), Steiner (1992), Birren (1970))****. Colour*** *is a fleeting and intangible essence (Birren (1970))****, a*** *multidisciplinary complex phenomenon (Durão, 2002)****,*** *a fundamental principle pertaining all things (just as Form), and communicates to the sensibility of man, whom understands colour through an 'inner sensibility' (Saarinen (1948))* ***and*** *a spiritual dimension that connects to 'imagination, inspiration and intuition' (Steiner (1992)). These theories defended that it is the* ***essence of colour that guides the artistic process*** *in* ***an intuitive and creative way****. The essence of colour can be understood as healing (possessing healing properties), as symbolic (creating multiple associations and significances) and as being universal (communicating independently of culture). Further, it was defined that* ***Colour in art:*** *is an integral part of the design process and integrated in the definition of the significance (Birren (1970)), is captured in a instinctive way derived from the sensations captured by perception and it is based on observation, feeling, sensitivity and sensations; (Matisse (1908), is associated to the transfiguration of sensations, led by the 'painter's perception of nature' into it's equivalent 'form', through instinct. (Matisse (1908)), allows each creation to be turned into a 'symbolic machine'. (Corbusier (2010)), allows the work to communicate to a transcendent dimension. (Corbusier (2010)), allows for a poetry that touches the soul of man to emerge (Scavuzzo (2010)) , allows for a transition to occur from the material corporeal dimensions into a spiritual dimension (Steiner (1992)) and lastly, it reveals a 'spiritual essence', 'beauty' and demands an inward experience (Steiner (1992)).* ***Art arises out of the significant understanding of the real nature of things: colour being the essence that gives forms their souls and their ultimate significance****. (Steiner (1992))*

BIBLIOGRAPHIC REFERENCES: Chapter 5

Afonso, N. (2010). *Time does not exist: Manifesto.* Lisbon: Dinalivro.

Arnheim, R. (1964) *Art and Visual Perception: A Psychology of the Creative Eye*. 4th edition. California: University of California Press.

Arnheim, R. (1969). *Visual thinking*. California: University of California Press.

Arnheim, R. (1977). *The Dynamics of Architectural Form*. California: University of California Press.

Aron, E. (2013). *A Talk on High Sensitivity*. United States of America. Available at: https://www.youtube.com/watch?v=FQLBnUBKggY [Accessed 30 Jul. 2016].

Bachelard, G. (2005). *A poética do espaç*o. 7th Edition. São Paulo: Martins Fontes.

Ballantyne, A. (2002). *What is architecture?* Hove, United Kingdom: Psychology Press.

Ball, P. (2003). *Bright Earth: Art and the Invention of Color*. Chicago: University of Chicago Press.

Batu, B. (2012). An Overview of the Field of Semiotics, in: *Procedia - Social and Behavioral Sciences,* 51, pp. 464 – 469. Available at: http://www.sciencedirect.com/science/article/pii/S1877042812033289 [Accessed 17 Nov. 2013]. DOI:10.1016/j.sbspro.2012.08.190

Birren, F. (1978). *Color Psychology and Color Therapy*. Secaucus, N.J: Citadel.

Birren, F. (1970). *The Elements of Color: A Treatise on the Color System of Johannes Itten Based on His Book the Art of Color.* New York: John Wiley & Sons, Inc.

Bonta, J.P. (1980). *Sistemas de significación en arquitectura: Un estudio de la arquitectura y su interpretación*. Madrid, Spain: Gustavo Gili.

Cary, J. (1984). A*rt and reality: ways of the creative process*. London: Ayer Company.

Clément, E., Demonque, C., Hansen-Love, L., Kahn, P. (1994). *Dicionário Prático de Filosofia*. Lisbon: Terramar.

Collingwood, R.G. (1938). *The Principles of Art.* Oxford: Clarendon Press.

Damásio, A. (2013). *O sentimento de si: Corpo, emoção e consciência*. Lisbon: Temas e Debates Circulo dos Leitores.

De Botton, A., Armstrong, J. (2013). *Art as Therapy*. London: Phaidon Press.

de Sousa, R. (2014). Emotion, in: *The Stanford Encyclopedia of Philosophy*, Zalta, E.N. (Ed.). Available in: http://plato.stanford.edu/archives/spr2014/entries/emotion/ [Accessed 08 Apr. 2015].

Durão, M.J. (2015). Contributions to the understanding of colour in nature and in art: Diogo de Carvalho e Sampayo Tratado das Cores, in: *Views on Eighteenth Century Culture: Design, Books and Ideas*. Cambridge: Cambridge Scholar Publishing.

Durão, M.J. (2002). Colour in the built environment, in: *FABRIKART-Arte*. Spain: Universidad del Pais Vasco-Euskal Herriko Unibersitatea.

Eco, U. (1989). *The Open Work*. Cambridge, Mass.: Harvard University Press.

Eco, U. (1986). *Semiotics and the Philosophy of Language*. Bloomington: Indiana University Press.

Emotion (2015). In: *Merriam Webster* [online]. Springfield: Merriam-Webster, Inc. Available at: http://www.merriam-webster.com/dictionary/emotion [Accessed 4 Aug. 2015].

Fez-Barringten, B. (2002). *Aesthetics architecture: the making of metaphors*. Available at: http://www.academia.edu/1790215/Aesthetics_architecture_the_making_of_metaphors [Accessed 15 Apr. 2015].

Flam, J. (1995). *Matisse on Art.* California: University of California Press.

Ghyka, M.C. (1946). *The Geometry of Art and Life*. New York: Courier Dover Publications.

Giovannelli, A. (2015). Goodman's Aesthetics, in: *The Stanford Encyclopedia of Philosophy*, Zalta, E.N. (Ed.). Available in: http://plato.stanford.edu/archives/fall2015/entries/goodman-aesthetics/ [Accessed 24 Sep. 2015].

Goodman, N. (1976). *Languages of Art,* 2nd edition. Indianapolis, Cambridge: Hackett Publishing Company Inc.

Graham, G. (1997). *Filosofia Das Artes: Introdução à Estética*. Lisbon: Edições 70.

Handa, R. (1999). Against arbitrariness: architectural signification in the age of globalization, in *Design Studies* 20, pp. 363–380. Available in: http://www.sciencedirect.com/science/article/pii/S0142694X98000416 [Accessed 16 Nov. 2013]. DOI:10.1016/S0142-694X(98)00041-6

Heidegger, M. (1989). *A origem da obra de arte*. Lisbon: Edições 70.

Hemenway, P. (2005). *O Código Secreto: A fórmula misteriosa que governa a art, a natureza e a ciência.* China*:* Evergreen, GmbH, Koln.

Hofstadter, A., Kuhns, R. (1976). *Philosophies of Art and Beauty: Selected Readings in Aesthetics from Plato to Heidegger*. Chicago: University of Chicago Press.

Houlgate, S. (2014). *Hegel's Aesthetics*. The Stanford Encyclopedia of Philosophy, Zalta, E.N. (Ed.). Available at: http://plato.stanford.edu/archives/spr2014/entries/hegel-aesthetics/ [Accessed 08 Sep. 2015].

Hsieh, N. (2016). Incommensurable Values, in: *The Stanford Encyclopedia of Philosophy*, Zalta, E.N. (Ed.). Available in: http://plato.stanford.edu/archives/spr2016/entries/value-incommensurable/ [Accessed 18 Aug. 2016].

Johnson, P.A. (1994). *The theory of architecture: Concepts, themes & practices*. New York: Van Nostrand Reinhold.

Kandinsky, W. (1977). *Concerning the spiritual in art.* 2nd edition. New York: Courier Dover Publications Inc.

Klee, P. (1961). *Paul Klee: The Thinking Eye.* London and New York: G. Wittenborn and Lund Humphries.

Lamb, T., Bourriau, J. (1995). *Colour: Art and Science*. Cambridge: Cambridge University Press.

Medway, P., Clark, B. (2003). Imagining the building: architectural design as semiotic construction, in: *Design Studies,* 24, pp. 255–273. Available at: http://www.sciencedirect.com/science/article/pii/S0142694X02000558 [Accessed 16 Oct. 2014]. DOI: 10.1016/S0142-694X(02)00055-8

Merleau-Ponty, M. (1991). *Signos.* Lisbon: Martins Fontes.

Mora, J.F. (1991). *Dicionário de Filosofia*. Lisbon: Publicações Don Quixote.

Moreira da Silva, F. (1999). *Colour / Space: Its quality management in architecture: the colour/space unity as an unity of visual communication*. PhD Thesis. University of Salford, Salford, UK. Available at: http://usir.salford.ac.uk/14758/1/299124.pdf [Accessed 9 Nov. 2014].

Naar, H. (2014). Art and Emotion, in: *Internet Encyclopedia of Philosophy*. Available at: http://www.iep.utm.edu/art-emot/ [Accessed 8 Apr. 2015].

Norberg-Schulz, C. (1985). *The concept of dwelling: on the way to figurative architecture*. New York: Electa Rizolli International Publications.

Noy, P., Noy-Sharav, D. (2013). Art and Emotions, in: *International Journal of Applied Psychoanalytic Studies,* 10, pp. 100 – 107. Available at: http://www.pinchasnoy.com/files/Art-and-Emotion-published-aps1352.pdf [Accessed 8 Apr. 2015]. DOI: 10.1002/aps.1352

Pallasmaa, J. (2011). *The embodied image: imagination and imagery in architecture*. Chichester: John Wiley & Sons.

Pallasmaa, J. (2009). *The thinking hand: existential and embodied wisdom in arthitecture*. Chichester, U.K.: Wiley Publishers.

Pérez-Gómez, A. (2008). *Built upon Love.* Cambridge, Massachusetts: MIT Press.

Pimlott, M. (2009). *Natural Antagonism: Notes on Colour or Architecture*. Presented at the Painting with Architecture in Mind. Tu Delf, Netherlands: Tu Delf Architecture University. Accessed at: http://www.tudelft-architecture.nl/uploaded/files/Interiors/Mark%20Pimlott/pimlott_v2.pdf [Accessed12 Sept. 2015]

Pinto, J.C. (2007). *O espaço limite*, Volume 2, Colecção Arquitectura e Urbanismo, Edição ACD Editores, Lisboa.

Pinto, J.C. (2007). *A caixa, metáfora e arquitectura*, Volume 1, Colecção Arquitectura e Urbanismo, Edição ACD Editores, Lisboa.

Pinto, J.C. (2007). *Ver, Desenhar, Imaginar, Projectar*, Colecção didáctica, temas e ideias em arquitectura, urbanismo e design, Centro Editorial da Faculdade de Arquitectura da Universidade Técnica de Lisboa, Lisboa

Plato (1937). *The Republic*, 2nd edition. Cambridge, Massachusetts and London: Harvard University Press and William Heinemann Ltd. Available at: https://ryanfb.github.io/loebolus-data/L237.pdf [Accessed 5 Aug. 2016].

Plato (1888). *The Timaeus*. London and New York: Macmillan and Co. Available at: http://www.math.upatras.gr/~streklas/public_html/timaeusofplato00platiala.pdf [Accessed 5 Aug. 2016].

Poetry (2015). In: *Merriam Webster* [online]. Springfield: Merriam-Webster, Inc. Available at: http://www.merriam-webster.com/dictionary/poetry [Accessed 3 Oct. 2016].

Preziosi, D. (1979). *Architecture, language and meaning: the origins of the built world and its semiotic organization.* The Hague, The Netherlands: Mouton Publishers.

Ricoeur, P. (2003). *The Rule of Metaphor: The Creation of Meaning in Language*. London and New York: Routledge Publishers.

Ruskin, J. (1903). Modern Painters: Of General Principles and of Truth, Volume I (Part 1 and 2), in: *The Works of John Ruskin*. London and New York: Longman, Greene and Co. Available in: http://www.lancaster.ac.uk/depts/ruskinlib/Modern%20Painters [Accessed 5 Oct. 2016].

Ruskin, J. (1903). *The Seven Lamps of Architecture*, in: *The Works of John Ruskin*. London and New York: Longman, Greene and Co.

Saarinen, E. (1948). *The search for form in art and architecture*. New York: Courier Dover Publications.

Scavuzzo, G. (2010). *Compositions For Chromatic Keyboards: Colour and composition in Le Corbusier's works*. Presented at the Colour and Light in Architecture - First International Conference 2010. Available in: https://www.academia.edu/3383554/Compositions_For_Chromatic_Keyboards_Colour_and_composition_in_Le_Corbusiers_works [Accessed 9 Dec. 2014].

Scruton, R. (2009). *Beauty*. Oxford, England.: Oxford University Press.

Scruton, R. (1979). *The Aesthetics of Architecture*. Princeton, New Jersey: Princeton University Press.

Silvestrini, N. (2011). *Colorsystem* [online]. Available at: http://www.colorsystem.com/?page_id=1853&lang=en [Accessed 12 Nov. 2015].

Steiner, R. (1992). *Color*. Great Barrington: Steiner Books.

Tolstoy, L. (2013). O Que é a Arte?. Lisbon: Gradiva.

Turner, C. (2005). *Cured by colour* [online]. Tate. Available at: http://www.tate.org.uk/context-comment/articles/cured-colour [Accessed 12 Oct. 2014].

Veleiro, T.T. (1991). *El color en arquitectura*. Sada, Spain: Edicios do Castro.

Von Goethe, J.W. (1840). *Theory of colours.* Cambridge, Massachusetts: The MIT Press.

Zumthor, P. (2006). *Thinking architecture.* Basel, Swizterland: Birkhäuser.

PART III

Case Studies Analysis

Introduction note

Part III of the thesis is composed of the case study analysis. It is comprised of three chapters: chapter 6 analyses the Architectural case studies, chapter 7, the Painters and Sculptures case studies and finally, chapter 8 will define a comparative analysis between both, defining principles, concepts and values that both possess in common, as well as identifying the underlying values that characterize each case study. For the analysis of each case study, the following analytical grid was used:

Case Studies Analytical grid:

(1) Biography: *Brief biography of the artist/architect.*
(2) Artistic/Architectural evolution and context: *Description of the artists/architect creative evolution and the clarification of the artistic, architectural, historical, philosophical or any other context.*
(3) Creative process and methodology: *A synthesis and analysis of the artists/architect creative process and methodologies that are the grounds for each individual creation and define the artists method.*
(4) Inspiration and influences: *Analysis of the artists/architect inspiration and influences, such as clear values or concepts that sustain the artistic practise.*
(5) Underlying theories and ideas: *Definition of the artists/architects underlying theory and overall ideals within the artistic creation.*
(6) Methods and Techniques/Specific work analysis: *For the architects, the work analysis one specific architectural example (the most relevant, most significant in the architect's life); For the painters and sculptures, the work focuses on multiple examples.*
(7) Key principles, concepts and values: *The definition of key principles, concepts, values and properties that characterize and support the overall work and ideals of the artist in question.*

After the individual analysis of each case study, a summary analytical page is created (presenting a summary of the case study and explaining the overall ideas analysed) as well as an analytical chart (which is the result of the definition of the concepts and highlights which driving concepts, values and principles were present in the analyses. Lastly, after the analysis of all the fourteen case studies have been analysed, and each according summary chart and table detailed, the cross analysis between both is interpreted in chapter 8: firstly the Social network analysis is presented, and secondly, a series of principles, concepts, values and ideals is analysed. After these cross comparisons, the values will be revealed.

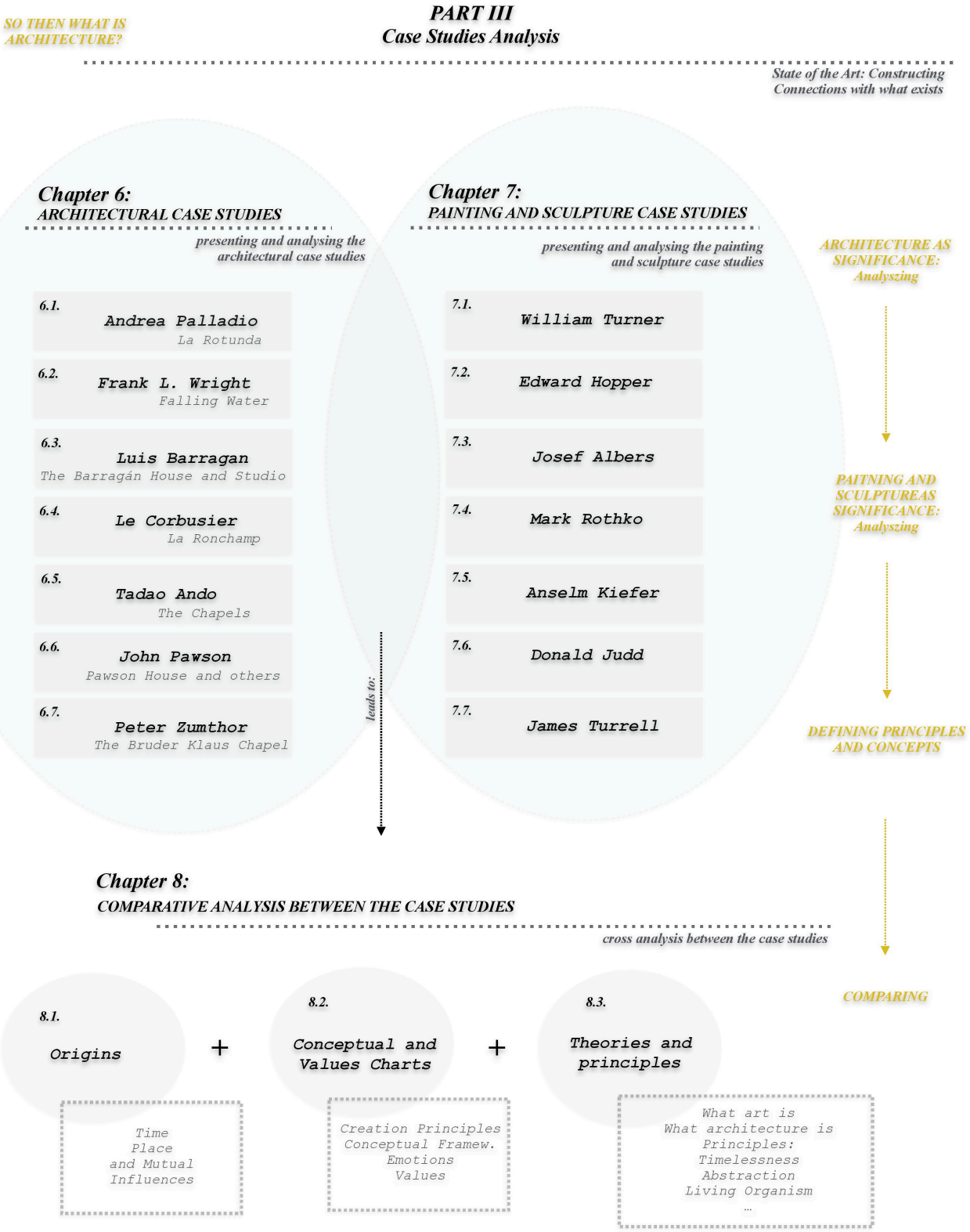


Figure 7: Diagram of Chronological map/diagram of case studies of the research.

CHAPTER 6

ARCHITECTURAL CASE STUDIES

Introduction:

In the present chapter seven architectural case studies are analysed: 6.1. analyses Andrea Palladio (1508 – 1580) and La Rotunda, 6.2. analyses Frank Lloyd Wright and Falling Water, 6.3. analyses Barragán (1902 – 1988) and the Barragán House and Studio, 6.4. analyses Le Corbusier (1887- 1965) and La Ronchamp chapel, 6.5. analyses Tadao Ando and the Chapel on the Water and the Chapel of Light, 6.6. analyses John Pawson and the John Pawson House as well as other projects of relevance and lastly 6.7. analyses Peter Zumthor (1943 -) and the Bruder Chapel.





Photo: Portrait of Andrea Palladio; Source: http://en.wikipedia.org/wiki/Andrea_Palladio;Photo : San Giorgio Maggiore (Venice) island, Venice, Italy. Source : http://www.iarc.ie/exhibitions/previous-exhibitions/andrea-palladio-1508-1580/

PLATE 34: ANDREA PALLADIO

6.1. ANDREA PALLADIO

Palladio is generally considered to be the last great 'humanist architect' as summarized by Wittkower (1971) [338]; his influence on English and American Architecture is thought to be greater than all of the other Renaissance architects combined[339] and, he is also viewed and generally understood as the most influential individual in the history of European Architecture. Wittkower (1971) claims that Palladio's contribution to the humanities: '' (…) was probably greater than any other architect of that period and can by no means be confined to architecture, '' (Wittkower, 1971, p. 62).

(1) artistic evolution, context and characterization

… Artistic Evolution

Ackerman (1966), explains that Palladio matured with ease and in a sudden manner, finding his own vision, through what he had learnt from others. Although his initial work was 'erratic in style'[340], Palladio quickly arrived at a mature style, which has the best example (the work he is most known for and considered the archetype of his work) in the Villas. His architectural evolution was found through many different programmatic requirements such as churches (mostly in Venice) and palaces (mostly in Vicenza), however, his vision remains clear, independently from those different programs. Overall Palladio's architectural evolution is characterized, by a clarification of his style and a simplification of his ideals and ways of executing them: defining new proportions that could accommodate his vision of an architecture that could elevate the human spirit and soul and make man understand his own immortal life.

> **Examples:** In 1556, Palladio had developed three main palace types. In 1550, the Palazzo Chiericati was completed in Vicenza, already portraying Palladio's ideals of harmony and beauty: the architecture was defined according to music ratios. A series of other Palazzos were completed in the same decade, in Vicenza. His last works were all located in Venice and comprise a vast body of work. At the late 1550's Palladio submitted two projects (the Rialto bridge and the reconstruction of the Dodge's Palace in 1577 that were rejected; the city council preferred projects that were more in keeping with the Venetian tradition. Around this time in Venice Palladio, begun to build churches, (he had already completed most of his palaces and villas); the commissions were either private, civic or monastic.

… Context: The Italian Renaissance

Palladio embodies the Renaissance ideal of humanism and classical scholarship, but surpasses it in his search for virtue. Born into what is considered to be 'the most creative period in architecture's history, the renaissance rooted him, in a humanistic context and training[341].

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[338] Expression unsed by Wittkower '' (...) of the last of the great humanista architects, Palladio.'' (Wittkower, 1971, p. 21)

[339] According to Ackerman (1966), Palladio is the most imitated architect in history and his '' (…) influence on English and American Architecture probably has been greater than that of all other Renaissance architects combines.'' (Ackerman, 1966, p. 19).

[340] According to Ackerman (1966), Palladio's initial work was '' (…) more erratic in style and quality than that of any apprentice to the profession in the Renaissance.'' (Ackerman, 1966, p. 31). This evolution finds evidence, in the Villas La Rotunda and Thiene.

[341] **Palladio's Renaissance context:** Palladio was born into what Ackerman describes as, '' (…) the most creative periods in the history of architecture.'' (Ackerman, 1966, p. 19). It is this humanist context and training that shaped Palladio's views on architecture and allowed it to grow according to the classical worldview; on this regard, Wittkower (1971) claims: '' The classical

Palladio is deeply contextualized in the Republic of Venice area (where all his buildings are, and where he lived for all of his life), where he was surrounded by the spirit of a Golden Age, distant from the Roman and the Florentine schools. He was a contemporary of Veronese, Tintoretto, the sculptor Vittoria and the painter Titian (that died three years earlier to Palladio), and as such, was surrounded by a rich environment of colour and light, and accustomed to the Venetian luxuries that characterized the spirit of the time. He was the only architect of the time that was trained in the Veneto, and thus was deeply influenced by Venetian tradition and '' (…) the Byzantine fantasy or the marvellous lighting and radiance of the provincial earlier Renaissance architecture of Venice.'' (Ackerman, 1966, pp. 19, 20). Ackerman (1966) continues, this Venetian style allowed Palladio to transform his thought into a human architecture, making it accessible to future generations.

But of the Renaissance, grew his outlook on philosophy, metaphysics and the ideal of creation. The Renaissance (the Age of Humanism), as a 'rebirth' after the 'dark ages'[342], aspired to a greater elevation of ancient ideals (considered the one true source of excellence) and to place man at the centre of the world once more. The Renaissance was greatly rooted in philosophical principles: the focus on humanism (the defining intellectual movement of the Renaissance) stated the good qualities of man and how to live a moral life (in a more simple and grounded way); in Aristotle's ideas, they found an interest in the 'immortality of the soul' (believing that immortality could be philosophically demonstrated), as well as other religious or theological questions; and in the revival of Platonism, they found sacred mysteries to be deciphered, and with the works of Marsilio Ficino (1433–1499), who translated Plato's works, the views of the world of 'forms' as intangible ideas, the notions of Platonic love and the overall ideas of beauty were revived, in all spheres of life (philosophical, aesthetical and theological). The Renaissance, is also characterized by its artistic and architectural advances and overall focus on artistic creation: firstly the role of the artist differed from that in the Middle Ages, where the artist was an anonymous creator, in the Renaissance the artists began to be recognized as an independent and worthy creator; secondly there was a large increase in commission works that varied from portraits of kings and nobles to churches, public and private architectural commissions (most of the art was commissioned by the Medici family in Florence); in the third place there was also a heightened interaction between patron and artist. Also, greatly influenced by the classical tradition, the artists and architects began to write about their own work: '' Renaissance artists were the first in European history to write extensively about art and themselves.'' (Grendler, 2016). Examples of this are Leon Battista Alberti (1404–1472) treatises on painting (1435) and on architecture (1452) or Giorgio Vasari's (1511–1574) *Lives of the Artists* (first edition 1550, revised edition 1568). Overall, artists and architects had a platonic understanding of the world, and believed in the immortality of the soul. As such, their creations should be an echo of that

studies which he begun under Trissino remained Palladio's life long preoccupation and his architecture cannot be disassociated from the humanist training in this circle.'' (Wittkower, 1971, p. 62).

342 **The Renaissance:** also referred to as the Age of Humanism, is generally understood as the period that extends from the middle of the fourteenth century (beginning in Italy at around 1350) to the beginning of the seventeenth century (until about 1620). It is defined as a period of artistic, architectural, scientific and philosophical advances and 'activity'; and is considered to be '' (…) a unique time with characteristics all of its own.'' (Grendler, 2016). Author Grendler (2015) in his article about the Renaissance explains that the term 'renaissance' derived from the renaissance and it's use of the term *rinascità* ('rebirth or renaissance'), to describe their own rebirth after a long of darkness, the Middle Ages. It's origin is marked with the views and writing of the humanist and vernacular writer Petrarch that criticized medieval habits and aspired to a greater elevation of ancient ideals. At a first level, author Lorenzo Casini in his article on Renaissance's philosophies, for the Philosophy Encyclopaedia (2014) and values explains that one of the main driving ideas was the return to classical antiquity; in his words: '' A fundamental assumption of the Renaissance movement was that the remains of classical antiquity constituted an invaluable source of excellence to which debased and decadent modern times could turn to.'' (Casini, 2014).

immortal life and follow the principles of nature and of God, in order to portray virtue and other humanist qualities. As such, they pursued the creation of 'ideal form' using proportions and ratios derived from the natural world (measurements of the human body or musical interval) as an expression of harmony in the universe. These ideals sustained the various artistic fields (art and architecture) during the Renaissance, and was elemental of their views of art[343].

Examples of artistic and architectural works of the Renaissance:

In art, it is of reference the works of the proto-renaissance Florentine painter Giotto (1267?-1337), whose study of the human body deeply influenced the Renaissance artists to come; the sculptor Lorenzo Ghiberti (c. 1378-1455) who designed the set of bronze doors for the Baptistery of the cathedral of Florence; and by the end of the fifteenth century, the works of Leonardo da Vinci (1452-1519), considered the ultimate 'renaissance man', for his paintings (including the "Mona Lisa" (1503-05), "The Virgin of the Rocks" (1485) and the fresco "The Last Supper" (1495-98),), architecture, science, inventions and treatises; Michelangelo Buonarroti (1475-1564), considered the dominant sculptor of the Renaissance, with his most notorious works being the Pietà in St. Peter's Cathedral (1499) and David in Florence (1501-04), also was a painter most known for his fresco covering the ceiling of the Sistine Chapel, completed over four years (1508-12) with scenes from Genesis, the Bible; and Raphael, that learned from both da Vinci and Michelangelo, most known for painting 'The School of Athens' (1508-11), in the Vatican. Most works of fine arts, painting and sculpture depicted scenes of the Bible and were used as devotional pieces. In architecture it is of great reference the works of the architect Filippo Brunelleschi (1377-1446) and the works of Leonardo da Vinci, who drew his inspiration directly from nature and drew many utopian ideas for architectural projects such as churches that embodied his ideals.

Overall, Palladio is a man of his time: deeply rooted in the Renaissances ideals and striving to clarify a deeper meaning for architecture as an extension of the work that came before him. Palladio embraces both the classical traditions and the ideas of his time, aiming to recreate a clearer conception for the soul.

Philosophical aspects of the Renaissance:

There was the main belief that '' (…) God had given a single unified truth to humanity and that the works of ancient philosophers had preserved part of this original deposit of divine wisdom.'' (Casini, 2014). This idea that classic civilizations held a closer connection to truth, established Roman and Greek society as the primal sources for knowledge, wisdom and ideas. Also, there was an improved and increased study on the works of Aristotle, promoting a new Aristotelian knowledge. Author Casini (2014) explains that '' In order to rediscover the meaning of Aristotle's thought, they updated the Scholastic translations of his works, read them in the original Greek, and analysed them with philological techniques.'' (Casini, 2014). There was also a focus on Humanism, considered to be the defining intellectual movement of the Renaissance, that focused on the good qualities of men, and tried to teach the principles of living a moral, responsible, and successful life on this earth. Casini says (2014) that '' Humanists stressed moral philosophy as the branch of philosophical studies that best met their needs. (…) aimed to bring about an increase in public and private virtue.'' (Casini, 2014). Humanism became institutionalized in society as a new form of education. One of the main defenders of the humanist movement was Francesco Petrarca (1304–1374), objecting to scholastic Aristotelianism and defending a more classical and simple approach to life, expressing little interest in metaphysical or epistemological questions. Overall, author Grendler (2014) summarizes ''Humanism brought intellectual unity to Europe.'' (Grendler, 2016). Besides the revival of Aristotle and the focus on Humanism, the Renaissance was also defined by the recovery of Platonism. Casini (2014) writes that ''The Neoplatonic conception of philosophy as a way toward union with God supplied many Renaissance Platonists with some of their richest inspiration.'' (Casini, 2014). Essentially, the platonic dialogues were seen as sacred mysteries to be deciphered. The most important Renaissance Platonist was Marsilio Ficino (1433–1499), who translated Plato's works into Latin; for Ficino, it was Plato's ancient theology that was

> most of value. As a summary, '' Ficino assimilated Aristotelian physics and metaphysics and adapted them to Platonic purposes.'' (Casini, 2014).

…Characterization: Palladio's Architecture

Palladio's architecture, still today, is the embodiment of the classical tradition, his sense of order and the relationship between the parts and the whole, '' (…) that Palladio inherited from the great procession of Italian designers from Brunelleschi to Bramante and Michelangelo, and reformulated in a way that distils the Renaissance.'' (Ackerman, 1966, p. 19). Palladio's work was based on the use of proportions, symmetry, perspective, principles and values, derived from prior influences (classical temple architecture of the Ancient Greeks and Romans, Vitruvius and by Leon Battista Alberti); in general, he followed the principles defined by his predecessors who helped shape the Renaissance's ideals, but determined his own unique manner that better could defend his ideals.

Palladio's architecture, based on geometry and proportion, strived to elevate the human soul to a more virtuous and spiritual dimension. As such, architectural forms and spaces needed to echo that perfection; independently of program or location, it is possible to outline a series of characteristics that characterize his general architecture design.

First, Palladio designed an architecture with specific reference to it's environment, as is the case with the Villas that establish a unique connection with their surroundings. As such, an emphasis on the view and on the placing of windows was of vital importance for the overall architectural atmospheres. Second, the interior spaces in Palladio's villa plans use a strong geometric form; these could be Rectangular, 'H' shaped, 'T' shaped or '+' shaped, but all of them followed a successive proportional system that begun from the outside and went inwards. Attached to this configuration of space, there is always a symmetry according to a central axis: it is a bilateral symmetry, usually in a north-south position of the coordinate system.

Third, Palladio's elevations always have a central emphasis that reflects the axial symmetry of the plan. The elevations and facades were simple in character and design, and used various classical elements to emphasize their character. Instead of a portico, Palladio sometimes used loggia's (a sort of recessed portico); these could be on the ground level or double loggias that defined both levels; they could also be accentuated by a pediment. The facades usually were inspired by Roman temple facades. The Roman temple had a profound influence on his views of architecture at various levels.

Fourth, one other main characteristic of Palladio's architecture is the Palladian window: it was inspired by the Venetian window, and is composed of a central light with semi-circular arch over it. This window was sometimes flanked by two lower rectangular openings.

Fifth, is the use of colour. For Palladio architecture should use the colours of the materials, and portray a simple yet noble character. Therefore, the colours used are either white, ochre or yellows, creating an atmospherical type of environment. These colours established a coherence throughout the whole architectural space, in both interiors and exteriors. But when the exterior of the building was simple in character and in colours, the interiors echoed striking moods and a dynamic atmosphere, through its multi-tonal, yet chromatic environment. The colour palettes were rich and warm, and with the light that pours in from the large windows, allows for vibrations of colours to naturally emerge. See image bellow

of Vila Foscari. Some interiors were richly painted with frescoes and with scenes that were usually biblical in character, however the frescoes remained subdued in colour and tone.

In regards to the materials used, Palladio used traditional architectural materials in Italy, and liked using natural stone. Floorings were usually covered in stone, possessing their natural colour and a polished texture. In regards to composition, a further unique property that sustains Palladio's architecture, is the scheme that defines both plans and elevations as a triadic composition, with one main central block; this is rooted in Venetian and Byzantine architecture, describes Ackerman (1966). The design was conceived as an organisms: where all the parts fit together to define the whole, and the whole is defined by the individual parts. As such, there was a three-dimensional approach, that was unique in its character, and relates to mathematics. Ackerman explains, that '' The triadic system was not only suited for proportionalities, but was supported by utility and by tradition.'' (Ackerman, 1966, p. 162). In relation to the character of the architecture itself, Palladio profuced an architecture that was noble in character and form, imposing and free standing in relation to its surrounding; it embodied a virtuous attitude by echoing principles of simplicity, restraint, order and silence. The interior spaces exude a nobility, and for Palladio, they shouldn't be filled with elements or decorating pieces, but instead be left as they are. Pertaining to his ecclesiastical work, of the late period of his life, Palladio designed a church that possessed a central plan (either circle or square) because it was the most pure expression and embodied the ideal of beauty; this had philosophical and visual reasons. The designs were based on Roman architecture, specifically it's temples and discards completely the medieval tradition; and like in his other designs (villas) he believed that the façade should echo the interior space in some geometrical or volumetric way. Another characteristics of his church drawings, is that everything that is not architecture (such as painting or sculpture) was set apart and freed into the space; Palladio wanted all the walls to remain completely white and free from art. He had a great control and careful consideration for the amount of colour and light that flooded these interior spaces. He used matt stucco painted white or cream to create these visual effects with the play of natural light.

> **The Legacy of Palladio and Palladianism:** Today, what is referred to as Palladian architecture is an evolution of Palladio's original concepts and design systems. The style, that begun in the 17th century with Palladio's legacy, continued to develop until the end of the 18th century. In Britain, in the early 18th century Palladianism returned after a brief interruption due to the Civil War. It continued to be popular in Europe throughout the 19th and early 20th centuries, and was usually used to design public buildings. The Palladian style is considered to be most popular in the 18th century, when it expanded beyong England, to Scotland, Ireland and later North America. Richardson (2014) explains: '' The influence of Palladio's buildings and publications reached its climax in the architecture of the 18th century, particularly in England, Ireland, the United States, and Italy, creating a style known as Palladianism, which in turn spread to all quarters of the world.'' (Richardson, 2014). One major factor for Palladio's influence extending so broadly and across the globe was his treatise and publication that allowed for a definition of principles and rules, and made the 'language and principles' accessible and easily followed. On this influence, Ackerman (1966) states: '' The neo-classicists and their nineteenth-century followers looked on Palladio as the discoverer of some divine, or at least eternal, law in architecture. '' (Ackerman, 1966, p. 185). After the Renaissanece, Wittkower (1971) claims: ''Proportion became a matter of individual sensibility and in this respect the architect acquired complete freedom from the bondage of mathematical ratios.'' (Wittkower, 1971, p. 153).







CONTEXT



INFLUENVCE





Photo 1: The Last Supper. c.1497, by Leonardo da Vinci; Source: https://www.dartmouth.edu/~matc/math5.geometry/unit14/unit14.html; Photo 2: Brunelleschi's Old Sacristy, S. Lorenzo. Florence. 1421-28; Source: https://pt.pinterest.com/pin/311944711661047329/ ; Image 3: Detail of Raphael's School of Athens; Source: https://archhistdaily.wordpress.com/tag/michelangelo/; Photo 4: The Pantheon interiors; Source: https://pt.pinterest.com/pin/520799144380591685/; Photo 5: Photo: Interior space of Il Redentore; Source: ; Photo 6: Palladio's Il Redentore; Source: http://www.veniceweddingphoto.com/palladio/

PLATE 35: INFLUENCES, CONTEXT AND MATURE LANGUAGE

(2) creative process, methodology, techniques and characteristics

Palladio's aim for architecture was to achieve a visual and experiential perfection. On this regard, in his book 'The Four Books of Architecture' (1965), he wrote: '' I therefore hope, that the manner of building with universal utility be reduced, and soon brought to that pitch of perfection, which in all the arts is greatly desired, (…)'' (Palladio, 1965, p. v). This 'universal utility' and 'perfection' deeply characterizes his architecture and his decision/creative process.

Following the classical tradition, Palladio's work methodology is deeply related to the calculations of proportions and ratios in order to achieve the most harmonious relationships of the parts and the whole. The creative process, thus, was led by a sense of order and a desire to achieve unity and virtue, through mathematics, geometry, form proportions and harmony. The creation of architecture, for Palladio evolved naturally in a continuous subdivision of parts, according to the laws of the world and the universe, following the classic ideals of proportions. For Palladio there is not a distinction between the creative process, the methods, the techniques and the characteristics, but instead they all overlap in one single system with one single aim. As such, an analysis of the main driving methods/techniques/characteristics follows: the systems used to sustain proportions and ratios.

… Ideals of Proportion

Proportion can generally be understood as '' (…) the relation between two quantities (e.g. 6:4), such as the height and width of a wall or the length and breadth of a room.'' (Ackerman, 1966, p. 161). However, in the work of Palladio, the proportion system developed by him, has a more complex meaning and significance. Palladio found in proportions the system to sustain the 'universal design' and the 'divine harmony' thus validating and systemizing the philosophy and the aesthetical principles. In order to achieve this deeper meaning and 'divine harmony', Palladio didn't only elaborate on the traditional proportional systems defined by Vitruvius, Alberti and other classical architecture treatises[344], but extended and elaborated from all of them, creating his own system.

One of the fundamental differences in Palladian architecture proportion systems, Wittkower (1971) indicates, is the generating principle (the way by which proportion is achieved and defined) that manifests itself of the utmost relevance[345]: the generation of form and proportion follows a subdivision and breaking down of each individual form or surface into another set of proportions and ratios, and so on, from the global whole to the smallest detail. By this continuous subdivision of the overall whole, a

[344] **The Traditional types of proportions:** In the Vitruvian systems of proportions, proportions were associated to the overall principles of his architecture theory; they were a pre-requisite for the establishment of the three primordial elements he defined for Architecture: firmness (firmitas), commodity (utilitas), and delight (vernustas). For Vitruvius, proportion interrelates all the other factors, and is one of the elements of what he defined as the 'Six Principles of Design': order (ordinatio), arrangement (dispositio), proportion (eurythmia), symmertry (symmetria), propriety (decor) and economy (distributio). Alberti, like Vitruvius, followed the same ideals of proportion and believed in the sequential systems of proportions defined by the classical master. The classical proportions system, have an origin in Pythagoras, Ficcino and Plato; they were later summarized by Alberti who emphasized the corresponding relations to musical intervals. The connection between proportions and musical theory, possessed at its base, the notion that '' (…) numerical equivalents of the terms of musical harmonies could, when applied to spatial relationships in architecture, make visual harmonies.'' (Ackerman, 1966, p. 162). Overall, The Renaissance architects, utilised these plainer proportions based on these theories of 'harmonic ratios', that these harmonious relationships could be established based on a sequence of numbers: 1, 2, 3, 4, 8, 9, 27 (…). Through these number sequences, a universal order and beauty could be attained; for they were the basic numbers that composed the universe, as had been presented by Pythagoras.

[345] Reference to: '' In analysing the proportions of a Renaissance building one has to take the principle of generation into account.'' (Wittkower, 1971, p. 116).

proportional harmony is defined throughout the entire structure. On this issue, on the coherence of the whole form, Ackerman (1966) also adds, another fundamental difference; he says that Palladio extended the proportion system to all dimensions of the room, working in the three dimensions and integrating all of the elements together, binding together all elements of the design[346]; as such, his system differs from Alberti's system, where he did not have a control of the three dimensions, and achieved proportions through addition, where as Palladio's proportions was achieved by a sense of 'Integration' and 'wholeness'. With Alberti's influence, Palladio defined proportions and rations that echoed specific attributes and meanings: musical harmonies were converted into visual ones thus echoing the beauty of 'wholeness' that was presented in the universe.

… Proportion techniques

Dimensions and numbers were calculated by multiplication creating series of numbers that related to each other. As such, overall proportions were always established for each room and for the general spaces as such: 2:3:4, or 4:6:9 (where the relations between the first and second term are echoed also in the relations between the second and the third). The calculations of proportions and ratios, should occur in relation to the overall form (circular, square) or in relation to the diagonal of the space, defining for example a rectangular as a square and ¾, or a square and ½. Irregular proportions were never used, or described; but instead, an innate search for the most perfect proportions through number and geometry. According to Ackerman (1966), there can be defined two similar systems of defining proportions, 'proportionality' or 'relationship of proportions': firstly, 'geometrical' proportions can be defined (9/6 = 6/4), secondly a 'harmonic' proportion (6:4:3 ; or (6-4)/6 = (4-3)/3). Both these types of proportions related to musical theory. Besides these visual and harmonic proportions, the designs also followed centralized and secondary axes; the axes articulated the design in a symmetrical manner. These systems of proportions defined the overall definition/conceptualization/creation of the architectural elements at all its levels, in an integrated way: the overall whole, the subdivision of the form, room to room, relation of plan to elevation, detail to whole, etc.

(3) inspiration, influences, conceptual framework and themes:

… Influences

Palladio was initially deeply influenced by the writings and publications of architecture treatises that were published prior to his existence; such as the works of Vitruvius (whom he had chosen as his 'maestro, e guida'[347]) and Alberti (who had a tremendous influence on him, and was referred to on numerous times throughout the *Quattro libri dell' architettura* (1570)). For Palladio, it was Vitruvius that '' (…) revealed the deepest secrets of ancient architecture.'' (Wittkower, 1971, p. 65). In the preface of

[346] Reference to: '' What differentiates Palladio's proportions from Alberti's is that they are used in integrated systems that bind plan and elevation, interior and exterior, room and room, giving a sense of the pervasiveness of the architect's control.'' (Ackerman, 1966, p. 167).

[347] Reference to: '' But above all the modern books he placed Vitruvius whom he had chosen 'per maestro, e guida'.'' (Wittkower, 1971, p. 65). As described in the preface of the books.

his book '*The Four Books of Architecture',* about Vitruvius's influence on him, he writes: '' I proposed to myself Vitruvius as my master and guide, who is the only anient master of this art, and set myself to search in the reliques of all the ancient edifices, that, in spite of time and the cruelty of the Barbarians, yet remain. '' (Palladio, 1965, p. v).

Besides learning directly from the classic architecture in Rome and reading Vitruvius, Palladio, also saw the materialization of those principles in the architecture of Trissino, by whom he was deeply influenced. In the early 1530's Palladio was greatly influenced by the work of Cornaro-Falconetto; but according to Ackerman (1966), he was equally influenced and inspired by the work of Sebastiano Serlio, who '' (…) had moved to Venice to prepare the first two of his projected seven books on architecture, the fourth and the third, published in 1537 and 1540.'' (Ackerman, 1966, p. 24). Serlio's approach to the treatise was ground-breaking at the time, continues Ackerman (1966): he used pictures and experimentations to define his books, setting new territory in the scientific worlds, setting the ground for Palladio's work, which was modelled after Serlio's[348], instead of following the Vitruvian and Albertian model.

The main source of inspiration was drawn directly from ancient ruins and the observations from classical temples in Rome. Through antiquity, he understood and defined the 'permanent values' of architecture, claims Wiittkower (1971); for him, they were a testimony of Roman excellence, virtue and grandeur, having professed that it was the quality of virtue that 'concentrated all his thoughts on these studies'[349]. Palladio was deeply influenced by the works of early Renaissance architects and artists, such as the works of Bramante and Raphael. Not only were they a great influence, but Palladio elevated Bramante's Tempietto (1502) *(see Glossary),* to the stature of ancient temples, giving it equal importance in his books[350]. He was also greatly influences by Brunelleschi (1337 – 1446) who was the first architect to employ mathematical perspective to redefine Gothic and Romanesque space, and designed the Dome of Santa Maria del Fiore, Florence (1417 - 1434); by Leonardo da Vinci (1452 – 1519) and by Michelangelo (1475 – 1564) *(see Glossary for further information).*

Another influence, was the work of Sylvio Belli, *On proportions and Proportionality* (1573), where he established arithmetical principles. Ackerman (1966) explains: '' Belli describes proportion as if it were a cardinal virtue: 'the very source of the distribution, of beauty and health'. Beauty is included because it is ' a correspondence of all parts arranged in their proper place.' '' (Ackerman, 1966, p. 161). Palladio, influenced by Belli applied the principles to his designs, giving a much greater emphasis on proportions than earlier Renaissance architects, argues Ackerman (1966).

[348]Reference to: ''Palladio modelled his own book a few years later on Serlio rather than Alberti and Vitruvius tradition, and this choice, given the high quality of the work he illustrated, was to make him the most influential architect of the Renaissance.'' (Ackerman, 1966, p. 25).

[349] Reference to: '' He regarded the ancient 'enormous ruins as a shining and sublime testimony of Roman excellence (virtù) and grandeur', and professed to have been deeply stirred by studying that 'quality of virtue' and having concentrated all his thoughts on these studies.'' (Wittkower, 1971, p. 63).

[350] Reference to: '' Like Serlio, Palladio included Bramate's Tempietto of 1502 among his ancient temples, not as a copy of the past, which it wasn't, but as a work of equivalent spirit and stature.'' (Ackerman, 1966, p. 29).

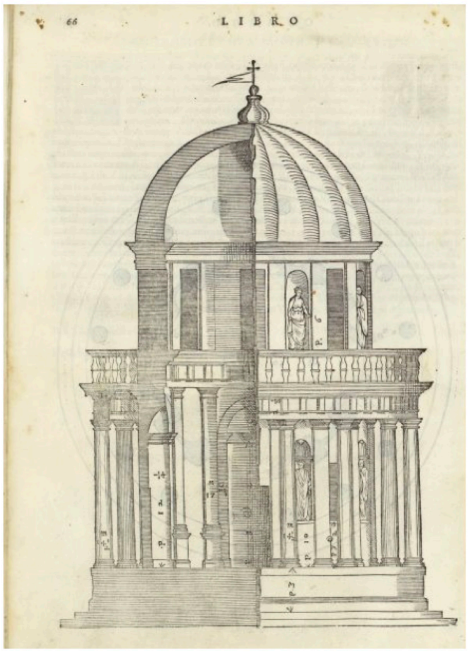






Photo 5: Page from the Four books of architecture; Source: https://bernadetteschaeffler.files.wordpress.com/2013/01/screen-shot-2013-01-11-at-9-17-52-am.png; Photo 1 and 2: Villa Foscari La Malcontenta; Source: https://www.yatzer.com/andrea-palladio-and-zaha-hadid-architects

PLATE 36: MATURE STYLE, PALLADIAN CHARACTERISTICS

… conceptual frameworks and themes

In all, besides the compositional ideas of proportion and harmony, there are only two other themes that describe Palladio's works of architecture: the theme of the 'ideal' of truth and beauty and the theme of virtue.

… (a) The ideal of Truth, Beauty and Goodness

The ideal of truth and beauty was the ultimate theme that carried out all of the design and backs the global vision. It was deeply influenced (as previously explained) by the general understanding of the Renaissance regarding religion and philosophy that determined both their ways of existence and their creation principles. This ideal followed Plato's ideas (metaphysical and platonic understanding of beauty), and was also deeply shaped by Ficcino's ideas, that beauty, truth and goodness were all intertwined and interdependent qualities. On beauty, Palladio writes: '' Beauty will result from the form and correspondence of the whole, with respect to the several parts, of the parts with regard to each other and of these again with the whole; that the structure may appear an entire and complete body, (…).'' (Palladio, 1965, p. 1). Here he is making a reference to the interconnectivity of every element of architecture and making it one of the primal sources of 'beauty'. This correspondence between all parts, it's use of the right proportions and the right 'numbers', could indeed, not only establish a sense of beauty, but also guarantee a deeper connection to those timeless and universal values. Palladio, like Alberti, defended this type of mathematical conception of beauty, claims Wittkower (1971). However his ideal of beauty ran deeper than the mere corelation of the parts, to the whole. It was an understanding of architecture like a human body, and number was only one of the components reponsible for the dimensions and beauty. Beauty was the name of a quality that encompassed many other qualities, more specifically: goodness and truth.

… (b) Virtue: Architecture as a manifestation of virtue

Palladio found in Roman Architecture, not only excellence and grandeur, but virtue, the one single quality that had deeply 'stirred' and moved him. Virtue was a quality that Palladio begun to see as essential in architecture: architecture should convey and possess virtue in order to allow it to be felt by it's users. It is associated to three concepts: virtue (character trait and actions), practical wisdom (the disposition to act virtuously) and '*eudaimonia'* (happiness that occurs), as explained by author Hursthouse (2013)[351]. Thus. for Palladio architecture that was virtuous was firstly in accordance with the principles of God, and thus reflected good intentions and good actions; secondly it reflected a noble character and an inner strength, portrayed through it's architecture, that echoed the character resulted by virtuous action

[351] **Virtue:** Rosalind Hursthouse, for the Stanford Encyclopedia of Philosophy on 'Virtue' explains that Virtue ethics is a discipline of ethics in philosophy, that was founded by Plato and Artistotle and possesses three central principles or concepts: virtue, practical wisdom and *eudaimonia*. Firstly, in regards to virtue, she explains it '' (…) is, indeed a character trait—that is, a disposition which is well entrenched in its possessor . (…) To possess a virtue is to be a certain sort of person with a certain complex mind-set.'' (Hursthouse, 2013). She further adds that virtue is connected to actions, '' (…) emotional reactions, choices, values, desires, perceptions, attitudes, interests, expectations and sensibilities.'' (Hursthouse, 2013), and it is so much rooted in the person's being that to be completely virtuous is a rare thing. Secondly, 'practical wisdom' can be understood as the disposition to act virtuously. Thirdly, the concept of *eudaimonia*: '' It is standardly translated as 'happiness' or 'flourishing' and occasionally as 'well-being'.'' (Hursthouse, 2013); therefore, for *eudaimoni*a to occur, it is necessary to live a virtuous life.

and virtuous men; more so, it should show and convey this 'practical wisdom' from within, which Palladio did intuitively and consciously (example in the Villas); and lastly, it should reflect 'eudaimonia' or exude happiness and well-being, which was a condition for his proportions (ex. the establishing of musical rhythms). There are many other ways in which virtue was incorporated: the nobility of the materials, the ideals of beauty and elegance that convey restraint from the material world, the focus on light as a metaphor for the focus on divinity, and many other examples.

Palladio believed that good architecture (a moral obligation) as a 'manifestation of virtue', possessed the power to inspire man and make man's spirit rise towards those 'virtues' materialised through architecture. Through the union of both Platonian ideals (virtue and spirit) and Aristotelian principles (experience and the senses), inspired by Daniele Barbaro's theories[352], Palladio created a unique view of architecture: a union between the intangible world of virtue, forms, and heavenly manifestations of the spirit and the pragmatic sensorial world of the body. Architecture becomes a vehicle for this manifestation of virtue, using forms, proportions, and harmonies (the canons of the divine world) to create an architectural space that aspires to heavenly ideals. By embodying virtue, architecture 'aids' man in turning towards divinity, once more.

(4) underlying theories and ideals

… Theories and writings

Palladio, throughout his life, composed and published multiple books on architecture (the ruins in Rome, or other), however, it is the *Quattro libri dell' architettura* (1570), in which '' (…) he set out to survey the whole field of architecture.'' (Wittkower, 1971, p. 63), that his views are best defined. The four books, a culmination of 20 years of architecture research and designing, deeply inspired by the architecture treatises that came before him, are each structured to deal with one specific aspect of architecture: book one defines orders and elemental problems, book two relates to domestic buildings, book three public buildings, and book four relates to temples[353].

[352] **Daniele Barbaro's Theories:** Wittkower (1971) claims that Palladio's Renaissance Humanistic ideals of architecture and the arts, derived from Daniele Barbaro's theories; where his ideal of art relates both to Platonian principles and to Aristotelian ideals. For Barbaro: '' The Arts are concerned with 'uncertain truth' ('il vero contingente'), i.e. the truth dependent on human will power which is manifest in human creations.'' (Wittkower, 1971, p. 67).. As such, Barbaro's ideal of the arts, echoes that of Aristotle's, (the arts rest on universal principles that are discovered through experience, where as experience relies on the senses and is 'concerned with single instances', relation to wisdom and virtue) and to the Platonic ideal (the artist formulates first on the mind and then symbolizes the exterior image after that interior image). Wittkower summarizes: '' Architecture, in other words, is nearer to the platonic ideal than any other art.'' (Wittkower, 1971, p. 68).

[353] **The four books on architecture:** Author Richardson (2014) adds: '' This work was a summary of his studies of classical architecture. He used a number of his own designs to exemplify the principles of Roman design.'' (Richardson, 2014). The four books each deal with one specific aspect of architecture: the first book defines the orders, 'elementary' problems and contains studies of materials, the classical orders, and decorative ornaments; the second book relates to domestic buildings and contains: '' (…) many of Palladio's designs for town and country houses, together with his classical reconstructions. '' (Richardson, 2014); these are marked with dimensions according to a system of mathematical ratio; the third book relates to public buildings and town planning, bridges and basilicas; and lastly, the fourth book, relates to the temples (drawings, writings, designing and the reconstructing of ancient classical temples). The publication of the books was interrupted by Palladio's death. According to Wittkower (1971): '' There is a fact a close relationship between the two treatises; for much of Palladio's thought and sometimes even his paraphrasing derive from Alberti. Nevertheless, (…) he introduces a new clarity.'' (Wittkower, 1971, p. 21). Author Tomás García-Salgado in his article 'A Perspective Analysis of the Proportions of Palladio's Villa Rotonda: Making the Invisible Visible' (2008) explains that the principles '' (…) probably intended to express his architectural ideals, not the buildings as they were actually built.'' (García-Salgado, 2008, p. 269).

About architecture in general, in the first pages of the '*Four Books of Architecture'*, Palladio accentuates the influence Vitruvius had when he claims: '' According to Vitruvius all building must consider three things without which they can not deserve any praise: these are la *utilidad* or *comodidad* (the utility or comfort), *firmeza* (firmness) and *hermosura* (beauty).'' (Palladio, 1987, p. 3) [354]. These, continues Palladio, establish the founding aspects of architecture because we could not imagine a work that would be devoid of comfort, of durability, or that, likewise wouldn't be beautiful. The *comodidad,* Palladio explains, is catered to when all the parts find its according place (living areas, rooms, and other spaces); *firmeza* is addressed when the architect makes all the walls, columns, windows and doors aligns with each other; and lastly, *hermosura* (beauty), is the result of the beautiful form and correspondence between the parts within themselves and to the whole. Once all these things have been decided, Palladio accentuates considerations of costs and materials.

The books go on to further describe practical issues, underlying the practical system of 'classical rules' was the notion that architecture is a manifestation of virtue. Mostly, the books are a descriptive analysis of how buildings should be: type of spaces they should create, with regard to purposes, the type of ornament, the type of materials, explaining in detail what to choose and why.

For Wittkower (1971), there are strong resenmblances to Alberti's treatise, however Palladio introduces a new clarity; and for García-Salgado (2008) the principles outlined in the books aimed to be guidelines of ideals rather than act as strict principles. The author further explains that the treatise had a profound emphasis on proportions and was led by the overall idea that a unification of the plan, elevation and section in his work had to be achieved through number and form. *The Quattro Libri* exemplifies a number of proportions and ratios that should be used in order to achiever the harmonious unifying effect, but Palladio provides little evidence in how these ratios were selected or defined. Above all, two main systems for defining proportions were outlined: the method of triangulation and the use of the golden section. He also established the Condition on the Concordance of Heights (CCH) Rule, which relates the proportions of one room to another.

In regards to Palladio's main understanding of architecture, he claims as his aim: '' (…) that in such places, those may be amused with pleasure.'' (Palladio, 1965, p. 37). Pleasure here relating to a more metaphysical and spiritual understanding of the word, connected to virtue.

… the Temple: the archetype of true Architecture

Palladio, like Alberti, considered that the temple was the most noble architectural element. These buildings, designed to 'invoke' the 'supreme Being' should be placed in the noblest part of the city, and should be designed in the 'highest' perfection, in order to evoke emotions of devotion and awe: '' They ought to be built so that nothing more beautiful could be imagined and those who enter should be transported into a kind of ecstasy in admiring their grace and beauty.'' (Wittkower, 1971, p. 22). Moreover, they should be strong and ever lasting, enduring the tests of time and history, use accurate orders (evoking the correct emotions), precious materials, the use of white (for white is the colour of purity, and as such the closest colour to God); nothing in the temple should detract the attention from the

[354] Free translation from: '' Segun Vitruvio deben en todo edificio considerarse tres cosas, sin las quales no puede merecer alabanza: son estas la *utilidad*, o *comodidad*, la *firmeza y hermosura*.'' (Palladio, 1987, p. 3).

'contemplation of the Divine' and the decoration or other artistic elements should evoke the 'service of God' and other good virtues/works. For Palladio, (unlike Alberti), the ideal form of the temple was the circle (the form that was closest to God due to it's perfection[355]); thus there is the constant desire to make an agreement between content and form. Architecture, through the temple was a 'man-made echo' of the image of God. This conception, rooted in Plato's *Timaeus*: the aesthetical aspirations ascribed to be an echo of God. For both Alberti and Palladio, Bramante's Tempietto was the most perfect example of the Renaissance Temple, and as such, most demonstrated '' (…) 'the unity, the infinite essence, the uniformity and the justice of God.'.'' (Wittkower, 1971, p. 24)[356].

(5) specific work analysis, examples and key features

6.1.1. LA ROTUNDA

Villa Almerico Capra, or La Rotunda (as its most commonly known as) is considered to be Palladio's masterpiece and is located in the suburbs of Vicenza (northern Italy). La Rotunda is set apart from the other villas because of its unique and innovative design; today it is one of the most recognizable buildings of the Renaissance. It is a World Heritage Site. Furnari (1995) summarizes: '' As Wittkower puts it, La Rotunda is the Palladian Villa par excellence.'' (Furnari, 1995, p. 172).

… Contextualization: The Villas

La Rotunda is considered to be the best example of all of Palladio's Villas. Therefore, a brief analysis of his Villas is in order, to be able to clarify and contextualize La Rotunda. Overall, there are 19 surviving Palladian Villas: all of them located in the Veneto area, surrounding the Vicenza area and all of the are UNESCO World Heritage Sites. The Villas responded to a very specific new need: a country residence for escaping the busy and 'unhealthy' cities, that could accommodate agricultural productions (which were growing in the 1540's) and simultaneously respond to the riches and nobility the families were accustomed to (such as entertaining or impressing guests); they were a smaller version of the palazzos combined with production, in order to assure and maintain the social and political influence in the countryside [357].

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[355] **The Circle:** Wittkower (1971) explains that the circle, is the 'most beautiful' and 'most regular' forms: '' (...) because it is the only one among all the figures that is simple, uniform, equal, Strong and spacious. Therefore let us make our temples round.'' (Wittkower, 1971, p. 22)); the circle is the geometric form that is closest to God, through its innate properties and qualities: strong, equal, spacious, uniform, with no beginning and no end, parts correspond to each other and to the whole, all equidistance from the centre. As such, the form is ideal to represent the character of unity of the Divine.

[356] **The Tempietto:** Bramante's Tempietto fulfils all the requirements the temple should possess (put forth by Alberti): in the centre of a square, free on all sides, on a platform, perfect roundness, semi-circle of the dome, the abstention form painted elements and decoration, the 'planned use of statues', the Doric order, etc. According the Wittkower (1971), ''Bramante, chronologically and artistically the mediator between Alberti and Palladio, represents at the same time the apex of this trio of great humanist architects.'' (Wittkower, 1971, p. 24).

[357] **The Origin of the Villa:** The term Villa refers to 'country house', far from society, serving as a suburban retreat for wealthy Venetian merchants, bankers or patricians away from the town life; the Villas, that derived their names from the owners family name, besides being 'country houses' for seasonal holidays, also responded to the growing investment in agriculture production that was occurring in 1540's. This investment was partly due to business men beginning to 'protect themselves' from the 'risks of trade and the instability of exchange': '' After 1530 the capitalist nobility of Venice, which had made fabulous fortunes in commerce in the fifteenth century, began to protect itself from the risks of trade and the instability of exchange by seeking more stable investments: (…) a revival of industry, (…) and large-scale acquisitions of agricultural properties.'' (Ackerman, 1966, p. 50).

Author Kim Williams (2010), in the book *The Villas of Palladio*, explains that it is not an easy task to summarize Palladio's villas. However, '' What is of immediate interest with regard to architectural form is Palladio's architectural vocabulary, the collection of elements from which the architect composed his designs.'' (Williams et al., 2003, p. 15). The author also adds that Palladio often used the Villas as a testing ground for other architectural works, for he sustained that there was a greater freedom with a country residence.

Ackerman (1966) summarizes that they represent a union between the gentleman's world and the farmer's world. In order to achieve this union of content through form, Palladio aimed to classicize the villa and make it nobler in character. The Villas, thus, have a lot of commonalities between them (each one is a different orchestration of the same theme): they are deeply associated to the landscape (an agricultural site) which was used both for gardening (close to the house) and farming; they possess a unitarian system that allows them to be independent in character and function; construction wise, they were all built of rough brickwork and coated with stucco; stone carving was reserved for 'refined' details such as the bases and capitals of columns and window frames, (writes Ackerman); they all have a central axis (where a hall was located) and a symmetry of the adjoining rooms[358]; the overall layouts was based on a composition of spaces organized according to the main axis, which created a systematization of the ground floor plan, a sort of archetypal geometry that is considered a main distinguishing feature of the Villas; they all use harmonic ratios that define a relation between the whole and the parts, echoed in both the façade and the floor plan; they use elements of the classical temple front (in the façade), adding nobility to the architural piece; they were all designed as if aggregated around a spine, like an organism[359] and organized according to a hierarchy of functions and proportions; they follow the same typological program (main ground level where all the noble functions were located and an additional basement where the functional programmatic requirements, such as kitchen and storage were placed)[360] ; they are also united in their simplistic character, for Palladio believed they should all be devoid of rich ornamentation.

> **The systemization of the Plan and the Façade:** Michele Furnari in his book 'Formal Design in Renaissance Architecture, from Brunelleschi to Palladio' (1995), explains that the overall layouts of the villas were based on the composition of a series of different spaces (either opened or closed), organized along a longitudinal axis. However, she calls attention to the fact that in some Villas, the axis is not used as such: '' This axis however, is not used as a true axis of symmetry, but only as a reference line to balance the building masses to the right and the left.'' (Furnari, 1995, p. 167). This view of the importance and systemization of the plan is also echoed by Wittkower. According to Wittkower (1971): '' It is the systematization of the ground-plan which

Author Richardson (2014) also explains that Palladio's aim '' (…) was to recreate the Roman villa as he had come to understand it from Latin descriptions in the writings of Pliny and Vitruvius.'' (Richardson, 2014); this meant that the Villa would be simple in character, 'of stuccoed brickwork' and with a 'minimum of carved-stone detail'.

[358] Palladio followed specific set of rules from which he never departed in all the Villas: '' He demanded a hall in the central axis and absolute symmetry of the lesser rooms on both sides. '(…) so that the building may be the same in one part as in the other.'.'' (Wittkower, 1971, p. 70).

[359] For: ''Palladio (…) compared the dwelling with the human body, the noble and beautiful parts of which the Lord ordained to be exposed, and the ignoble but essential parts to be hidden from sight.'' (Ackerman, 1966, p. 54). Formally, as an echo of this 'organism' character, the Villas present themselves as a single structure, arranged as an organized whole, (a centralized block raised on an elevated podium) around a central core with symmetrical sides.

[360] **The typological pattern that is common to all of them is as follows:** formally, they had either one or two storeys and a basement or a central block with one major storey (and the others secondary); in either cases, the spaces bellow the roof structure were used for storing some of the productions from the farm, such as grain, while simultaneously, insulating the rooms bellow, and the basement was used for the kitchen, store-room, laundry and other services; the main storey, the public areas, developed in a central axis, with symmetrical rooms radiating outwards in proportion (smaller rooms more distant from the central areas, less noble and secondary rooms); these contained the living areas, from living room, dining room, and main master bedroom (central axis) to the secondary rooms such as offices for the estate and other secondary functions. They also possessed pedimented porches with open colonnades (either on both levels or one), a central temple front, and attached colonnaded or arcaded wings for 'farming' functions.

> became the distinguishing featured of Palladio's palaces and villas.'' (Wittkower, 1971, p. 70); all of the villas, he continues, derive from the same 'geometrical formula', and the Villa that shows this pattern most clearly is the Villa Thiene at Cicogna, which was never concluded but started undergoing construction around 1550, (it is featured in Book II, Page 60). In plan, each vila is a modification of the same archetypal geometry, grouped and re-grouped in different ways, in order to satisfy different programmatical requirements. Albeit, this grouping and rearrangement, explains Wittkower (1971), was not such a simple operation as it may seem, for harmonic ratios were employed, both to the whole and to all the single elements of the room and to the relations between elements: '' (…) it is this demand for the right ratio which is at the centre of Palladio's conception of architecture.'' (Wittkower, 1971, p. 73). The facades, are in similar essence to the plans; Palladio considered a relation between the elements as a whole, as a ratio between length, height and depth of the villa, thus considering it as 'three-dimensional' block. For the overall conception of the facades Palladio turned to the classical temple front, '' (…) which offered a motif associated with dignity and nobility, and invariably adapted it to the facades of the villas.'' (Wittkower, 1971, p. 74); this temple front applied to private buldings, allowed Palladio to nobilize them and simultaneously exemplifies his ideal of what architecture should be. It was used in various ways: either attached to the main wall as in Villa Emo, or in the classical way, defining a portico as is the case in La Villa Rotunda; these were all explored, with their own innate freedom of composition attached to their own set of rules and principles.

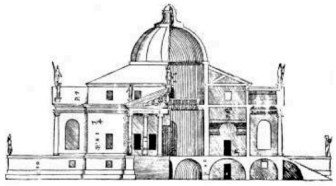
The differences between them emerge as variations of the type: where each one presents a specific kind of variation of the overall 'conception of architectural harmony and composition' (Ackerman, 1966, p. 36). There are also some differences in style and character (some were more conservative, some more modest and others more exuberant), which, according to Ackerman (1966) were due to the clients desires. In Villa Barbaro[361], for example, Palladio is believed to have collaborated with the painter Paolo Veronese, that 'invented' and created a new way of painting, an illusionistic landscape painting, covering most of the walls with vibrant frescoes: promoting a union between the architecture and the painting.

Another main difference is pointed out by the author Caroline Constant (1993) in her book *The Palladio Guide*, where she explains that the side facades of most of the villas lacked development (the frontal view dominates); however, Palladio '' (…) gradually resolved these shortcomings as the cross-axis became important to his spatial idea.'' (Constant, 1993, p. 13). So, what sustains most of the differences between the Villas is a gradual evolution of Palladio's architecture.

[361] **Villa Barbaro:** Michele Furnari (1995) explains that Villa Barbaro is considered, along with Vila Rotunda, to be the best example, and ''Palladio's most important Villas.'' (Furnari, 1995, p. 171). It was commissioned by Daniel Barbaro, a prominent man of culture in both Venice and Rome. Formally, the Villa is defined by a central block that extends out into the garden, to left and right of this central block extends the porticos and the unites containing all of the service spaces (as was characteristic of Palladio's villas), that extend backward to define the rear garden and some terrace spaces. Overall, '' The plan is characterized by a cruciform central space.'' (Furnari, 1995, p. 171); defined by two distinct axis: the north south axis and the east west axis. The two façades have a triangular pediment and uses the ionic order. The Villa, the author explains, is not only important because of it's unique architecture, but because of the decoration defined by Paolo Veronese in it's interior spaces; according to the author, the two (architecture and painting) work as one single element and do not enter into conflict. Canova suggested (explained by Furnari), that: '' (…) although these paintings are very important, even exceptional, they remain in some way dependent on, and conditioned by, the architecture that surrounds them.'' (Furnari, 1995, p. 171).







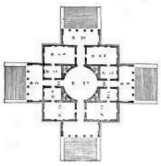




Photo 1:: Photo from beneath the portico; Source: http://www.villalarotonda.it/en/larotondadelpalladio.htm; Photo 2: Villa Context; Source 1: http://thepalladiantraveler.com/2015/02/23/travel-architecture-photography-italy-veneto-vicenza-villa-la-rotonda/: Photo 3: La Rotunda Plan, Section and Elevation; Source: http://en.wikipedia.org/wiki/File:PalladioRotondaPlan.jpg; Photo 4: La Rotunda entrance; Source: http://www.viaggiointorno.it/travel/it/italy/vicenza/gallery_vicenza/photo_41700395-Villa+La+Rotonda.html

PLATE 37: LA ROTUNDA

… The Commission and The Construction

Commissioned by Paolo Almerico, who had retired as a priest and decided to return to Vicenza after spending his career in the Vatican Court, sold his palazzo in town, and was in want of a 'palazzo/villa' located in the countryside, far away from the urban life and immersed in nature; as such, the palazzo/villa is unique in program and circumstances, for it has no utility buildings and was not designed to be used for agricultural functions but leisure ones. Thus, it escapes the classification of a villa/farm. The ecclesiastical/spiritual views of Almerico deeply allowed Palladio to adopt a new and innovative perspective for the Villa. The construction began in 1567, however neither Palladio not the owner saw the end result; a second architect, after the death of Palladio (1580) was assigned to assist its completion by the new owners. One significant change brought about by the new architect was the substitution of the high semi-circular dome Palladio had designed, for a lower dome with an oculus, but ended up being completed with a cupola.

… Location, Environment, Access and Entrance

La Rotunda is located in Monte Berico, a hill that has views in all directions, and has a panoramic setting over the countryside, with the distant Vicenza on the horizon (less than a quarter of a mile distance from the city centre). This landscape (believed to have been 'love at first sight' for Palladio[362]) allows La Rotunda to be designed as an extension of the landscape itself, emphasizing its natural qualities and connecting with it in multiple ways. Not only is the environment of vital importance for the genesis of La Rotunda, but also, the Villa acts as a stage from which to appreciate the spectacle of nature (the porticoes of each of the facades, projected above the ground). Landscape and architecture act in perfect harmony. Smienk and Niemeijer (2011) explain that Palladio's strategy to place the Villa on top of the hill, on a sort of trapezoidal platform, allowed him to create this type of scenic encounter, making the villa both a tribune and a theatre. Ackerman (1966) also adds: ''Palladio designed it as if its chief function were to promote gazing at a scenery.'' (Ackerman, 1966, p. 70). In regards to the overall access to the property, La Rotunda can be reached in two distinct ways: from a country road to the north-west, or from the river to the north-east; in both cases the entrances exude grandeur, and they gradually ascend towards the house, each in their own specific way[363].

Author Caroline Constant (1993) explains that '' The Villa Rotunda demonstrates that Palladio did not need garden walls or outbuildings to integrate building and site. '' (Constant, 1993, p. 13). Instead, in La Rotunda, he relied on the neighboring fields to frame the building scenographically, establishing a primacy of the entry axis; she summarizes: '' Here architecture does not dominate the site – human reason does.'' (Constant, 1993, p. 13).

[362] Smienk and Niemeijer in their book 'Palladio, The Villa and the Landscape' (2011), explain that Palladio's selection of the site for La Rotonda was love at first sight: '' On his first visit to the site (…) Palladio would have realized that it was the right spot to build the ideal villa. '' (Smienk and Niemeijer, 2011, p. 119).

[363] In regards to the entrances to the Villa itself, Smienk and Niemeijer (2011) explain that the four entrances are different from each other in content and form, depending on the landscape from which they come: '' Each of the four contributes to anchoring the villa in the landscape that is so different on all four sides, made possible by the construction of the platform and the deliberately eccentric placement of the house.'' (Smienk and Niemeijer, 2011, p. 128).

… Influences and Inspiration

It is possible to announce as inspirations and influences for La Rotunda, various architectural pieces and references: firstly, the centralized plan of the church, the pantheon, the mausoleum of Romulus, and the temple of Hercules Victor at Tivoli (featured in a drawing made by Palladio, that predates the design of La Rotonda) as suggested by Furnari (1995)[364]; secondly all the architectural legacy derived from the studies conducted in Rome; and additionally, the overall previously designed villas, of which La Rotunda is a continuation of.

… Outside Form and overall Innovations of concept: The Monument

La Rotunda has unique characteristics to it: it has a unique form which is a square volume, with no primary facades but four facades designed equally, facing all four directions (opening up to about 90 degrees allowing the villa to look equally to all points of view); all four sides of the Villa are identical to each other in form and in content including the classical porch (which in Villas usually appears on one side) which appears on all sides; each of the porticoes has a pediment which is adorned by sculptures of ancient and classic deities, and is composed by six ionic columns; it has a central dome which emerges at the centre of the volume (a symbol of grandeur making the Villas a sort of monument[365]). Other notorious innovations determined by the Villa include: the new concept of the villa as a 'detached' entity, free standing in the landscape, the monument characteristic of the dome as a sanctuary, the choice of the hilltop site, and the use of the central plan. One last reference is the fact that to optimize sun light in the interiors, the global form is rotated 45º from each cardinal point of the compass. The Villa thus presents an entirely new concept, '' (…) in the history of the type of structure referred to by the name of villa.'' (Furnari, 1995, p. 172).

… The Plan

The design of the building and the plan is centralized and symmetrical: a square plan with four identical wings and porticoes projecting from each one of the façades and a centralized circular hall. The central plan refers back to a long list of references, theoretical and practical traditions: Alberti, Bramante,

[364] **Influences and Inspirations:** Furnari (1995) explains that: '' The Villa can be considered a secular version of the kind of central-plan church to be found in Todi (Madonna della Consolazione) or in Montepulciano (Madonna di San Biagio).'' (Furnari, 1995, p. 172). It is this idea of a monument, and scared space that served as the basis for inspiration for La Rotonda. The author further explains that there are a number of architectural ancient buildings that could have been the direct source of inspiration for La Rotunda. Firstly, the Pantheon, '' (…) the most famous central-plan building of the past and an essential part of any study of ancient architecture.'' (Furnari, 1995, p. 172). Another building is the mausoleum of Romulus, and the temple of Hercules Victor at Tivoli (featured in a drawing made by Palladio, that predates the design of La Rotonda); the drawing represents a temple, continues the author, that probably existed more in the 'artists imagination' rather than in real life, which possesses a porch with a pediment repeated four times. This drawing seems to be a germ of the conception idea for La Rotonda. This idea, seems to be derived, as suggested by Semenzato (explains Furnari), not only because of the landscape and site for the vila, but also because of Palladio's desire to perfect this type of 'universal' and 'perfect' design that seemed to have always been subject to some forms of compromise (which was the case, even with the Pantheon).

[365] **The Dome:** is of major importance, culminating as a round form that subtly shifts the forms of the architecture against the background of the sky; According to Ackerman (1966), the dome was used for its 'monumentality', and, '' (…) like the temple front, it is divorced from functional allusions to become a symbol of grandeur.'' (Ackerman, 1966, p. 68). It also expresses 'the uniformity of the plan' and the 'de-emphasis of axis'[365] continues Ackerman (1966). The central dome and the central space is what is said to have given the name to 'La Rotunda'. The use of the dome in the Villa reveals a new concept of the villa itself, also claims Furnari (1995) explaining that because of it, La Rotonda becomes a kind of monument. She explains: '' (…) like a sacred structure, this monument requires a dome.'' (Furnari, 1995, p. 172). The combination of all these elements was new, and no previous Villa uses the dome, or the other dramatic elements such as the four staircases.

Leonardo da Vinci and Michelangelo, '' (…) all expressed their preference in religious buildings for this type of plan.'' (Furnari, 1995, p. 172). It possessed neo-platonic associations, symbolic and metaphysical connotations. The main form is the intersection of square (has a dimension side of 11.80 meters) with a cross. The plan also used the consonance of the square and the circle: the two most 'perfect' and 'whole' forms, that should be used for the definition of the temple, as they are the forms that act most accordingly to divinity; as such, La Rotunda acts as a materialization of the temples ideals. Author Furnari (1995) in this regard explains: '' (…) he inserted the circular element into the square block, so that only the dome emerged and no longer contrasted with the porches, (…); '' (Furnari, 1995, p. 172). By uniting these two forms, these two basic archetypal geometric forms, Palladio resolves the problem of the coexistence of the circular lines with the straight lines, and metaphorically suggests the union between the 'imagination' and 'emotion' of the circle with the reason and intellect of the square.

… Interior Spaces and Materials

The Villa has two floors and a basement; the main floor, contains all important rooms, where the other floors were used for secondary functions. Authors Smienk and Niemeijer (2011) explain that '' The internal arrangement of the Villa, particularly on the piano nobile, reflects how definitive the panorama must have been for the design.'' (Smienk and Niemeijer, 2011, p. 128). As previously seen, they were also optimized in order to receive a maximum exposure to sunlight. The porticoes, with the steps leading up to it, opens up to a small narrow corridor, that leads to the centralized circular space. The central space is housed by the dome (the highlight feature of all the interior space), surrounded by a balcony and distributes to all the other adjacent spaces, that also connect amongst themselves through an outward circulation. The light flooded interior, contrasts greatly with the sober exterior of the Villa.

The paintings/frescoes for the villa were designed by the painters Alessandro and Giovanni Battista Maganza and Anselmo Canera, throughout the four principal salons: the West Salon (also called the Holy Room, contains frescoes of religious nature), the East Salon, (contains an allegorical life story of the owner, Paolo Almerico). These were painted from Palladio's designs, and he didn't 'approve' of their design. For Palladio, the spaces should be bare and simple, allowing for the architecture to move people, through its forms and light. In terms of the materials used, the overall construction is featured by stucco covered brick and stone; most of the columns are also stucco and brick, where as stone was left for very specific fine details: such as bases and capitals of columns and frames of windows.

… Proportions, Harmony and Humanistic Values

Although La Rotunda is mostly uniform and proportional, according to Ackerman (1966), It does possess some variations: there are variations in the facades, in the width of steps, retaining walls, etc. in order to respond to the site requirements. The Villa's proportions were designed and calculated according to the principles defined by Palladio; following the rules of geometry and harmony, each proportion is integrated amongst itself and in relation to the overall form. However, the underlying harmony principle was at multiple levels: harmony between architecture and landscape, between civilization and nature, harmony between reason and intuition, between man and God, between humanity and the divine, between life and the sacred, etc. This prevalence of harmony, at multiple levels, allows La Rotunda to emanate a

unique atmosphere. Author Tomás García-Salgado in his article 'A Perspective Analysis of the Proportions of Palladio's Villa Rotonda: Making the Invisible Visible' (2008) explains that the square and the cube define the geometry of the plan and the overall proportion of the space: [366]. As such, it is possible to understand a perfect materialization of the Palladian principle that the parts should all be a reflexion of the whole; in La Rotunda's case, with the use of the square and the cube.

… The Sacred Principles

Just as with other projects of Palladio's architecture, he uses ancient Roman temples as a model, and incorporates religious elements into the architecture, and turning the day-to-say life of the villa into a contemplative and spiritual experience. Wittkower (1971) claims: '' (…) complex ideas must be taken into account in order to understand his buildings.'' (Wittkower, 1971, p. 62). The Villa, as the sacred spaces of the classical tradition, and as had been defined in Palladio's previous villas: uses and incorporates principles of symmetry, proportion, perfection, harmony, beauty and unity. Consequently, La Rotonda acts a as reflexion of sacred principles and of a sacred life: with emotions of serenity, sophistication, and elevation, and a sense of balance, clarity, unity, and integration between the physical world and the world of God.

… The Spatial Experience

Having visited the house in September 2010, following is a brief description of the architectural spaces and the overall experience.

The Entrance: Upon entering the main gate, one is immediately taken aback by the trail that leads up to the house which sits at the top of the small trail, freestanding against a green natural landscape. Along side the trail are blossoming flowers that seem to be an introduction to the gardens and the architecture that follows.

The Surrounding Gardens: Once at the top of the hill, one is standing a few meters away from the La Rotunda; immediately, the height and architecture of the building makes one feel; the columns and the staircases exude an air of strength and independence that affirms itself over nature. Surrounding the whole house is a grass lawns, that with its infinite light green shades contrast greatly with the whiteness of the facades. This green lawn serves as a sort of podium for the house, and one can't help but walk around the house and contemplate at the landscape that seems to embrace it. All around are hilltops filled with dense green trees, however one has a sense of protection: the tall house free standing on one side, and the open landscape on the other. It is with surprise (even if one already known in advance) that all the facades are the same. As

[366] **The cube:** '' The geometry of the square seems to rule the configuration of the Rotunda's plan, since several imaginary squares can be identified in a concentric position alternating with other squares, which are rotated 45° from the main plan.'' (García-Salgado, 2008, p. 269). He further adds that the arrangement of the plan has mirror symmetry along both the longitudinal and the transversal axes, and can be understood as an interior progressive succession of squares within squares, in two positions: the standard one and the rotated one. The first square defines the outward configuration and outward limits of the stairs; the second one in defined by the outward columns; the third one by the first interior/exterior walls; the fourth one by the succession of doors that create visual openings at the same geometry line; and the last one is defined by the central space. Inward successions of squares turn into cubes when the geometry of the space gains volume.

one wanders throughout the garden and observes them, one can't help but smile in awe at this precious gem that seems to welcome the world always in the same manner: independent, freestanding, strong, noble and pristine.

The Staircases: After surrounding the gardens and observing the facades of the Villa, one feels like we must enter it and see what secrets it holds in it's interior. Afterwards, upon walking up the staircases one is compelled to linger on beneath the stretching columns. It is a space that sheltered and protected, it creates a sort of nest from the world, and is the perfect setting from which to observe the outside wilderness. Beneath those columns, where one doesn't feel the weight of the rooftop (sitting high above), there, high above the grass, the spectacle of the world can be understood. At the centre of this transition space is a door.

The Entryway: Following the main door is a sort of narrow and obscure corridor, which creates a great contrast with the openness and expansion of the outside. It is a sort of transition area, which one immediately understand, as one is compelled to keep walking until the main central area.

The Central Area: One is led to this central area where one is immediately taken aback and surprised by the visual information. The space is circular, and painted on all the walls is images of the classic Greek Gods and Goddesses, that seem to use an infinite number of colours. The paintings are realistic, and made to seem as if the Gods are really sitting there, in that space, observing us. Behind them is an endless landscape. Above these paintings is a circular small balcony, which seems to belong to the first floor of the house and centred in the space and in the dome that encloses this round space, is a round skylight that opens up to the heavens, allowing for the natural blue of the sky to come into this enclosed space. The proportions and form of space and the skylight create a feeling of wonder and completeness, which is amplified by the presence of the Gods that are sitting there, right in front of us. It is a space that is designed for meditation, contemplation, and understanding our own place within ourselves and within the world.

The Surrounding Rooms: Upon gazing in awe in that central space one is led to wander around in the surrounding spaces. One enters the first surrounding room from a door that is located in the narrow hallway. This room possesses a completely different atmosphere than the main circular area: it is flooded by natural light, it is light, airy, and opens up to the landscape; it is a living room, and possesses comfortable (yet noble) chairs scattered all around, and is adorned by classical paintings; the room that follows is the dining room, which possesses the exact same feel to it and the same sort of dimensions, proportions and light. However, one main difference between these adjacent rooms is the overall colour that is attached to each of them: whereas the living room was red, the dinning room was sort of brown and dark. Another adjacent room is the library, filled with books form top to bottom. These rooms, unlike the main space, are meant for living: a life of rest, repose, reading, entertainment and family time. Whereas the main central

space was meant to be a space for contemplation and meditation, these spaces are designed for ordinary life.

(6) Key principles, concepts and values

… The Search for Universal Principles

Palladio believed that, in order for architecture to portray its full 'power', it needed to follow a series of principles, or 'universal precepts of architecture'. These principles follow a three-part system:

… The Principle of Nature

Palladio claims: '' 'Since architecture, like all the other arts, imitates nature, nothing (in it) can satisfy that is foreign from what is found in nature.' Quatro Libri, I, XX.'' (Ackerman, 1966, p. 160). Ackerman (1966) writes that this inspiration from nature is an inspiration for rationality in structure and practicality in design; in a first instance, there is logical design and engineering throughout Palladio's architecture; at a second instance, a deeper root of inspiration from nature, is the humanistic ideal, that sustains that the supreme order of the Divine in nature should be 'imitated', in mans creations. However, '' The imitation of nature was quite the opposite of copying what one sees around; it was a search for abstract principles.'' (Ackerman, 1966, p. 160). It is this search for nature's principles, Ackerman claims, through proportions, composition and equilibrium that defines Palladio's unique qualities.

… The Body Image and The Hierarchy of Parts: 'Organism'

Also, there is an elemental **hierarchy of parts**: parts nearer to the centre are larger that those further away; there is a central focus from which all the other parts derive from. '' This core, bound to the wings by proportional relationships, is the head and torso of the body; the central axis is its spine.'' (Ackerman, 1966, p. 168). The architect applies to the building a system of ratios established, having these to comply with a higher order, and the building should mirror/echo the proportions of the human body: '' As man is the image of God and the proportions of his body are produced by divine will, so the proportions in architecture have to embrace and express the cosmic order.'' (Wittkower, 1971, p. 101). The laws that determined these ratios and principles had been defined by Plato and Pythagoras, continues Wittkower, whose ideas saw new light in the Renaissance.

…The Elevation of Life into Sacredness

A unique property that identifies Palladio's architecture is the ideal of reconciling man with his spiritual and virtuous life. Architecture, through it's beauty and proportions, can be a union between the intangible world of virtue, forms, and heavenly manifestations of the spirit and the pragmatic sensorial world of the body; a union of both Platonic ideals (virtue and spirit) and Aristotelian principles (experience and the senses). In this union lies architecture's ability to serve as a link, or as a connection 'device', that allows man to connect to both its physical body (experience, emotions) and his spiritual realm (virtue, ideal of sacred life). This is the moral duty of architecture and of all the arts: to allow man

to understand more than he does, to give him the space where he can encounter fragments of another reality and where he can see through beauty, an ideal that is almost eternal and timeless. Only through architecture and art, can this union be manifested, for in nature, God's creation, the spirit of man is not reconciled. The power of architecture, it's meaning and it's significance lies precisely in this unique ability. An ability that Palladio saw very clearly, and aimed to re-create through all of his works.

> ***Ending Remarks:*** *As a Renaissance architect, Palladio's use of 'ideal proportions' in his architectural spaces, aimed to create spaces that communicated virtue, wisdom and truth, and aimed to elevate man into a higher dimension of spiritual life. Rooted in the ideal that good architecture has a moral obligation to transform man's life and allow him to connect the most virtuous sides of his own existence and to the platonic world of forms (where things are pure and in their most truest condition). His architecture is a pursuit for that which is harmonious, universal and spiritual using proportions (derived from nature, music and number) to create an ideal of life, virtue and spirit. Noble architecture, then, creates proportional harmony, defined throughout the whole structure, as a reflexion of sacred principles and of a sacred life, echoing the beauty of the 'wholeness'. In this ideal (and ability to unify man with those ideals) lies its complex meaning and significance.*

Summary Notes: Andrea Palladio

1. *Andrea Palladio's architecture, is a pursuit for that which is harmonious, true, universal and spiritual: using proportions and forms to create an ideal of life, virtue and spirit. In this ideal and ability to unify man with those ideals, lie it's meaning and significance.*

2. *Proportions, are the system that sustain the 'universal design' and the 'divine harmony'.*

3. *Architecture can be defined, by universal principles that support its meaning and significance.*

4. *The arts rest on universal principles, that are discovered through experience and relate to wisdom.*

5. *The practice of good architecture, is a 'moral obligation'.*

6. *The relationship between the parts and the whole, the sense of order and harmony, and the proportions that define every part of the design are fuelled by symbolic/mathematical/musical harmonies – nature's creation methods.*

7. *Architecture is a union between the intangible world of virtue, forms, and heavenly manifestations of the spirit and the pragmatic sensorial world of the body: union of both Platonic ideals (virtue and spirit) and Aristotelian principles (experience and the senses)*

8. *A proportional harmony, defined throughout the whole structure, is a reflexion of sacred principles and of sacred life: echoes the beauty of 'wholeness', conveys the 'universal design' and communicates the 'divine harmony'.*

9. *Architecture as a 'manifestation of virtue', can inspire man and make man's spirit rise towards the 'virtues' materialized through architecture.*

10. ***Conceptual diagram***:

Table 1: Andrea Palladio Conceptual Chart

CREATION			CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Table 2: Andrea Palladio Synthesis Chart

ANDREA PALLADIO

1. FIELD:
- *Architecture*

2. EDUCATION/BACKGROUND:
- *At 13, became an apprentice to a stone carver in Padua, (the sculpture workshop of Bartolomeo Cavazza da Sossano);*
- *Continued as a stone carver in Vicenza*
- *At thirty, Count Giangiorgio Trissino took him in and educated him on architecture, teaching him to be his apprentice and 'specialist-assistant' of architecture.*

3. EVOLUTION:
- *Palladio evolution is characterises by a maturation of style and perfecting of proportions.*
- *Conciliation of his own vision, with what he had leant from others: treatises, travels, etc.*

4. CONTEXT:
- *one of the most creative periods in the history of architecture*
- *Humanist context and training.*
- *In Venice, he was surrounded by the spirit of a Golden Age, distant from the Roman and the Florentine schools*

5. INFLUENCES:
- *by the Venetian tradition (the Byzantine fantasy)*
- *by the early Renaissance architects and artists: Brunelleschi, Bramante, Raphael and Michelangelo*
- *by the architecture treatises of Alberti and Vitruvius (overall vision and ideas of architecture)*
- *by the classic architecture of Rome: seen in his travels there; influenced by the ancient ruins and the observations of classical temples*
- *by Bramante's Tempietto (1502), considered the best example of architecture.*
- *by Sylvio Belli, On proportions and Proportionality (1573), for his arithmetical principles.*

6. CREATIVE PROCESS:
- *methodology is related to the calculations of proportions and ratios in order to achieve the most harmonious relationships of the parts and the whole*
- *led by a sense of order and a desire to achieve unity and virtue, through mathematics, geometry, form proportions and harmony.*
- *a continuous subdivision of whole into parts*

7. PERSONAL COSMOLOGY:
- *belief in the overlapping of creative process, methods and techniques into one single system with one single aim.*
- *proportions are the system that sustains the 'universal design' and the 'divine harmony'*
- *the belief that architecture could be defined by principles (publishing of Treatises)*
- *the temple was believed to be the most noble architecture element and that most demonstrated'' (...) 'the unity, the infinite essence, the uniformity and the justice of God.'." (Wittkower, 1971, p. 24).*
- *sustained that Architecture was a manifestation of virtue*
- *believed that the practice of good architecture was a 'moral obligation'*
- *the arts rest on universal principles that are discovered through experience and relate to wisdom.*

8. EMOTIONS
- *Awe*
- *Order*
- *Harmony*
- *Surrender*
- *Virtuous*
- *Beauty*
- *Sacredness*

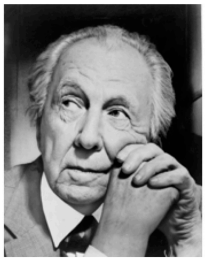
9. OBJECTIVES:
- *to create a proportional harmony, defined throughout the whole structure.*
- *to convey the 'universal design' and the 'divine harmony'*
- *to echo the beauty of 'wholeness'.*
- *to define the 'permanent values' of architecture*
- *to create through architecture a 'manifestation of virtue': inspire man and make man's spirit rise towards the 'virtues' materialised through architecture.*
- *to reveal 'certain truths'*
- *to embody virtue and 'aid' man in turning towards divinity, once more.*
- *to be a reflexion of sacred principles and of a sacred life.*

10. CHARACTERIZATION:
- *designed many different architectural programs (such as churches (mostly in Venice) and palaces (mostly in Vicenza)), but is most known for his Villas - archetype of Palladian architecture.*
- *embodiment of the Renaissance ideal of humanism and classical scholarship.*
- *surpasses tradition in his own search for virtue.*
- *embodiment of the classical tradition, his sense of order and the relationship between the parts and to the whole*
- *created his own system of proportions in search of his own vision of 'divine harmony'.*
- *focus on number for the calculation of proportions: multiplication system that creates a series of numbers that relate to each other*
- *associated to harmonies: musical and visual harmonies*
- *union of both Platonic ideals (virtue and spirit) and Aristotelian principles (experience and the senses)*
- *unique view of architecture: a union between the intangible world of virtue, forms, and heavenly manifestations of the spirit and the pragmatic sensorial world of the body*
- *Reflection of the principles of symmetry, perfection, harmony, beauty and unity.*

11. CONCEPTUAL FRAMEWORK:
- *Harmony, Virtue, Truth and Sacredness*
- *Proportions, Order and Symmetry*
- *Unity and Sense of Beauty*

12. VALUES
- *Metaphysical, Sustainable, Philosophical and Spiritual*

13. MEANING/SIGNIFICANCE
- *The inherent meaning to be a 'manifestation of virtue'.*
- *To touch man's spirit and inspire him to a better life.*
- *Revelation of truth and universal ideals.*



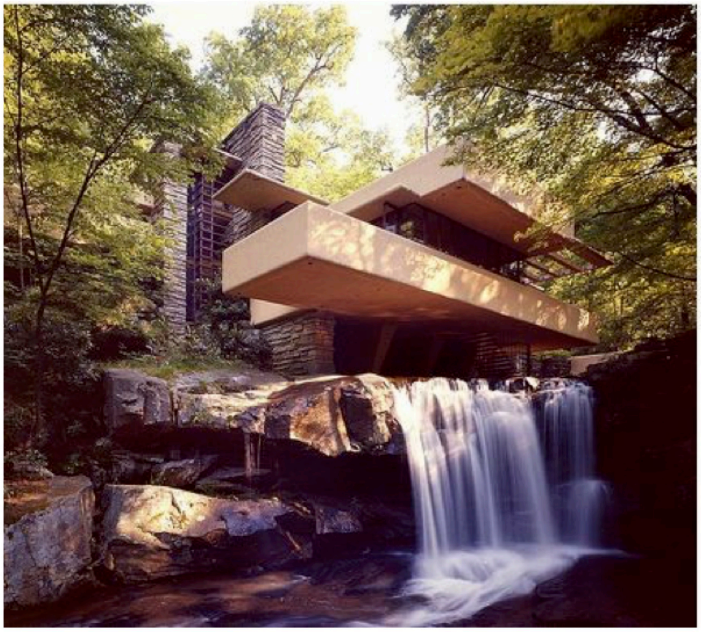


Photo: Frank Lloyd Write Portrait; Source: https://en.wikipedia.org/wiki/Frank_Lloyd_Wright;Photo: The Fallingwater; Source: http://www.archdaily.com/60022/ad-classics-fallingwater-frank-lloyd-wright/5037dde628ba0d599b000091-ad-classics-fallingwater-frank-lloyd-wright-image

PLATE 38: FRANK LLOYD WRIGHT

6.2. FRANK LLOYD WRIGHT

(1) artistic evolution, context and characterization

… Artistic/Architectural Context

Frank Lloyd Wright emerged in a very specific American architectural context, between 1895 and 1905. It can be understood in a two folded way: the first, there was an overall lack of a cohesive language (architecture was a combination of multiple styles) that could create a significant architecture for the nation: as explained by author Pfeiffer (2007)[367] and by Frank Lloyd Wright himself in the description of the American house as 'belonging to nowhere', possessing no 'sense of unity' and being more a 'box than a home'[368]; the second, it was a time of innovation in terms of construction materials and techniques (industrial revolution), however, architecturally, there was no reflexion of these innovations. Richardson and Sullivan led the way in architecturale innovations, and established an architectural context for Wright to emerge.

In general terms, it is possible to contextualize Frank Lloyd Wright as a child of the nineteenth century: both in his architectural/aesthetic vision (derived from the lack of unity analysed above) and in his philosophy. The contextual philosophical nature of the Romantics and the Transcendentalists[369], that was prevalent at the time, also had a profound impact on Frank Lloyd Wright, shaping his main philosophy of life and of architecture, and allowing him to create a vision for a better 'American architecture', managing to create a new possibility of life and architecture for the future.

… Artistic Evolution

Frank Lloyd Wright's architectural evolution can be understood as a clarification of his ideals, values and purposes. He began defining his sense of identity as a person at a very young age, which reflected in his early architectural creations, that already reflected his core values. An example of the first manifestations of his vision are the Prairie Houses, which is the name given to the type of houses Frank Lloyd Wright developed between 1900 and 1911, located in the prairie of the Midwest. They were designed to accompany and accentuate the natural beauty of the prairie in which they were located and can be characterized by their modest proportions, rooftops slightly tilted, soft silhouettes, low terraces,

[367] **Architectural contextualization**: The architecture in the United States, was a combination of different eclectic styles, According to the author Pfeiffer (2007), these styles couldn't create a cohesive language, sense or meaning for the nation he claims: '' It was a time when architecture was seen as an application of fashions and styles, without any relation to the structures and construction techniques. '' (Pfeiffer, 2007, p. 11); Free Translation from: '' Tratava-se de uma época que olhava a arquitetura como uma aplicação de modas e estilos, sem qualquer relação com as estruturas ou técnicas de construção.'' (Pfeiffer, 2007, p. 11)

[368] **The lack of unity in the American House:** Wright also contextualizes the overall o in his book 'The Natural House' (1970) also contextualizes the architectural scenario of the time. He claims: '' The typical American dwelling of 1893 was crowding in upon itself all over Chicago (…). That dwelling had somehow become typical American architecture but by any faith in nature implicit or explicit it did not belong anywhere.'' (Wright, 1970, p. 13). He further explains that what was the matter with the American House was that it 'lied about everything': it had 'no sense of unity', it was 'stuck up', was 'thoughtless fashion', and '' It had no more sense of earth than a ''modernistic'' house.'' (Wright, 1970, p. 14). These houses, continues FLW, were more hives than homes, mere boxes rather than houses. Another aspect that characterized this type of construction, he continues, is the lack of consideration for the human being; they lacked a sense of proportion and used a sense of common place and monotony rather than unity and uniqueness.

[369] Cronon (1994), on this regard, explains: '' (…) Wright was a nineteenth-century romantic, steeped in idealist traditions that reached back through Louis Sullivan and Walt Whitman to the New England Transcendentalists and beyond.'' (Cronon, 1994, p. 10).

projected walls, open interior spaces and surrounding the neighbouring gardens. They are simple in character and they use the colours and the materials of landscape. With these houses, Frank Lloyd Wright's language and personal significance of architecture begun to develop. The author Pfeiffer (2007), in his book Frank Lloyd Wright (2007) claims that these projects represented an evolution not only in language but also in principles materialized by the house's form[370].

Frank Lloyd Wright's architectural evolution, thus, is characterized by a growth of the values that he begun exploring in his Prairie Houses: the opening of the interior space, the subtlety of the exterior forms, careful concern for materials and the integration between architecture and nature. His architecture progressed, according to these principles, to his growing creativity and the desire to materialize his vision of an organic natural architecture that could sustain man in multiple ways of existence.

… Architectural Characterization

Frank Lloyd Wright created various building types in his multiple architectural projects: including houses, offices, churches, schools, skyscrapers, hotels, and museums. Besides designing the architecture, Wright also designed the interiors of his spaces, such as the furniture and the glass panels. All of these forms of creation, responded to specific characteristics that resulted from him unique view of life, man and spirit.

Wright believed in an organic architecture that should integrate buildings with the natural world, creating a new sense of space. In a broad way, FLW's architecture (and his other creations) can be characterized by this union between man, architecture and nature; this union aspired to a deeper connection between man and the universe and as such is manifest throughout all of the design process and the overall architecture that from there results.

Another of the aspects that most defines Wright's architecture is the use of pure forms and the use of geometry (and the overall composition that results as a plan, as a whole and a three dimensional volume). Cronon (1944) summarizes this, when he explains that Wright's approach to defining form was a composition and combination of a series of basic geometrical forms and shapes geometrical shapes and forms (the line, the spiral, the circle, the sphere, the square, the cube, the triangle and the tetrahedron). These geometrical abstraction and compositional elements where used both in the overall form defining process and in the decorative elements. His love for geometry is derived from the belief that geometrical forms represent not only nature, but also capture a deeper essence: their symbolic meaning. These geometric abstractions (using nature as the inspiration) aimed to '' (…) capture the inner meaning of outward forms to reveal the cosmic unity of nature and spirit.'' (Cronon, 1994, p. 15). As such, since geometry was the language of creation, through the use of geometry in its most basic forms and in combinations Wright saw a means to create a unity between man, nature and spirit.

[370] **The Prairie Houses:** In plan, author Pfeiffer (2007) continues, the house possesses 'open spaces', defined only by 'small architectural tricks' instead of divisions and doors (Pfeiffer, 2007, p. 21). Another change was the integration of the architecture into the landscape: Wright uses an elevation of the floor plan in order to grant a better view of the landscape. In terms of materials, there was a reduction of them, both in the interiors and the exterior: using wood, plaster, glass and stone. Simultaneously, there was a growing respect for natural materials that reflected the characteristics of nature. But the main innovation, explains Pfeiffer (2007) was the conceptualization of the interior space, that begun to be conceived as something open and ample rather than fragmented and individual. The Prairie Houses were part of a larger group of architects that together defined the Prairie School or Prairie Style. As a movement, they sustained the aesthetics and values of the Arts and Crafts Movement begun in the late 19th century in England mainly by John Ruskin and William Morris, defending handcrafting and craftsman guilds as a reaction against assembly type construction and mass production. The style was also an attempt to define a North American style of architecture.

Another aspect that characterizes Wright's architecture is the use of specific materials. He used materials and structural forms in innovative ways, while at the same time creating a link between the architectural object and the natural landscape.

Formal aspects such as geometry and materials, served a broader function: that of creating his vision of an architecture that promoted the integration of man to the natural world (to the landscape); in doing so, architecture would become a vehicle of God.

Henceforth, it is of reference that Wright's most distinctive characteristic, is the sensitivity to which he approaches Architecture (as this emotional and spiritual entity with extreme powers). This view is also echoed by Cronon (1994) when he claims: ''The secret of Wright's architecture, he would surely have reminded us, will not be found on its surface but in its heart. '' (Cronon, 1994, p. 28). It is the underlying sensitivity and the intrinsic goals and visions that sustain a deep philosophical and religious way of life, that most defines Wright's architecture.

(2) creative process, methodology, techniques and characteristics

… Creative process, methodology and techniques

Frank Lloyd Wright's creative process and methodology is led both by rational ideals and by intuitive understanding. His overall belief of the creation process is guided by Emerson's views of spirit being the creator: '' " Spirit creates," wrote Emerson. It "does not build up nature around us, but puts it forth through us as the life of the tree puts forth new branches and leaves through the pores of the old.".'' (Cronon, 1994, p. 28). Thus for Frank Lloyd Wright, the creative process is led in a great way, by the spirit and the faculties connected to the spirit such as intuition, imagination and emotion. Moreover, in order to allow spirit to guide the creation Wright found in drawing the tool and the methodology he needed; it is drawing that defines a fundamental stage of Wright's projects. He used the drawing to conceptualize and to clarify his vision, at the various stages of the creation. Drawing commanded and clarified both rational ideas and intuitive emotional essences, allowing for a combination of both to emerge naturally.

The resulting project of his creative process is a combination of the multiple aspects he valued and considered important in a sort of playful way: '' (…) his exploration of new technologies, his invention of new styles, his striving for maximum expressive effect, his search for grammatical consistency in all his buildings with a remarkable playfulness. '' (Cronon, 1994, p. 27).

Equally, sustaining his creative process and methodology is a deep desire to reveal the 'greatness of his soul' and the inconsistencies, complexities and contradictions, that from there resulted, were simply a means to an end; these were cherished and protected, they defined the creation and the project itself, as explained by Cronon (1994), when he claims that Wright's ability to create was deeply accompanied by the ability to 'revel in the polarities of his own soul'[371] Cronon further says, that to understand this

[371] **Contradictions of the Soul in creation:** This view is described by William Cronon, in his article entitled *Inconstant Unity: The Passion of Frank Lloyd Wright* (1994), where he explains that Wright was '' Intent on proving the greatness of his soul from a very early age, Wright cherished his inconsistencies as if they were among his most beloved creations.'' (Cronon, 1994, p. 2). He continues explaining that Wright was a 'rebel' in character, that had a passion for the exception, inconsistency and independency, as

contradictive spirit that describes and define Wright, is to understand his architecture and his creative process better; these contradictions defines his 'greatness' and the complexity of the his designs. An example of these contradictions, is the fact that he believed the building should reflect the personality of the owner, and yet, the architect should impose his vision. Once this creation was achiever, Wright would become very protective of it. He is known for his rigidity and inability in compromising with his clients; he wanted to stay true to his vision and insights at every stage of the architectural development[372]. The author summarizes: '' "With consistency a great soul has simply nothing to do." If Emerson's preaching is true, then Wright's paradoxes surely seem to confirm the greatness that is everywhere evident in his buildings.'' (Cronon, 1994, p. 9).

(3) inspiration, influences, conceptual framework and themes:

… Influences

Wright was deeply influenced by multiple sources, even thought he denied them, and argued a total independence and originality[373]. This independence led him to '' (…) violate virtually every tradition of Western architecture.'' (Cronon, 1994, p. 9), in search of his own style, ideals and visions. Despite Wright's many denials, the architectural traditions and broader cultural movements did play a large role in shaping his architectural and artistic style. But the biggest influence, as detailed below, was the influence of his family, their religion and views on life, their teaching and their philosophies.

… (a) His Family's Legacy: Unitarianism

His father, William Wright, who was a composer, influenced him through his love of classical music (Bach and Beethoven), and the belief that music was a '' (…) near perfect metaphor for the principles that informed great architecture.'' (Cronon, 1994, p. 10). This view led Wright to view the architect as a composer that takes a theme, and uses creation to transform it and create an organic whole[374]. But it was his mother's family, The Lloyd Joneses that greatly influenced his views on religion, spirituality and life. Overall, the family was composed of a group of cultured farmers, kept by their own intellectual and religious views of the world: a version of Unitarianism, the intellectualism of the New England Transcendentalists and an extreme form of liberal Protestantism (suspicious of religious institutions), defending an individual's search for spiritual truth. The family motto was 'Truth against the

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well as a deep sense of self worth and the need to be around those who saw it too and could sustain him in his vision: '' Here was a man whose self-love seemed limitless, whose ego apparently knew no bounds, who nonetheless hungered for the validation he could only receive from admirers, disciples, and lovers. An extreme proponent o f individualism and personal independence, he did his best work only when burressed by soul mates who believed in his talent even more unshakably than he did. '' (Cronon, 1994, p. 2). Wright himself believed: '' (..:) his architecture to be an organic expression of the very personality that in many ways seems so problematic.'' (Cronon, 1994, p. 2). There are many ways in which these contradictions show in architecture, continues the author, such as One example is the 'Prairie style' that introduced shallow-pitched roofs into northern climates where snow accumulations would threaten the roof system with their heavy loads; another example is the proclaimed devotion to the nature of materials, yet he continuously pushed those materials to their extreme. Another inherent contradiction, is the fact that he believed the building should reflect the personality of the owner, and yet, the architect should impose his vision.

[372] Reference to: '' When his mind was set on a particular architectural effect. Wright could be as unwilling to compromise with a building's inhabitants- his clients-as he was with its natural environment.'' (Cronon, 1994, p. 23).

[373] Reference to: '' No artist has ever worked so hard to claim total originality for himself; none has sought more assiduously to deny the obvious influences that contributed to his special vision.'' (Cronon, 1994, p. 9).

[374] Reference to: '' "The composer," Wright later said. "is a builder. My father taught me to listen to a symphony as an edifice of sound. . . . Building is the same thing. It's taking a motif, a theme and constructing from it an edifice that is all consistent and organic organism as a whole." (Cronon, 1994, p. 10).

world'[375], a view that deeply influenced Frank Lloyd Wright, and set the ground for his architectural search and they believed in Unity, as a general life principle. On the whole, Unitarianism believed in the unity between all things and searched for the sacred principles of life; it aligned itself with humanism, romanticism, deeply influenced the transcendentalists (artistic movement) and introduced romantic idealism into American culture, as explained by Cronon (1994)[376]. These movements converged in Frank Lloyd Wright's views and architecture; he not only was greatly influenced by them but also helped to define them.

… (b) Emerson's Influence (The idea of Genius, and the understanding of Nature) and the Romantics

Frank Lloyd Wright was also greatly influenced by Ralph Waldo Emerson. Emerson (Unitarian minister turned popular lecturer and romantic philosopher) had a profound influence on the American society at the time, and was the leader that inspired writers that followed such as Walt Whitman, Henry David Thoreau and John Muir. Cronon (1994) claims: '' To understand the language and ideas of Frank Lloyd Wright today, one cannot avoid a serious encounter with Ralph Waldo Emerson.'' (Cronon, 1994, p. 12). Emerson, the author continues, gave a sort of license to Wright in defining himself as an iconoclast, individualist and as a genius; his refusal to accept any other vision or idea but his own, maintaining a strong sense of personal integrity, was derived greatly from Emerson's views, where he supported personal self-reliance above all else[377].

Emerson also influenced Wright's views on nature and helped shape his sense of 'organic architecture'. Nature, in the nineteenth century sense, in Emerson's and the Romantics sense, was not regarded in its pure condition as something beautiful, but instead as a manifestation of God: '' The romantics regarded plants and animals and the rest of creation as the outward manifestations of an all-encompassing spiritual unity whose name was God.'' (Cronon, 1994, p. 13). In this sense, the secularization of God was also the sacralisation of Nature. Emerson was not alone in defining and implementing Idealistic Romanticism in the United States. It had many roots, deriving from both American and European culture. Wright was brought up in the midst of these Romantic influences, brought to him at a very young age by his mother who introduced him not only to Emerson, but also Whitman, Thoreau, and the British writers such as Byron, Shelley and William Blake. Wright also read

[375] Reference to: '' "Truth Against the World" was their family mono, implying their belief-so basic to Wright's later sense of his own mission-that any- one who sought the truth and found it would surely have to defend it against the falsehoods of others whose motives and vision were much less pure. '' (Cronon, 1994, p. 11)

[376] **Unitarianism and Wright:** Cronon (1994) explains that '' Wright's own commitment to Unitarianism and to the principles of spiritual unity it espoused continued for the rest of his life. '' (Cronon, 1994, p. 11). The Unitarians believed in the unity between all things, searching for a sacred meaning that exists despite of the all the world religions, believing that science was a necessary tool for attaining truth and that no doctrine should be imposed in its 'supporters'. All these views and principles deeply influenced Frank Lloyd Wright's vision of the world and of architecture. Unitarianism was scattered all around the Boston area, and was the views expressed by most of the intellectuals and scholars of the time. Cronon (1994) explains that it '' (…) aligned itself with romanticism, humanism, and liberalism-the secular trinity that would help lay the foundations for modernity as the twentieth century would know it.'' (Cronon, 1994, p. 12). The Transcendentalists, a group of artists and writers that defined one of the early expressions of American romanticism, derived their views from Unitarianism:

[377] **Emerson's influence on defining the self:** '' "To believe your own thought." Emerson wrote, "to believe that what is true for you in your private heart is true for all men,-that is genius." (Cronon, 1994, p. 13). As such, for FLW, as described in his autobiography, his search for love (by leaving his family), his fight for architecture in the midst of misunderstandings, his overall non-conformist attitude, his 'loose ways with money' and his arrogance, all defined, sustained and '' (…) could serve as proofs of the independence, originality, and integrity that revealed true genius.'' (Cronon, 1994, p. 13). Emerson's philosophy not only supported and influenced his unconventional lifestyle but also his artistic and architectural mission: '' "Whoso would be a man," wrote Emerson, "must be a nonconformist. He who would gather immortal palms must not be hindered by the name of goodness, but must explore if it be goodness. Nothing is at last sacred but the integrity of your own mind."'' (Cronon, 1994, p. 13).

Schiller and Goethe, establishing a romantic aesthetic and was constantly surrounded by 'romantic' classical music such as Bach and Beethoven.

… (c) Other Influences, Defining Form: Froebel and Ruskin

Another major influence on Wright's aesthetic and architectural style was the Friedrich Froebel's blocks (derived from the book *Kindergarten Gifts and Occupation Material,* 1876). Froebel, the German inventor of the kindergarten, developed a series of exercises using blocks, forms and shapes, designed to educate a child's sensory experience of the world and associate those shapes to their symbolic meanings. Froebel himself drew inspiration from the Euclidean geometry as an expression of the Platonic order, and according to Cronon (1994) there is also the underlying Idealistic Romanticism as an inspiration; Wright was educated through this system (implemented by his mother at a very young age)[378]. So, this view of both adding simple shapes to define a complex form and its spiritual meaning in the cosmos, greatly influenced Wright's architecture.

Another great influence was John Ruskin and his ideas that the artist should: '' (…) convey not just the natural appearance of an object, but its meaning for the artist's soul.'' (Cronon, 1994, p. 16), as explained by Cronon (1994). It was John Ruskin's views that the artist should always turn to nature for formal inspiration, and that from nature's abstraction would result a revelation of deeper truths. For Ruskin: '' By using signs and symbols that conveyed deep emotional meaning even though devoid of any natural likeness an artist could represent the highest truths.'' (Cronon, 1994, p. 17).

Similar views that also influenced Wright, were the views of from Eugene-Emmanuel Viollet-le-Duc *(see Glossary),* that, unlike Ruskin, appealed for the use of new materials and types of construction, as long as the 'truth of the nature of the materials' was maintained and sustained. Violet-le-Duc also believed that the architect should search for inspiration in nature, observing it closely to draw from it principles. He claimed: '' "Architecture, this most human of creations." he wrote. "is but an application of principles that are born outside of us. . . . '' (Cronon, 1994, p. 17). Another major influence on FLW as an apprentice was the critic Owen Jones, and his decorative ornaments theories, that searched for universal principles. He was also greatly inspired by the Japanese Print. He became a collector of Japanese Art. What appealed to him, was the simplification and the elimination of the insignificant. He claimed: '' "A Japanese artist." he declared, "grasps form always by reaching underneath for its geometry. . . ." '' (Cronon, 1994, p. 21). Plato's eternal idea, that sustained form, was made apparent in Japanese prints for FLW, and he admired the means by which it was achieved. And lastly, Wright was also greatly influenced by the architecture of the time: Louis Sullivan, from the 1851 Crystal Palace forward, the technologies and materials that allowed for experimentations and new discoveries and the values and principles of innovation that sustained them.

[378] **Frobel blocks and Wright's education:** Overall, the system '' (…) intended that children begin to associate different shapes with well-defined symbolic meanings.'' (Cronon, 1994, p. 15). Anna Wright, FLW's mother used Froebel's textbooks to teach him as a kid. Froebel's system also sustained that the child should first learn the inherent simple geometric forms of nature, before imitation the external forms (such as plants or trees); only after understanding the inherent compositions, could the child begin to draw and understand the outside forms. Cronon (1994) explains: '' Wright (…) learned from Froebel that inner nature had a Euclidian grammar. This helps explain why an architect who consistently described his work as "organic" or "natural" could just as consistently refuse to include naturalistic designs in his structures, apparently preferring highly abstract patterns (…).'' (Cronon, 1994, p. 15).

… Conceptual Framework and Themes

… (a) Human Values

One of Wright's main conceptual themes was 'man' and his values, at its most significant understanding. On this issue, author Pfeiffer (2007), explains that the presence of Human Values, or what Wright called 'Humanity', was at the centre of every creation. These ideas are explained by Wright (in his book '*A Testament'* in the last chapter entitled 'Humanity - The Light of the World'), where he states that his desire had always been to create a more 'human' architecture, meaning an architecture that reflected innate qualities to man and to man alone. Pfeiffer (2007) writes, that one of these values is Imagination, that for Wright, was derived from a human light (just like the light of the sun in the physical world), that is above instinct, and that illuminates the spirit; so, to affirm that light (as imagination) in creation and in life, is man's true happiness, because it is above everything else, and it is what man commonly refers to as 'beauty' (the manifestation of the light). It is this light that feeds and nurtures the human soul[379].

… (b) Nature as Spiritual and Creation as part of the Universal Order

Another main framework that backs all of Frank Lloyd Wright's creations is his idea of nature that led to the belief of creation as part of the universal order, following the transcendentalist's and the romantics. Wight, on nature, declared: '' I think Nature should be spelled with a capital 'N,' not because Nature is God but because all that we can learn of God we will learn from the body of God, which we call Nature.'' (Cronon, 1994, p. 13). In this sense, the appreciation of nature was a religious understanding and nature's value was a spiritual one. Nature, for Wright, acquired it's meaning in relation to the human soul and the divine spirit (of which the human soul was a manifestation of), explains Cronon 81994), and all of nature was thus a symbol of a spiritual understanding. Natural forms, then, need to be infused and touched by the spirit to become alive, and here lies the role of the artist and the architect: to understand this universal spirit and to create a vision from it, so that the work of art would serve as a microcosm for the 'beauty of the whole'.[380].

This vision Wright possessed of Nature and of creation, was derived (as previously seen) from Emerson and the other Romantics. Emerson, for this process, (creation as part of the universal order) used the metaphor of the alembic (the technique the alchemists used to distil materials into gold); as artists, poets, architects and thinkers, distil the principles from the matter and nature, in order to arrive at some form of gold as universal spirit. Cronon (1994) further says that for Emerson the whole world was an expression of the spirit of God, through beauty, of which nature was the ultimate reflexion of the ultimate eternal beauty. The soul, then, seeks beauty in nature, to satisfy his spiritual longings, and art, then, is the creation of beauty through the divine principles in order to manifest the divine presence of God in world.

[379] As a synthesis, FLW claims: '' The interior light is the certainty that Architecture, Art and Religion of man are one and the same thing – their symbolic emblems.'' (Pfeiffer, 2007, p. 39) ; Free Translation from: '' A luz interior é a certeza de que a Arquitetura, a Arte e a Religião do homem são uma só coisa – os seus emblemas simbólicos. '' (Pfeiffer, 2007, p. 39).

[380] '' The multitudes of natural forms were only so much dead matter until touched by spirit. and so it was the role of human beings-especially artists-to breath life into matter by relating it [0 the whole of creation and thereby giving it spiritual meaning. '' (Cronon, 1994, p. 13) and '' The role of the artist in relation to this all-encompassing universal spirit was to distil its virtues into a concentrated vision so that the resulting work of art would serve as a microcosm for the beauty of the whole. '' (Cronon, 1994, pp. 13, 14).

Emerson's views on nature, beauty and the soul: In this sense, '' The highest expression of this artistic impulse was the human love of beauty', which found its roots in the graceful forms of organic nature but drew its true inspiration from the spiritual essence that lay behind and beyond those forms.'' (Cronon, 1994, p. 14). For Emerson, in this context, the whole world was an expression of the spirit of God, through beauty it was an expression of God's presence in the world. Natural beauty is of value as it reflects the divine order, the reflection of the ultimate eternal beauty. Emerson claimed: '' "The world thus exists to the soul," he wrote. "to satisfy the desire of beauty. This element I call an ultimate end. No reason can be asked or given why the soul seeks beauty. Beauty, in its largest and profoundest sense, is one expression for the universe. God is the all-fair. Truth, and goodness. and beauty, are but different faces of the same all." '' (Cronon, 1994, p. 14). In this sense, Art, then, is the creation of beauty through the divine principles in order to manifest the divine presence of God in world. As such, because it is infused with man's spirit, is a result of man's spirit, it is a truer, richer, more organic expression of nature's beauty and of God. As such, '' (…) if one wanted truly to encounter Nature. one could do so more readily in Art than in nature itself.'' (Cronon, 1994, p. 14).

Wright's views on nature and art are completely coincidental with Emerson's. As such, it is in this context that the words 'nature' and 'organic' need to be understood, rather than in the contemporary understanding of the terms. In the broadest sense, nature refers to the nature of order, of beauty and the nature of God. '' For Wright, the purpose of art and architecture was not slavishly to copy external nature, but to use it in the way Emerson recommended, as the occasion for exploring inner nature and thereby expressing universal spirit.'' (Cronon, 1994, p. 14). For the artist, nature was a potential waiting to be transformed and led by some even greater ideal.

(4) underlying theories and ideals

… Theories and writing

In all, Wright wrote about 20 books and many articles over the course of his lifetime. He was also a popular lecturer in the United States and in Europe. He wrote extensively about his visions and ideals, and summarized his views on architecture, art and creation in various publications. Cronon (1994) claims: '' Rarely has an architect said so much in defence of his own vision or tried harder to articulate a philosophy that would make aesthetic and moral sense of his creations. '' (Cronon, 1994, p. 9). He explains, that in reading all of Wright's theories, letter's and lectures, it is possible to understand the 'obsession with certain idea' that he believed represented all of his work. In such a way, one is led to discover his driving principles that symbolize even his most varied contradictions.

… (a) Art and Conventionalization

One publication of reference was written in 1900, an essay titled '*A Philosophy of Fine Art'* where Frank Lloyd Wright synthesized his theory Art and his doctrine of 'conventionalization'. It is one of the least well known but most important of his career (according to Cronon (1994)). In the essay he argues that the artist needs to do more than merely imitate nature, he must possess a 'prophetic eye', and distil natural beauty into a 'conventional' essence: '' Through this "rare and difficult process," Wright said, the flower's "natural character was really revealed and intensified in terms of stone, gaining for it an imperishable significance, for the Life principle of the flower is translated to terms of building stone to satisfy the Ideal of a real 'need.' This is Conventionalization, and it is Poetry.'' '' (Cronon, 1994, p. 17). The task of Art then, was to define nature's symbolic meaning, in order to guide civilization. Wright adds:

‘’ A work of architecture is a great coordination with a distinct and vital organism, but it is in no sense naturalistic-it in the highest, most subjective, conventionalization of Nature known to man, and at the same time it must be organically true to Nature when it is really a work of Art." (Cronon, 1994, pp. 17, 18).

… (b) The Search for the Good, The True and Beautiful: The Divine in the World

Frank Lloyd Wright, in all of his creations, writings and theories, believes there is a cohesiveness of the world and the universe of man and nature, but also of creation, morality and religion. This is an important aspect of his theory that sustains all of his creations, in an intertwined and interconnecting way. Through his life, his architecture, his vision, theories and writings he searched for a unity between Truth, Beauty and Nature, as a manifestation of the divine, of God. On this issue, FLW wrote: ‘’ " I believe that Emerson was right when he said, 'Beauty is the highest and finest kind of morality: ... If you are attuned, and you love sincerely, harmony, rhythm and what we call beauty, instinctively what is ugly will become offensive to you.’’ (Cronon, 1994, p. 14).

Ugliness in this sense, is an offense to man, morality and to God. As such, for Wright, all of creation should be in tune with the universe, nature, morality and a sense of spirituality, needs to possess that quality of beauty, harmony and rhythm. Only in that way, can creation contribute to the divine order of the world. He further adds, that the desire for the good, that is searched through creations is what can be more generally understood as the beautiful[381]. These principles of unity and belief in a divine order, describe not only his life, but also his architecture and his artistic purpose. In a certain sense, Cronon explains, they were his ‘religion’.

… (c) The Search for Universal Principles

As just seen in the previous topic, his search in life and in creation was led by a belief that art can indeed determine a universal order. This belief was led by a Platonic understanding of forms and beauty, a transcendentalist view on life and a romantic view of nature. However, supporting or inherent to, this broad belief, was the certainty that those creations that belonged to the universal order could be defined and understood by universal principles. According to Cronon (1994), this is something Wright shared with his nineteenth-century contemporaries: the idea that sustaining all of creation was this deep hidden unity as principles, and the discovery of those principles, would allow a better union between man and the universe, and between man and God[382]. Discovering universal principles, then, not only would allow one to become closer to God, but also to understand the means by which God creates and in doing so, would allow the creator, to create according to those principles (to apply them freely in his creations) and contribute (with his creations) to the divine order, which defines Wright’s aims and ideals.

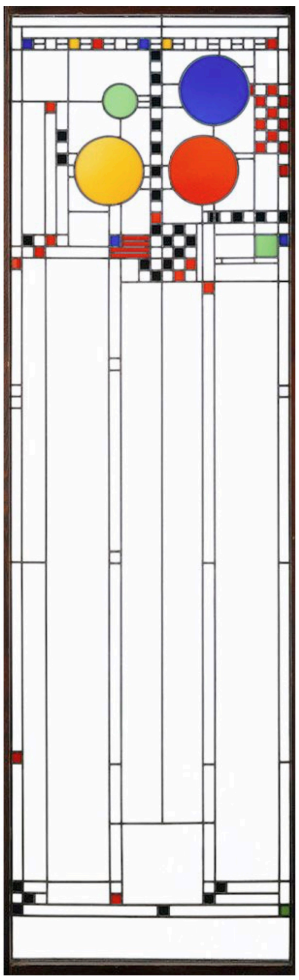
[381] FLW claims: ‘’ "The Sort of expression we seek," Wright wrote, "is that of harmony, or the good otherwise known as the true, otherwise known as the Beautiful." ‘’ (Cronon, 1994, p. 14).

[382] **The search for universal principles:** On this issue Cronon (1994) clarifies: ‘’ Wright shared with his nineteenth-century contemporaries a deep conviction that the chief task of science and art was to discover underlying principles of order-present not just in architecture but in literature, philosophy, music, mathematics and, indeed, in the entire organic and inorganic universe which would reveal the hidden unity of humanity and nature.’’ (Cronon, 1994, p. 10). As such, it was the discovery of these principles, universal principles, that would disclose the hidden unity of man and the universe. Further: ‘’ To know these principles was to come as close as humanly possible to a direct encounter with God.’’ (Cronon, 1994, p. 10). This search for universal principles is part of other nineteenth-century figures to whom Wright turned for inspiration; they all had the shared belief that by observing ‘a flower’, for example, it would be possible to understand the underlying principles of the world and therefore be closer to God.









Photos 1: Isaac Hagan House in Kentucky Knob (1953-56), by Frank Lloyd Wright; Source: https://en.wikipedia.org/wiki/Kentuck_Knob; ;Photo: Frank Lloyd Wright's Massaro House in Petra Island (North New York), 1949; Source: http://cdn.home-designing.com/wp-content/uploads/2012/12/frank-lloyd-wright-house-island.jpg; Photo 3: Frank Lloyd Wright home built in 1906 known as the Gridley Residence; Source:https://pt.pinterest.com/pin/251075747955023821/; Photo 4:Stained-glass window, 1912 Made by Frank Lloyd Wright ; Source:https://pt.pinterest.com/pin/251075747955023817/

PLATE 39: SPACES OF NATURE AND GOD

… Personal cosmology

… (a) The belief in 'Organic' Architecture

Frank Lloyd Wright first used the term 'organic architecture' in an article for Architectural Record in August 1914. Wright was not the first architect to use the term organic architecture, however, the concept of an organic style had different meanings and different materializations for different architects. Wright's specific use of the word 'organic' in the context of architecture referred to creations that belonged to the universal order of the world, and that followed the universal principles he believed in. As such, 'organic architecture', developed according to a set of principles and ideals (not through imitation of forms, but principles), would allow for man to become more in tune with his existence, the world, his spirit and God.

Overall, the architecture should portray a sense of shelter and protection from the outside world; the architecture should be derived (and inspired) from nature in an abstract way, and should be guided by the proportion and feeling of the human body. Building and site had a very specific connection in Wright's architecture. He believed that the building should be an extension of the site, and should respect it and enhance it in multiple ways: '' (…) buildings should respond to the natural conditions of their site.'' (Cronon, 1994, p. 2). The building, like this, should derive its form and materials from the landscape and find inspiration in the nature of the surroundings. The building and the site should develop such a unique connection that one without the other would loose all meaning. The materials should be used simply, enhancing their innate characteristics, staying true to the energy and properties of each material. Wright proclaimed '' (…) a deep devotion to the "nature of materials." arguing that each should be employed only, in ways that were consistent with its innermost qualities.'' (Cronon, 1994, p. 2). Both inside and outside, only a few number of materials are used that enhance the principles of organic architecture: natural material and glass. In relation to the interior space, organic architecture sustains a space that is free, open and that allows for a free circulation; the space thus creates a rich experience rather than an isolated understanding as a view. The atmosphere for the spaces should be quiet, serene and tranquil, in order to allow for human development. In general, there is a desire for achievement of simplicity as a supreme harmonious quality.

… (b) The Natural House: Principle and Values of Organic Architecture as a new type of Architecture

Further, Frank Lloyd Wright in his book 'The Natural House' (1970), announces a series of principles and values that should be contemplated in the 'new house', a new architecture for American culture. First, there is the principle of simplicity (a condition of the organic and natural whole, that uses grace and elegance) and plasticity (continuity of space that granted new spatial qualities: '' (…) plasticity is only the modern expression of an ancient thought.'' (Wright, 1970, p. 39). Through simplicity and plasticity, and it's expressive characters, man would be able to 'make forms more significant. Simplicity is a concept that is difficult to comprehend, explains Wright, and to truly comprehend it is to understand it in a spiritual dimension. As such, freedom of expression and simplicity, then, is a matter of knowing what to leave out and what to leave in, a subtle coordination between elements – a plasticity.

> **Plasticity and Simplicity:** Wright explains that be promotes both for architecture, for plasticity is associated to continuity as a concept in the building as a whole. It was plasticity, when promoted by continuity that could grant architecture these new spatial qualities. Simplicity, in this sense, is a property and a condition of the organic whole: '' Clarity of design and perfect significance both are first essentials of the spontaneous born simplicity of the lilies of the field.'' (Wright, 1970, p. 36). This type of simplicity is an organic and natural one that uses grace and elegance and harmony to create. However, FLW further explains: '' To eliminate expressive words in speaking or in writing – words that intensify meaning – is not simplicity. '' (Wright, 1970, p. 36). Likewise, in architecture, it is the same; in architecture, expressive characters in design, form or surfaces 'make forms more significant'. Simplicity is further understood as '' (…) clean, direct expression of that essential quality of the thing which is in the nature of the thing itself.'' (Wright, 1970, p. 188).

Second, the values of Glass and Continuity, the use of materials for their own sake and the establishment of a new type of integrity. Glass and Continuity, allow for a greater freedom of design and a sense of integrity in a house as in the human being, and there can be no completeness or wholeness without a deep understanding of the materials; on this sense, he writes: '' Now there can be no organic architecture where the nature of synthetic materials or the nature of nature materials either is ignored or misunderstood.'' (Wright, 1970, p. 22). As such, all elements need to be in perfect correlation, completeness and integrated into a wholeness that promotes integrity in a harmonious way. Third, the concept of Grammar, which is defined by Wright (1979) as a value and a principle that has the possibility of defining architecture as a work of art. The 'grammar' of the house is what Wright specifies as the manifest articulation of all the parts, the 'speech' it uses. He claims: '' Everything has a related articulation in relation to the whole and all belong together; look well together because all together are speaking the same language.'' (Wright, 1970, p. 181). It is in developing this single language that the house may be elevated to the work of art. About this new type of architecture, Wright states: '' Well, like poetry, this sense of architecture is the sound of the 'within'. We might call that 'within' the heart.'' (Wright, 1970, p. 44). This new ideal, is an ideal for all the general culture, entails a union between the outside and the inside of the human being, is derived from the higher realms of imagination and establishes a connection to happiness; then, it is an architecture, organic architecture, where man can realize his potentialities: uniquely, creatively and freely.

(5) specific work analysis, examples and key features

6.3.1. THE FALLING WATER

… Introduction

Frank Lloyd Wright, designed the Falling Water house for his clients, the Kaufmann family, and it was built between 1936 and 1939. Today, it is a National Historic Landmark, and a museum (operated by the Western Pennsylvania Conservancy). Fallingwater, (an icon of modern architecture), is considered to be the best example of Frank Lloyd Wright's principles, including the sense of harmony he searched between man and nature, through his so called 'organic architecture'.

… The Clients and the Site

The Kaufmann family, Mr. and Mrs. Edgar Kaufmann and their son Edgar Kaufmann Jr. were the original owners of the house and the ones that commissioned Wright for the project. Mr. Edgar Kaufmann was a Pittsburgh department store tycoon and had been deeply involved in multiple architectural projects for his thirteen department stores, multiple homes and other public works. At the time, the son of the couple, was studying at Wright's school, the Taliesin Fellowship; through him the couple developed a friendship with Wright, they appreciated his values and beliefs systems as well as his vision of an organic architecture founded in transcendentalism. This led them to commission the project in 1935. Besides being friends, the family and the architect shared a common belief in architecture as a means for spiritual transformation[383]. The site is located in the deep forest of South-western Pennsylvania, about 90 minutes from Pittsburgh. It is a natural reserve with a stream of water flowing at about 300 meters above sea level, breaking to a waterfall of about 10 meters. The house was meant to be a weekend home for the family, in the site of the waterfall that had been the family's retreat for over fifteen years. It's vegetation and landscape can be described as follows: '' Mountain laurels mix with white, red and black oaks, birch, tulip, apple, hickory, butternut, wild black cherry and other hardwoods, while giant ferns from ancient times give a sculptural effect.'' (Furze, 2010, p. 143).

… The Designing Process

Frank Lloyd Wright was at his sixties, at the time of the commission for the project and was in financial trouble, struggling to maintain Taliesin, his Wisconsin home and studio, in the midst of an economical crisis. Wright made his first trip to the site on Bear Run, Pennsylvania in December, 1934. From the very beginning, he rejected a site that presented a conventional view of the waterfall (as originally desired by the clients), suggesting instead a house that would be part of it.

In regards to the designing process, little is known. There is only a story, that says that Wright, after receiving the commission, procrastinated for nine months, leaving the design of the house to the very last minute, when Mr. Kaufman was already on his way to Taliesin. This story, corroborated by multiple sources claims that the design just poured out of him in a couple of hours. The accuracy of the story is unknown.

However the case, Frank Lloyd Wright's architectural design process followed a sequential methodology, searching for variations of the same theme, concept or driving idea. The author Furze (2010) explains that there is a lack of preliminary sketches in all his designs[384], and as such, they all followed a sequential design method, using drawing as the grounding tool, creating a succession of drawings[385]. Also, there is a common idea that Wright chose, a very clear vision for the project from the very beginning: '' His initial thoughts for the house were as a broad shelter integrated with the rock, trees and water that made up this rugged, natural site.'' (Furze, 2010, p. 145).

[383] As the author Richard Cleary (2000) explains: '' The Kaufmanns and Wright shared a belief in architecture as a vehicle for spiritual transformation. The building of Fallingwater (…) were activities the family and their architect believed would lift their hearts from their individual troubles and inspire them to higher and common purpose.'' (Cleary, 2000, p. 395).

[384] '' Due to the lack of preliminary sketch designs in all his schemes, it could be said that he designed buildings in sequence, as variations on a common theme. '' (Furze, 2010, p. 145).

[385] He explains: '' These sequential designs could be seen as the embryo of Falling Water, as part of a constant accumulation of formulae or of the development of spatial types, structural themes or the approach to site specifics. Wright hinted at this method of designing as part of the development of spatial types, (…).'' (Furze, 2010, p. 145).

About the process Wright himself claims it was a result of a divine grace. In a talk for the Taliesin Fellowship he said: ‘’Fallingwater was a great divine grace – one of the biggest divine graces one can experience here on earth.’’ (Pfeiffer, 2007, p. 122)[386]. He continues explaining that no other Project ever equated the coordination, the harmonious expression of harmony, and the principle of tranquillity that is combined in all the elements: the forest, the water, the rocks and the structural elements. All these elements combine so silently, that one can only hear the music of the water and feel a relationship with nature.

… The Architecture: Spatial Description

Fallingwater consists of two parts: The main house of the clients, which was built between 1936-1938, and the guesthouse, which was completed in 1939. The main house is connected to the guest house (elevated in the hill) by a covered narrow semicircular passage.

The main house is composed as a series of three independent horizontal trays (defining three floors), stacked one upon the other freely, appearing to float over the waterfall that seems to stream below. The overall idea for the design was of a house floating over the waterfall. Furze (2010) comments: ‘’ Wright’s conception of the house over the falls, was of a series of terraces of space leaping out of the rock ledge behind which should have no sense of support in order to give a free, natural structural expression as in the branch of a tree growing from the trunk or the outstretched arm cantilevered from the body.’’ (Furze, 2010, p. 148). The author further points out that Wright had an absolute faith in the cantilever, as a way to free space and create planes parallel to the ground. This system had previously been used in multiple prairie houses, but not with the same prominence or conviction of design. Reinforced concrete was the only material that could execute such a vision and such a daring design. He considered it to be a material that had no aesthetic qualities or character, but, however, would have to be used. As such, the projecting trays, balcony’s, formed the core of the design, horizontal elements in between which the program and the internal spaces would develop. About them, the author continues: ‘’ These trays were double cantilevered concrete slabs with integral upturned beams forming the balustrade to the terrace and supporting the slate floor and with their soffites forming the ceiling below.’’ (Furze, 2010, p. 145).

About the exterior of the house, the author Perez (2010) indicates: ‘’ The exterior of Fallingwater enforces a strong horizontal pattern with the bricks and long terraces.’’ (Perez, 2010). Perez (2010) also says in respect to the terraces: ‘’ The terraces form a complex, overriding horizontal force with their protrusions that liberated space with their risen planes parallel to the ground.’’ (Perez, 2010). The approach to the house is made from a simple bridge over the stream from which the entrance is completely hidden, however ‘’ (…) a glimpse of the cantilevered terraces is given although the waterfall is also hidden except that its sound can mysteriously be heard.’’ (Furze, 2010, p. 151). As such, the entrance has to be searched for and is not presented right up front.

The interiors follow Frank Lloyd Wright’s usual plans: combining simplicity, plasticity with both open and more contained spaces. At the centre of the house is the fireplace, the heart of the home, which Wright considered to be the main gathering place for the family. The fireplace is accentuated on the

[386] Free Translation from: ‘’ A Fallingwater foi uma grande graça divina – uma das maiores graças divinas que se pode experimentar aqui na terra.’’ (Pfeiffer, 2007, p. 123).

outside form of the house, being the highest volume. Surrounding the fireplace are open spaces for the living room, and a series of smaller rooms that define bedrooms and offices running across the three floors. The main floor, the first floor possesses the larger living room (that has steps that lead directly into the water below) and a compact kitchen. The main floor has 3 different panoramic terraces. Three small bedrooms are located on the second floor. And the third floor was the location of the study, studio, gallery room and bedroom of Edgar Jr., the Kaufmann's son, each leading to its own terrace. All the floors possess low ceilings in order to direct the eye horizontally to look outside.

The rooms are simple in character. Wright designed most of the furniture and furnishings; these are combined with rare antiques. For him, the furniture was also part of the design and should echo the principles and language of the whole. In some points the natural rock is allowed into the spaces. In regards to the circulation between the spaces, Perez (2010) explains that: '' The circulation through the house consists of dark, narrow passageways, intended this way so that people experience a feeling of compression when compared to that of expansion the closer they get to the outdoors.'' (Perez, 2010).

… (a) Formal Analysis

Counterbalancing the horizontality of the design, defined by the horizontal trays, is a series of vertical elements of stone. Although the design is not symmetric it possesses a strong order and a strong sense of balance. Formally, internally, it banishes fixed walls and uses multiple planes free in space, accentuating the two qualities Wright so much praised: plasticity and simplicity. Wright didn't believe in the box, as a system for creating space: he believed in a free space, open, plastic and expansive. The author Furze (2010) on this respect, says this formal development was connected to Frank Lloyd Wright's previous designs: '' It can be seen that the plan for Falling Water was a direct development of the early Prairie House in the basic organization of a cruciform interpenetrating a square, (…) .'' (Furze, 2010, p. 141).

… (b) Building with nature

The house was designed to be in tune with nature and the landscape. FLW wanted the clients to live with the waterfall, to hear it, feel it and make it part of their everyday life (as oppose to just looking at it, from time to time). The trees, the vegetation and the water are incorporated naturally into and around the house. Although the waterfall is not seen from the interior of the house, it '' (…) is felt as part of the calculated space sensation, heightening its mystery and wonder, allowing it to become an integral part of the living space, permeating all senses, in particular the hearing and haptic senses.'' (Furze, 2010, p. 151). Nearly half of the floor plan of the house are outside terraces, as a way to accentuate the connection to nature. The inside is merged with the outside through the terraces. The rooms all relate towards the house's natural surroundings, opening up with glass into the scenery that surrounds the house; the house has no walls facing the falls allowing for expansive vistas. Part of the strategy to allow the rooms to extend towards nature was to create the long cantilevered terraces. These create a viewpoint frame that allows the landscape to be immersed into the spaces. Pfeiffer (2007) explains that from the inside of the house, at any point, it is possible to see the woods, the landscape, and hear the water. The power of the

falls is always felt, not visually but through sound. He also introduces the corner window and the use of internal screens, allowing natural light to flood into almost all of the spaces.

… (c) The Materials

The house uses only a few materials: combining industrial materials (reinforced concrete, steel, glass) with natural ones wood and stone (sandstone). All the vertical elements of the house were made out of rock of the region, projecting the rocks in order to give a more sculptural effect. All the horizontal elements are made out of poored concrete; the use of reinforced concrete for the long suspended balconies was revolutionary. All the floorings are of stone. Wood is used for the glass casings and frames. Steel is used throughout the house in railings, shelves, and windows and doors; mostly, it is painted red. Glass is used to allow the outside to flow freely into the inside. The author Furze (2010) explains that glass was used not only for expanding views, but also for its sensitive qualities: '' Coupled with physical continuity and the organic principle was his use of glass as the material to awaken sensibilities, to diffuse, refract or reflect life itself.'' (Furze, 2010, p. 141). The colour ochre, painted over the concrete, was chosen to match the back of a fallen rhododendron leaf.

… Metaphors, Symbolic and Spiritual Connections and References

The main elegance and beauty of the house is the sense that it seems to be suspended in the air hovering over the water that streams beneath it. The elegance of the structure is emphasized by the projecting volumes of the balconies, combining the form with the site. This approach is a result of Frank Lloyd Wright's desire to make the house belong to nature (an extension of nature) rather than make it stand outside of nature, or making nature adapt to the architectural element. The house was designed to mimic the natural formations of the rocks and the site in the surroundings. Symbolically, Fallingwater represents the perfect interaction between man and nature, between humanity and divinity. The house acts as a symbolic element that establishes a connection between man and God, the physical world of nature and the abstract truth of the divine, explains Furze (2010)[387].

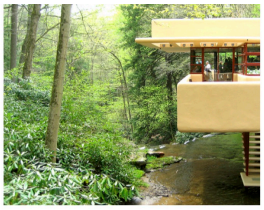
(6) key principles, concepts and values

…The Search for The Universal Principle or The Original Meaning: The Individual Genius

Wright believed that creations can indeed define a universal order (led by a Platonic understanding of forms and beauty, a transcendentalist view on life and a romantic view of nature). To be part of that universal order, creations needed to discover and integrate within themselves universal principles (discovered in nature).

[387] **Symbolism:** On these symbolical aspects of the house as a connection to God and to humanity, the author Furze (2010) elaborates: '' No longer an outside and an inside, or a building placed upon the ground as an object, but a closeness with, and an awareness of God's creation, an interior space concept using the natural ground levels and features to create dynamic space enclosures and a new sense of earth as a great human good.'' (Furze, 2010, p. 141). Furze (20109 further accentuates: '' In line with the transcendentalism of Emerson it connects us to the divine or the World Spirit through this connection with nature.'' (Furze, 2010, p. 153).





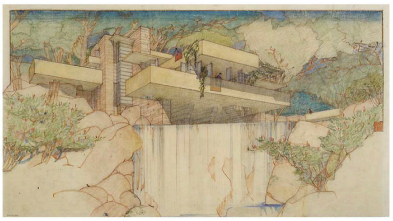




Photo 1: Frank Lloyd Wright, Fallingwater (Edgar J. Kaufmann House), Mill Run, Pennsylvania, 1935, Color pencil on tracing paper, 15-3/8 x 27-1/4 inches; Source: https://www.khanacademy.org/humanities/art-1010/architecture-20c/a/frank-lloyd-wright-fallingwater; Photo 2: Falling water in the fall; Source: http://www.dwell.com/we-recommend/article/10-iconic-frank-lloyd-wright-buildings; Photo 3: Fallingwater and Nature; Source: http://www.amnesta.net/other/fallingwater/; Photo 4: Falling water; Source:http://www.allthelyrics.com/forum/showthread.php?t=132363&page=3

PLATE 40: THE FALLING WATER

Thus, discovering universal principles, then, not only would allow one to become closer to God, but also to understand the means by which God creates and in doing so, would allow the creator to create according to those principles (to apply them freely in his creations) and contribute (with his creations) to the divine order, which defines Wright's aims and ideals. These can also be understood as qualities: for Wright, all of creation to be in tune with the universe, nature, morality and a sense of spirituality, needs to possess that quality of beauty, harmony and rhythm.

… The Union of the Spirit (Nature and God)

Wright, like all the transcendentalists and the romantics, viewed nature in a mystical and spiritual way. It is this sacralised view of nature, as an extension and manifestation of God that coordinates Wright's vision of architecture as an extension of nature. Architecture should be a mediator between man and Nature, allowing for a better relationship between man and God. Through architecture, man could live in harmony with nature and with God, and be in tune with his spirit. Cronon (1994) summarizes: ''Where nature and spirit met, there one would find the principles one sought, the lessons that would reveal the secrets of trees and flowers and buildings and even of the architect's own soul.'' (Cronon, 1994, p. 28).

… Architecture as a Manifestation of God

Wright believed in an architecture that was capable of promoting an interaction between the divine and man, where man can realize his potentialities: uniquely, creatively and freely, and that was able of elevating man's spirit. In order to achieve this, architecture should be derived from the higher realms of imagination, establish a connection to happiness, be created intuitively (from the spirit), use nature's principles as the 'rule' of God on earth (principles connected to geometry and materials) and relate the object to plasticity, simplicity, grammar and character (that which elevates it to art).

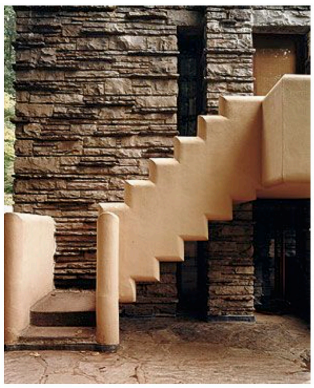
> *'' Over and over again he tells us that a truly great work of architecture must express harmony, simplicity, order, organic beauty, natural integrity, unity-indeed, even 'consistency'. Here the mystery deepens, for this seemingly most inconsistent of men was among the most consistent defenders of consistency as a cardinal virtue in life and art.'' (Cronon, 1994, p. 9).*

…Human Values and principles

For Wright, architecture also needed to be a reflexion of human values: human faculties and human qualities that were exclusive to man and to man alone. One of these values, is Imagination: derived from a human light (just like the light of the sun in the physical world), that is above instinct, and that illuminates the spirit; thus, to affirm that light (as imagination) in creation and in life, is man's true happiness, because it is above everything else, and it is what man commonly refers to as 'beauty' (the manifestation of the light). It is this light that feeds and nurtures the human soul.

Ending Remarks:

Frank Lloyd Wright's architecture is built up, on the idea, that man's creations are an extension of God's creations; as such, as Architecture and Art are part of the 'universal order' they should follow the same ideals, principles and goals in order to amplify it's meaning. His spaces, thus, strive to achieve, a union between man, place, Nature and Spirit, between the physical material dimension of man and the spiritual dimensions of God; to promote a reconciliation between man and a kind of 'lost paradise', where the world is whole, in harmony and true; to achieve a cohesiveness of the world, the universe of man and nature, but also of creation, morality and religion at all levels of existence. In order to do so, Architecture should see and understand Nature as spiritual, and the artist/architect should always turn to Nature for inspiration (in Nature are the 'codes' and 'principles' by which God creates). Nature needs man's creations to accentuate it's own purpose, nature acquires it's meaning in relation to the human soul and the divine spirit, so architecture has a great power to manifest it: reuniting nature with man's soul. Conceptually and more tangibly Frank Lloyd Wright's spaces focus not only on the connections between architecture, place and nature, but also on trying to exude the inner meaning of forms; he uses glass and new technologies to allow him to incorporate nature within the spaces, and believes the spaces should be open in order to allow for a free circulation of the being. This complex meaning and significance of architecture and art is conveyed in both the overall form of the space and in the overall emotions that are conveyed through it, in the experience of the space.



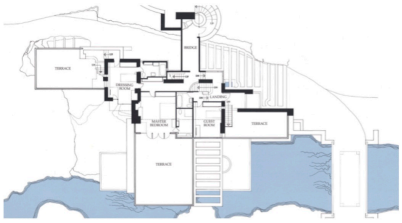




Photo 1: Detail and Materials; Source: https://pt.pinterest.com/pin/334181234829996474/; Photo 2:Photos: Technical Drawings, ground, first and second floor plan; Source: http://www.fallingwater.org/assets/Site%20Plan%20and%20Floor%20Plans.pdf; Photo 3: Falling Water Interiors; https://pt.pinterest.com/SMacRaeDMD/fallingwater/

PLATE 41: THE FALLING WATER: INTERIOR HARMONY AND MATERIALS

Summary Notes: Frank Lloyd Wright

1. *Frank Lloyd Wright's architecture is in pursuit of a 'whole' unifying architecture: between Nature, Man and Spirit. He aspired to understand the universal spirit and to create a vision for it, so that the work of art and architecture could serve as a microcosm for the 'beauty of the whole' and convey the universal order. In this vision and ideal, lies FLW's meaning and significance.*

2. *Architecture can create a deeper connection between man, place, Nature and the universe and can manifest through beauty, God's presence in the world.*

3. *Architecture can capture the inner meaning of outward forms to reveal the cosmic unity of nature and spirit.*

4. *Understanding universal principles allows one to become closer to God. Man should strive to define these principles, understand them and convey them through his creations.*

5. *The purpose of art and architecture is to understand the inner nature, and express universal spirit.*

6. *Artists should convey not just the natural appearance of an object, but its meaning for the artist's soul (influence of Ruskin).*

7. *Nature is spiritual, as such, the artist should always turn to nature for inspiration. Also, nature acquires its meaning in relation to the human soul and the divine spirit, so architecture has a great power to manifest it: reuniting nature with man's soul.*

8. *All creations, Art and Architecture, are part of the 'universal order', as such, should be based on the same principles, in order to amplify it's purpose and it's meaning.*

9. *Conceptual Summary Chart:*

Table 3: Frank Lloyd Wright Conceptual Chart

CREATION			CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Table 4: Frank Lloyd Wright Synthesis Chart

FRANK LLOYD WRIGHT

1. FIELD:
- *Architecture, Design (furniture, stained glass windows)*

2. EDUCATION/BACKGROUND:
- *views of religion as Unitarianism*
- *worked on his uncles' farms: cultured farmers, committed to education and self-improvement*
- *attended the University of Wisconsin Madison in 1886: Civil Engineering*
- *was hired as a draftsman in an architectural firm in Chicago at an early age.*
- *no formal education on architecture*

3. EVOLUTION:
- *a growing clarification of his ideals, values and purposes: begun exploring in the Prairie House.*
- *increasing concern with harmony: the integration of the architecture into the landscape*
- *Growing spiritual understanding of Art and Architecture.*

4. CONTEXT:
- *Architecture in the United States, between 1895 and 1905, was a combination of different eclectic styles*
- *innovation in terms of construction materials and techniques - The Industrial Revolution*
- *Richardson and Sullivan led the way in architectural innovations*

5. INFLUENCES:
- *by his Family's religious views: Unitarianism - views on religion, spirituality and life.*
- *by R. W. Emerson: the idea of Genius, and Nature.*
- *by The Transcendentalists and The Romantics: nature as a manifestation of God and of the divine harmony.*
- *by John Ruskin's artistic theories: form should be derived from nature's forms.*
- *Emmanuel Viollet-le-Duc theories: new materials and construction.*
- *by the Japanese Print*
- *by the architecture of the time: Louis Sullivan*

6. CREATIVE PROCESS:
- *Drawing defines a fundamental stage of FLW's projects: used the drawing to conceptualise and to clarify his vision.*
- *Architectural and Artistic creative process, inspired by nature, and led by the creative spirit.*

7. PERSONAL COSMOLOGY:
- *believed in an organic architecture that should integrate buildings with the natural world, creating a new sense of space.*
- *a passion for the exception, inconsistency and independency*
- *artists should convey not just the natural appearance of an object, but its meaning for the artist's soul (influence of Ruskin)*
- *the artist should always turn to nature for inspiration*
- *the belief that Nature is Spiritual.*
- *Nature acquires its meaning in relation to the human soul and the divine spirit.*
- *Creation is part of the universal order*
- *Beauty is an expression of God's presence in the world.*
- *The purpose of art and architecture is to understand the inner nature, and express universal spirit*
- *The Search for the Good, The True and Beautiful: The Divine in the World*

8. EMOTIONS
- *Harmony*
- *Belonging*
- *Union*
- *Beauty*
- *Connection*

9. OBJECTIVES:
- *accentuate the natural beauty of the landscape*
- *strived to achieve, through architecture, a union between man, place and nature.*
- *aspired to create a deeper connection between man and the universe*
- *capture the inner meaning of outward forms to reveal the cosmic unity of nature and spirit.*
- *a deep desire to reveal the 'greatness of his soul'*
- *to understand the universal spirit and to create a vision from it, so that the work of art would serve as a microcosm for the 'beauty of the whole'*
- *to manifest through beauty God's presence in the world.*
- *to achieve a cohesiveness of the world, the universe of man and nature, but also of creation, morality and religion*
- *Discover universal principles, and would allow one to become closer to God*
- *Portray a sense of shelter and protection from the world*

10. CHARACTERIZATION:
- *Wright was a nineteenth-century romantic, steeped in idealist traditions*
- *created various building types in his multiple architectural projects: including houses, offices, churches, schools, skyscrapers, hotels, and museums*
- *designed all the aspects of the space: furniture, etc.*
- *the use of pure forms (geometry) and the overall composition that results as a plan, as a whole and a three dimensional volume*
- *geometrical abstraction and compositional elements*
- *the use of specific materials: technological and natural.*
- *unique sensitivity and sensibility to architecture.*
- *Architecture and should emulate the principles of nature without imitating its forms*
- *'nature', which refers to the nature of order, of beauty and the nature of God should be primal concept.*
- *characterised by principles of unity and belief in a divine order and led by a search for universal principles*
- *Open spaces, natural materials, free plan, use of glass, idea of continuity and 'organic' ideas and references.*

11. CONCEPTUAL FRAMEWORK:
- *Human Values*
- *Nature (Spirituality)*
- *Universality*
- *Unity and Divine Order*

12. VALUES
- *Spiritual, Metaphysical, Sustainable, Philosophical and Symbolical.*

13. MEANING/SIGNIFICANCE
- *Search for The Universal Principle or The Original Meaning of the being and the universe*
- *Convey natural, spiritual and universal order.*
- *Promote a deeper connection with the world and with God.*
- *Elevate the human spirit*





Photo: Luis Barragán portrait; Source: https://en.wikipedia.org/wiki/Luis_Barragán;Cuadra San Cristobál, Los Clubes, 1966-68, Luis Barragan, © Armando Salas Portugal/Barragán Foundation, Switzerland; Source: http://design.designmuseum.org/design/luis-barragan

PLATE 42: LUIS BARRAGAN

6.3. LUIS BARRAGAN

(1) artistic evolution, context and characterization

… Artistic Context: Between Mexico and Modernism

Barragán is a Mexican based architect, deeply connected to the traditions of his country and to modernism and the international style, which dominated the architectural scene in his time. Mexico has a vast architectural and urbanistic legacy that is very characteristic of its culture and of its people, which is of the essence to understand, in order to contextualize Barragán. The traditional Mexican architecture, is dominated by the cities and infrastructures of the Maya and the Aztec cultures from the pre-Hispanic periods such as Monte Albán (a city with a multiethnic population) and Teotihuacan. With the arrival of the Spanish, European architectural ideas combined with the local culture and formed a unique architecture. Architect Stefanos Polyzoides *(2012)* on this Mexican architecture legacy claims: '' Producing some of the most poetic and extraordinary objects and places in the Americas. The record of Mexico's Spanish architecture and urbanism is as notable as it is extensive.'' (Polyzoides, 2012). For the author the most profound architectural example is in the houses of common people: a vernacular architecture that used the patio and colour as their main references[388]. Overall, Mexico's culture is characterized by a vibrancy and happiness translated in their love for colour and life. It was in this Mexican context, that Barragán grew up and from which his work emerged from. However with his travels, he also became deeply interested in the Modernist theories and the International Style that were at their peek throughout Europe and the United States of America. The International Style, that emerged in the 1920s and 1930s, defined by American architects Henry-Russell Hitchcock and Philip Johnson (in 1932), focused more on the formal aspects of architecture itself rather than in the social aspects that were being emphasized in Europe, with the work of Le Corbusier. It expanded upon characteristics that defined Modernism focusing on volume, aesthetics, symmetry and the suppression of ornament. In Europe, with Le Corbusier, Modernism was focused on creating a better social world through architecture. Both these visions of architecture defined the context for the architectural panorama at the time. Deeply contextualized in both these fronts (Mexico and Modernism) Barragán defined his own unique vision. Vincent Canizaro (2012) in his book on architectural regionalism, explains that Barragán's architecture and vision was a sort of critique to '' (…) placenessness and globalization.'' (Canizaro, 2012, p. 404).

… Architectural/Artistic Evolution

Barragán's initial approach to architecture was a traditional one (rooted in the popular sense of Mexican architecture), however after his European trips, his architectural ideal changed and evolved as he

[388] **The Mexican House:** The process of the production of vernacular Mexican architectural form, was defined by a modest character house, that used the patio typology (originally imported from Europe), around which the house would develop and an abundance of colour. The author claims: '' The simplicity and frugality of means, the elegance and beauty of form, and the humanity and humility of life possible in a traditional Mexican patio house puts to shame current abstract development formulas and the rootless architectural modernism that is typically attached to them.'' (Polyzoides, 2012).

allowed European culture and Modern Architecture to influence and inspire him. However inspired Barragán may have been, his traditions were never forgotten; by the contrary, they were combined in new ways, allowing for a unique vision to emerge as a result of the multiple influences. He incorporated and implemented the vivid colors, the textural contrasts and the natural surroundings, creating his own new vision of what 'modern' architecture should be.

His evolution can be understood as a gradual clarification of his own vision and ideals and how those could be materialized. Whereas his first works were simpler in character, form and emotion, his mature work expressed a deeper sense of energy and vitality, through the creation of specific atmospheres. Author Sennott (2004) writes that it was with the development of *El Pedragal* which begun in 1945, as well as the beginning of the development of his house in 1947 and the rebuilding of the *Convento de las Capuchinas Sacramentarias,* in 1955, all in Mexico City, that he begun perfecting his vision, achieving his mature style and defining clearly his personal and architectural quest. Essentially, his architectural spaces seem to be growing towards a more intense expression of 'poetry': exploring through light, colour and objects (such as art) a deeper way to convey meaningful moments.

… Architectural Characterization

Most of Barragán's work is residential, both large-scale development projects and smaller luxury homes. In Guadalajara, his body of work includes over a dozen private homes, within walking distance of each other.

> **Examples of his most prominent work:** Some of the most prominent works include: Jardines del Pedregal (1945-50), which he considered his most important work, Las Arboledas (1958-59), both large residential developments; whereas his most notable residences include, the Gilardi House (1976), the González Luna and Christo Houses (1928-1929), all in Mexico City. Another notable architecture space is the Capuchinas Sacramentarias del Purisimo Corazón de Maria (1953-55), also known as just Las Capuchinas, which is a small chapel in the district of Tacubaya (in Mexico City). Another prominent reference, is his collaboration with Mathias Goeritz, the Satellite City Towers (1957), a public sculpture in a busy automobile highway in Mexico City. It was with the development of *El Pedragal*, began in 1945, and *Convento de las Capuchinas Sacramentarias,* in 1955, that his main characteristics begun to defined. According to Sennott (2004), the themes explored in El Pedregal were carried out in later projects such as Las Arboledas and the Gilardi Houses: '' In them one finds more evolved versions echoing the play of light, shadow, water and wall, its dramatic use of colour and varied textures, its startling juxtapositions of the old and the new, the local and the imported, and the natural and the man-made.'' (Sennott, 2004, p. 117).

One main important characteristic of Barragán's spaces is the combination of modernism with traditional architectural Mexican features: merging modern materials and forms with Mexican culture and language[389]. The Gardens of El Pedregal, for example, emphasized the vegetation and the volcanic rock of the site and made references to Mexican vernacular and historic architecture; these, references were combined to modernist ideals. Overall, Barragán's architecture can be characterized by multiple principles or ideas that held his principal vision and goal. First, the use and combination of colour, light and water; these elements are used in multiple projects in different ways. Water is present on the outside of the property, and creates a 'poetic' and contemplative moment (an example is the small pond of water at the Barragán house). Colour is applied profoundly and with a variety of intense chromatic tones (usually

[389] Sennott (2004) summarizing the overall characteristics of his work, claims: '' (…) buildings and landscapes that merge modern materials and minimalistic cubic forms, with discreet references to local culture, personal memory, figurative surrealist painting, and Mexican and Mediterranean vernacular forms.'' (Sennott, 2004, p. 116).

using colors that cannot be found in abundance in nature, such as reds, pinks and yellows, that contrast with the blue's and green's of the natural landscape[390].

Light is studied carefully, and for each opening of the house, some sort of 'poetic' moment is created with the use of light. These last two (colour and light) elements are all used abundantly throughout the interiors of the house. Second, Barragán creates architecture that is always open to a sort of outside courtyard; this openness creates dynamic relationships and spatial connections between interiors and exteriors. Another main characteristic is the fact that his spaces create specific atmospheres that change and shift; they are not coherent throughout the whole space but vary in accordance to the 'poetry' desired for that specific location; each atmosphere possesses it's own colour system, it's own artistic feeling and it's own poetic meaning. Fourth, Barragán's spaces have a profound sense of isolation and interiority from the exterior; even if sometimes they connect to the landscape of the patio (vegetation) and to nature (views of the sky) they always create a sheltered and protected understanding of space, allowing the user to find repose and stillness. Lastly, his spaces are a combination of multiple influences and ideals that work together in creating a coherent meaningful and significant whole.

(2) creative process, methodology, techniques and characteristics

… Creative Process, Methodology and techniques

Barragán believed that Architecture was not a static element, but instead a living organism that changed and mutated in a constant evolution[391]. This view deeply shaped his creative process and his methodology. On this issue Shields (2014) emphasizes that for Barragán, the architectural process was also an ongoing one, in a constant evolution: led by the belief, that no architecture element is ever finished or concluded, but instead, is an open living system that should adapt, change and mutate. The architectural process, then, is never finished, but an open system, that feeds off the living space once it is constructed and alive. The design of the architectural space, in this way reveals itself over time; not only in a brief moment of project design, but it unravels, as the space is lived and experienced.

Barragán's methodology can, then, be interpreted by two stages: the stage where space is defined and is ready to be constructed – the project phase; about this project phase, not much is known[392]. And the phase where the space is already constructed, and the space then 'speaks' about its desires and what it should become. In the second stage, Barragán uses experimentation through trial and error, in situ, to better decide on colour choices, dimensions, location of objects and art. It is known, that he sometimes changed his theme over and over again, until finally deciding on one colour; and even after this decision, he was known to never being completely satisfied and changing his mind once more. Barragán's decision-making was led by an intuitive vision, that allowed him gradually to perfect his own ideals, almost as if trying to show in reality what his vision already possessed as clear.

Another aspect of Barragán's methodology and creative process was summarized by the author Shields (2014) in the book *Collage and Architecture* (2014). The author sustains that Barragán's work

[390] Sennott (2004) explains that his works, are marked by the use of '' (…) brilliant saturated colours (pinks, blues, yellows and reds are prevalent) and by a sophisticated handling of space, texture, sitting and natural light. '' (Sennott, 2004, p. 116).
[391] He claimed: '' ''I think that everything will keep changing because architecture is a living being, which adjusts itself according to the way its inhabitants change. A house is never finished, it is an organism in constant evolution. ''. '' (Shields, 2014, p. 223).
[392] No references were discovered that explain Barragán's process within the Project phase of the architecturale design.

(and his methodology) can be understood as a 'collage', as an assembly of different elements, that juxtaposed memories and experiences: influences, objects, elements, atmospheres, colours, art and other elements, all act together from the very beginning of the design process[393].

According to the author, Barragán's technique uses abstract planar compositions juxtaposed against the rich materials and colours in a collage like way; simultaneously, she explains, the house also results from the compilation of 'iconic fragments'.

Author Vincent Canizaro (2012) points out another main aspect of his work process in connection to memory: the aspect of 'sentimentality' in architecture. The author highlights, that Barragán incorporates personal memories of his past, such as journeys, tales or stories, within the architectural conception process[394]. This aspect of Barragán's creative process is deeply in tune with what author Shields (2014) defines as a 'collage' mindset. In a broad sense, Barragán's creative process is identified and summarized by his intuitive vision, emotional decision-making process, the belief in the living, open and ever-shifting Architectural space and the combination of elements that add together, juxtaposing themselves into one single vision.

(3) inspiration, influences, conceptual framework and themes:

… Influences

Barragán was deeply influenced by multiple sources that combined together and created his unique vision and architectural 'style'. As previously stated, he was deeply rooted and contextualized into Mexican culture, which was a profound influence on him. Shields (2014) explains that Mexican culture as an influence occurs in a two folded way: on the one hand, Barragán was deeply influenced by the landscape and the vernacular architecture that from it arise (the terrain, the mountains, etc.) on the other hand he was deeply influenced by the traditional homes of Michoacán (colours, textures, materials and spatial understanding)[395].

[393] **Collage:** In her words: ''Like a collage, the elements combine together, in an '' (…) intentional aggregation and juxtapositions of his memories and experiences.'' (Shields, 2014, p. 223). These types of 'assemblies' can be found at various scales: firstly the collage of influences, secondly the collage of objects and elements, and thirdly the collage of atmospheres and opposing principles. All these combine together in the space, but they begun, firstly, in the conception phase of the project extending at all phases of the design including the last phase, when the space is being lived. Shields (2014) summarizes: '' Barragán's architectural style was personal and idiosyncratic, derived from a collections of borrowed ideas, techniques, materials and forms that he reinvented – a collage of elements that he found relevant and valuable.'' (Shields, 2014, p. 223).

[394] **Memories:** The author explains that Barragan insisted, '' (…) that, 'the architect must listen and heed his nostalgic revelations.'.'' (Canizaro, 2012, p. 404). He believed that incorporating personal memories of his past (stories, tales, journeys around the Mediterranean in his youth, etc.) would make his architecture more personal, and make it be almost auto-biographical. Canizaro (2016) explains: '' His best known works would seem to pulse with a bittersweet remembrance of things past.'' (Canizaro, 2012, p. 404). As such, these memories played a vital role in Barragán creative process.

[395] **Mexican Influences: ''** The vernacular architecture, rugged terrain, and mountainous landscape of this region would influence Barragán's interest in integrating architecture and landscape.'' (Shields, 2014, p. 220). Another influence was the traditional homes of Michoacán, continues Shields: '' The distinctive colours, textures, materials and spatial strategies found in traditional houses served as an inspiration for Barragán, cultivating his love and appreciation for the humble beauty and cultural complexity of Mexico's vernacular architecture.'' (Shields, 2014, p. 220).









Photo 1 and 2: Garden design and architecture, Casa Ortega, Mexico City; Source: Sarah Frances Dias Photography, photos taken by the Author.; Photo 2: a detail of a house designed by Barragán; Source http://www.design-museum.de/en/exhibitions/detailseiten/luis-barragan.html; Photo 3: Detail of the Gilardi House in Mexico City; Source: http://www.domusweb.it/en/from-the-archive/2013/03/23/luis-barragan-seclusion-and-serenity.html

PLATE 43: NATURE, COLOUR AND ATMOSPHERE

Another influence is pointed out in the book '*Barragan: Paradises'* (2001): the Mexican nomadic lifestyle of the indigenous people, that create an open, free and 'atmospheric' way of being which led to define an architecture that was connected to the landscape in a deeper way: defining a more poetical and meaningful existence, where the house acts as an extension of the landscape[396].

As a landscape architect, Barragán was deeply influenced by Ferdinand Bac's writings and vision. As a Modernist Architect, and as a result of his many travels to Europe, he was also very influenced by the work of Le Corbusier, whose lectures he attended; the clean lines, the purist approach and the designing for the whole man of the modernist movement resonated with him. However, the 'machine for living' was not something he defended, understood or sustained, but instead believed in an architecture of emotions, or an 'emotional architecture'. Author Vincent Canizaro (2012) writes, about these Modernistic influences, that his work: '' Formally and conceptually it was directly informed by the work of Le Corbusier, Richard Neutra, Frank Lloyd Wright, and other Europeans and North Americans, as much or more than it was by any Mexican vernacular example.'' (Canizaro, 2012, p. 404). Sennott (2004), about Barragán's general influences summarizes: '' Luis Barragán was at the forefront of a generation of Mexican architects who followed a fascination with European functionalism design; they endeavoured to reconcile modernism with the indigenous architecture of Mexico, in order to express a distinct sense of place.'' (Sennott, 2004, p. 116). Combining all these various influences (rooted within Mexican tradition, in the nomadic lifestyle, in the fascination with the landscape and in the contemporary modernist ideals), Barragán created a unique vision. Using vivid colors, textural contrasts, plays of light and shadow, incorporating the architecture into the landscape and into the natural setting, and creating strong emotional references and poetical symbolism, his vision and quest through architecture evolved and became clear.

… Conceptual Framework and Themes

There are three main themes, references of conceptual frameworks that define Barragán's architecture: firstly, Nature and the landscape, secondly Colour and Light, and lastly Emotion.

… (a) Nature and Landscape

As a landscape architect, Barragán had a unique approach to the landscaping that accompanied each project. In most cases, he believed that nature should be allowed to grow freely and naturally, thereby echoing our most primal and primitive condition. These gardens could also be intertwined by large fields of grass and incorporated with water features such as ponds or fake lakes. This contact with nature was of vital importance for Barragán, and nature is present in all his projects in distinct ways: in some cases he allows nature to come in through the vast openings of the windows, allowing the great blue

[396] **The nomadic Lifestyle:** In their words, they explain: '' That culture amassed in the American vastness, continues to act upon its men, sometimes surreptitiously, and it is no doubt what produces the attraction and the resonance we can feel when faced with works such as those of LB.'' (Barragán et al., 2001, p. 19). The authors (echoing the author Shields in regards to the Landscape), continue explaining that Barragán was deeply influenced by the landscape, however the authors add a deeper meaning, that in their views, derived from the nomadic influences rather than exclusive Mexican ones. As such, his architecture becomes a space that belongs to the landscape in both physical and poetical ways. In their words: '' Architecture that shall inhabit, co-habit with the majestic landscape. Live in peace with its geography; weave its days below the sky and the wide horizons.'' (Barragán et al., 2001, p. 19). But further more, '' (…) in this way, LB simply produces places where there exists no difference between the ''inside'' and the ''outside'', where everything is landscape. '' (Barragán et al., 2001, p. 20).

skies and the green of the vegetation to flood interior spaces; in others nature is present through the element of water; and in other cases, he creates spaces for the exclusive contemplation of the sky (such as the roof terrace on his house and studio).

… (b) Colour and Light

About his constant use of colour, Barragán himself, explains that in nature there are fewer colours, so he creates with colour to have the pleasure of being around them; furthermore, that is the reason why he never uses green (and blue), because it is the colour of nature, and ‘’green will always compete with nature’’. On the colours of casa Gilardi, he explains that he was inspired by a painting of Chuchu Reyes [397]. Clarifying that Chucho Reyes had an ‘incredible eye for colour’, and had dedicated his life to beautiful things. Durão (2012) clarifies that ‘’ For Barragán, light and colour qualifies and transforms space and he used it with the same freedom as a painter, trying out different solutions.’’ (Durão, 2012, p. 9). His work was a ‘source of experimentation’, and each space, each colour is a result of multiple experiments in determining the ‘right’ colour for each specific ‘surrounding’ and ‘location’. As a result, each ‘colour composition’ is complex depending on a multitude of factors [398] and achieving simultaneous and successive contrasts. So, the expression of colours through the work of Barragán is partly due to the way by which he deals with the ‘interactions’, Durão explains. He was greatly influenced by Joseph Albers’s work [399].

… (c) Emotion

The last theme or conceptual framework presented is the concept of Emotion. For Barragán emotion was something that had to be created in order for architecture to be an art. He believed that it was the emotions of stillness, tranquillity, serenity and a sort of contemplative meditations that elevated architecture and turned it into something valuable and meaningful. Emotion, in this way, was a concept that was deeply considered at all stages of the creative process.

(4) underlying theories and ideals

… Theories and writings

Barragán didn’t leave a body of theoretical work where he clarifies his overall design strategies, principles, ideals and goals. However, it is possible to understand his overall theory and vision for architecture from his interviews, speeches and overall conversations, that left a body of knowledge and a general understanding of what he sustained and aimed to achieve.

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[397] Free translation from: ‘’ Los colores los tomé de una pintura de Chucho Reyes. Ahora de la ensenaré: es un gallo. De ahí salieron el magenta y el azul turquesa.’’ (Barragan and Riggen, 2000, p. 133)

[398] Reference to: ‘’ Barragán made his work a source for experimentation, changing colours as the work developed as a painter would do. It was therefore the result of experiences that determined the colours and also their alterations as a function of surroundings and interplay of light and shadow, location and other influences so that the ‘colour compositions’, as he named his work, are always complex, depend on the surface material as well as neighbouring ones that may reflect or absorb the light.’’ (Durão, 2012, p. 8).

[399] On these Colour Interactions, she further clarifies: ‘’Althought Alberti and Leonardo had reported the effect of simultaneous contrast, Chevreul first formulated the theory in 1804 and explains different kinds of contrasts and interactions. Yet it is Albers who probably inspired Barragán mostly and went as far as making a copy of Albers’ paintings.’’ (Durão, 2012, p. 9).

… Personal Cosmology

Barragán, about his main ideas of life and art, in one of his interviews says that, he considers art and religion to be two fundamental aspects for life in general; these two spheres, are responsible for creating and giving 'meaning to life'. In his words, he claims: ''Art and religion help to bring her out and give meaning to life. Without religion, without myth, there would be no cathedrals, no pyramids, and there would be no art history.'' (Barragan and Riggen, 2000, p. 134) [400]. It is this general association, between Art and meaning that really qualifies Barragán's understanding and vision. For him, Architecture, being an Art, possesses that purpose and that overall aim. It is through the construction of art that man finds his own meaning in the world; through both art (and architecture) and religion, the most magnificent creations of humankind found existence, and allowed man to find meaning in his own existence. This clear understanding defined his ideal of what architecture could be and do to the hearts and lives of man.

… (a) Emotional Architecture and the power of art

When asked about the art of architecture, Barragán replied that he believes in an 'emotional architecture'. This 'emotional architecture', he continues, is very important for humanity. In order for architecture to be emotional, he explains that it has to move people through its beauty[401]. He clarifies that although there might be a large number of solutions for any project or space, the one that brings the message of beauty and emotion, for those who live in the spaces is the one that is indeed Art is all its form: '' (…) ésa es arte.'' (Barragan and Riggen, 2000, p. 91). As such, Barragán feels that it is both beauty and emotion that elevate mere architecture to an art.

On this 'emotional architecture' he notes explains that he pursues the causes of 'emotions' and that those causes greatly interest him. He pursues those emotions, decoding them and understanding them; in his words: '' Walking in a cathedral provokes in me an emotion. I seek the causes of this emotion; those enclosed spaces that take us from one surprise to another, from one mystery to another…'' (Barragan and Riggen, 2000, p. 133) [402]. Through this search for the causes of emotions, he found that these could be re-created specifically and individually in each space. Specific emotions could be created by specific means, and in this fact, was his fascination with both the power of architecture and the power of emotion. On these specific emotions, he continues explaining that any work of architecture that is not capable of expressing serenity is a mistake; as an architect, he efends that his purpose is driven by the desire to create a 'formula' that would allow man to 'rest' and find tranquillity in his own home, where he could '' (…) find repose after the aggressions of the city.'' (Barragan and Riggen, 2000, p. 112). [403] When asked what

[400] Free translation from: '' El arte y la religión aydan a salir con ella y darle sentido a la vida. Sin religión, sin mito, no habría catedrales, ni habría pirámides, no habría historia del arte.'' (Barragan and Riggen, 2000, p. 134).
[401] Free translation from: '' Creo en ça 'arquitectura emocional', es muy importante para la humanidad que la Arquitectura emocione por su belleza.'' (Barragan and Riggen, 2000, p. 91).
[402] Free translation from: '' Caminar en una cathedral provoca en mí una emocion. Yo persigo las causas de esta emoción; por los espacios cerrados que nos llevam de una sorpresa a otra, de un misterio al otro... '' (Barragan and Riggen, 2000, p. 133).
[403] Free translation from: '' (…) quisera encontrar una formula para que el hombre se tranquilizara en su casa, se repusiera de las agresiones de la ciudad. Este es un problema que me importa muy profundamente.'' (Barragan and Riggen, 2000, p. 112).

the ideal space should be, he replies that an ideal space needs to contain elements of 'magic', 'serenity', 'enchantment' and 'mystery': these elements, he clarifies, can indeed inspire the 'minds of man' [404].

Another 'emotional' element that he claims to be of the utmost importance is the quality of 'leisure' and 'passing of time': '' A beautiful house with its garden should invite the most perfect 'Leisure' and give the most poetic and beautiful idea possible of the passing of time.'' (Barragan and Riggen, 2000, p. 29) [405]. Another idea, he remarks further, is the idea of 'beautification by time'; for him, this 'concept' is linked and associated with 'Interiority' as 'lived time' and 'Leisure' as 'enchanted time', being that both these concepts are associated to the 'idea of depth' [406] in life and in art.

(5) specific work analysis, examples and key features

6.3.1. BARRAGAN HOUSE AND STUDIO

… Introduction

'*Barragán House and Studio'*, also known as *Casa Luis Barragán*, was Barragán's own house and studio; he lived in the house from 1943 until his death in 1988. Today it is a world heritage site, UNESCO (added in 2004), and is used as a museum run by 'Jalisco (Barragán's home state) and Arquitectura Tapatía Luis Barragán Foundation', who acquired it in 1993. It was restored in 1995, and left in its 'living' condition, frozen in time, displaying all of Barragán's personal objects and belongings, as he had left them at the time of his death. The museum showcases the house itself and also holds conferences, presentation and art exhibits connected to Barragán in some way (modern architecture and the artist's he liked). It is considered to be a unique representation of 20th-century architecture. In all, Barragán's house and studio crystallize his ideas, aims and vision in a very unique way: he was designing for himself, and so therefore he could materialize everything as he intended and envisioned. He spent most of his days between the studio and the house, where he used to sit for hours reading and conceptualizing his on-going projects.

[404] Reference to: ''Penso que el espacio ideal debe contener en sí elementps de magia, serenida, embrujo y misterio. Creo que estos elementos pueden inspirer la mente de los hombres.'' (Barragan and Riggen, 2000, p. 129).
[405] Free translation from:: '' Una casa bella con su jardin debe convidar al Ocio más perfecto y dar la idea más poética y bella posible del paso diel tiempo. '' (Barragan and Riggen, 2000, p. 29).
[406] Free translation from: ''La idea más bella posible, en el sentido de preparión para el embellecimento por el tiempo, está intimamente ligada a la idea de Interioridad (tempo vivido) y de Ociosidad (espacio encantado) ambos relacionado con la idea de profundidad.'' (Barragan and Riggen, 2000, p. 29).











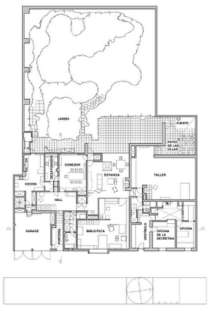




Photo 1: Main hallway space; Source: Sarah Frances Dias Photography, photos taken by the Author. Photo 2, 3, 4 and 5: technical drawings: Elevations, Sections, Ground floor plan and top floor plan. Source: http://www.archdaily.com/tag/luis-barragan; Photo 6: Detail of window in Main Street Façade; Source: Sarah Frances Dias Photography, photos taken by the Author.

PLATE 44: THE BARRAGÁN HOUSE, EMOTION AND SIGNIFICANCE: MAIN SPACE OF THE HOUSE

… Location

The house is located in the City of Mexico, in a residential area named Tacubaya, in Miguel Hidalgo borough, right next to the Ortega House, mid way in a small street. It was built in 1948 (after world war II) and was designed in 1947 for Luz Escandón de R. Valenzuela, however in 1948, after it's completion, Barragán moved into the house himself and continued living there until his death in 1988. The house is adjacent to the Ortega House, Barragán's former residence, where he resided for the five years prior to the new residence. The house functioned as a kind of laboratory for Barragán's architectural ideas; as such, it was always in permanent change. Barragan himself claimed that ''a house is never finished; it is an organism in constant evolution''[407]. As such it is a kind of autobiographical house, a reflection of all of Barragán's ideals and principles, acting as a kind of documentary of his 'vision and ideals'.

… Architectural influences and ideals

The house integrates traditional and vernacular elements (Mexican mainly) and combines various philosophical, architectural and artistic views. Although strongly rooted in Mexican influences, there are some international Modernist influences; despite of this, Barragán's architecture sets itself apart from other European influences such as the image of steel and glass and the industrialization movement that was being defined in his time. Some of the Mexican influences include: the division of private and public areas, the use of bright solid colour (deeply influenced by the vibrant culture of Mexico), the inclusion of the garden and the patio and the use of masonry materials. Modernist influences include the use of glass facades and iron and the use of white atmospheres. The author Weston summarizes its mixed influences: '' It owes something to Spanish Colonial, more to the vivid colors of traditional Mexican Architecture, and in the marked geometric clarity to the International Style. But the synthesis is uniquely Barragán's, (…).'' (Weston, 2004, p. 96). The sense of isolation from the outside world, the incorporation of artistic elements and most of all the poetical elements are indeed, a result of Barragán's vision and ideal. As such, the house represents not only a union between traditional and modernist ideals, but also a synthesis of Barragán's principles and multiple inspirational sources gathered throughout his life, that composed his views. But, essentially, the house aspires to achieve an emotional connection with the viewer through the senses: '' It is a house which appeals to all the senses and re-evaluates the ways in which architecture can be perceived and enjoyed by its inhabitants.'' ("Luis Barragán House and Studio - UNESCO World Heritage Centre," 2004)

… The Designing Process

The designing process, much like other Barragán's projects, was led by the idea that architecture is a living organism, and a result, should be understood as being in constant changes and evolution. He carried out his usual trial and error in location once the house had begun construction, and believed that the process of designing was never really concluded. Unlike other of his projects, because it was his

[407] Reference to: ''Luis Barragán believed that 'a house is never finished; it is an organism in constant evolution'.''("Luis Barragán House and Studio - UNESCO World Heritage Centre," 2004)

house, he could continue with his experimentations, changing places and locations, colors and light, to better create the mood, atmosphere and emotion that he desired. For Barragán, the overall structure of the house, the walls and windows, were just the first stage of the project. Everything else was an open field of meaning that had to be lived, experienced, changed, added to, accentuated, and enhanced by art, in order to gain its true significance and poetical force.

But the creative process can be also be designated as a process of 'collage' and juxtaposition'. According to Shields (2014), Barragán's house and studio reflects a 'collage' mind-set in three ways: the combination of Mexican and Modernist traditions, the simultaneity of spatial compositions, and the planar compositions (Cubism related)[408]. Besides from the collage aspects of the house, Shields adds, referring to Frederica Zanco, that the design of the house also results from the compilation of 'iconic fragments' that convey a narrative. These fragment like compositions, resulted partly from the photographic collage elements that Barragán used in his studio. Using photographs by Armando Salas (Portuguese photographer), breaking them up and re-utilizing them in 'different contexts', as explained by Zanco. Through the process, Barragán, then, uses 'fragments' and 'juxtaposes' them, in order to create new and rich meaning. Juxtaposition then occurs throughout the whole house.

… Construction, Materials and Sustainable Goals

The house is built from concrete with a plaster rendering painted in colour. In the interiors, wood and different types of tiles were used and incorporated into each space. On this issue, Weston (2004) also adds: '' The walls are framed in concrete, filled with concrete blocks: most are roughly plastered and brilliantly coloured, their intensity and textures enhanced by indirect lighting. The only other materials visible are pine beams, wide floor-boards and volcanic rock paving and steps.'' (Weston, 2004, p. 96). These traditional materials, also part of Mexican tradition, allow the house to respond to time in a unique way, incorporating the changes and adding to its special value: ''Many of its materials (…) reveal the aging of the house with a patina which the architect acknowledged as the poetic value of his architecture.''("Luis Barragán House and Studio - UNESCO World Heritage Centre," 2004). Another major consideration in the construction of the house, is the basic sustainable strategies that sustained the design. The house **is** designed to be completely light sustainable during the daytime, maximizing the openings in order to not need any artificial light in any spaces, during the day.

… Architectural and Spatial Description

… (a) The Facades

The main facade of the house, the east façade, is aligned with the main street. It is high rising, completely closed and simple (with only some small precise openings, a sort of bay window and two doors); it is designed to blend in with the surrounding houses, maintaining the same colour schemes and design; the elevation however, is much higher than its neighbors. It's simplicity and austerity doesn't

[408] **Collage Mind-set and Juxtaposition:** '' The synthesis of competing ethos, assimilating traditional Mexican building materials and techniques with elements of Modernism, (…) the simultaneity resulting from dynamic spatial relationships. Finally, the abstract planar compositions juxtaposed against the rich tactile quality of materials that acquire a patina over time resonates with artistic developments in collage-making beginning with Cubism.'' (Shields, 2014, p. 220). 'Juxtaposition' continues Shields (2004) occurs in various spaces of the house; one of them is in the hall, the nucleus of the house, with the granite stone, that '' (…) appears carved from a large monolithic volume, the edges exposing a volcanic stone.'' (Shields, 2014, p. 225).

convey what is happening on the inside, and aims to be a 'protection' from the outside world. The house, in consequence focuses inwards, turning towards itself, and exuding privacy and mystery. However, elements of the interior are allowed to 'emerge' in the façade provoking mystery and playfulness (such as the window, and the roof structures)[409]. The North and South façade are joint facades with the adjoining lots, and the West façade is a result of the interior configurations, opening up towards the back interior garden.

… (b) The plans and the spaces

The house comprises a total area of 1,161 sq m. In the north side, the studio is located, with its own private entrance (number 12 door) and the house, the private residence, follows (number 14 door). The interiors of both are interconnected. The house is accessed through the Eastern façade, through a small entrance. The Northern side of the residence is occupied with the studio, and the West interior is represented by the garden area. The west side, the back of the house, opens up to this private space, the garden and small meditation area, a result of Barragán's focus on privacy and seclusion from the outside world. The third floor, a terrace, can be accessed form the prayer room on the second floor and contains bright coloured walls, dark brownish grey, white, and blood red with red ceramic tiles. The top floors house more private spaces such as bedrooms, guest rooms and prayer rooms, where as in the lower ground floor, the spaces for social gatherings and more public activities are organized in an intertwined way. Throughout the house each space has its own specific height; the living room possessing double height. The vast main space of the living area, painted in white walls and with a large window opening up to the garden is subdivided into smaller areas with temporary partitions creating smaller secluded areas for reading or being.

… The Spatial Experience

Having visited the house in November 2014, following is a brief description of the architectural spaces and the overall experience.

> ***The First Level:*** Upon entering the house, the observer finds himself in a long and narrow corridor bathed in yellow light with volcanic-stone floors. The wall to the left, contains a long wooden 'bench'. After this space, one is led **into the hall area space**: a square like form space, painted half in pink (to the right) and half in white (to the left); to add to the contrast of the space, the flooring is in dark stone (same as the hallway). At the far end, a corner is composed with some objects and furniture (chair, small table, phone and paper), defining a perfectly balanced space for being, as much as doing. The staircases are compact and solid, projecting themselves onto the space. Without railings and made out of the same floor material, they designate the space visually and emotionally. This centre space articulates the circulation areas in the both floors. At the top of the stairs, there is a large golden Matthias Goeritz painting, (Barragán's friend and collaborator); the painting captures the light and reflects it to rest of the space, acting as a continuation of the architecture itself. The light reflected in the painting comes from a narrow long window just above eye level, bathing this light downwards towards the painting. From this intimate and small space, on the ground floor, one succeeds onto the living area, which immediately contrasts in scale and impressions. The space is a double height library area, and it

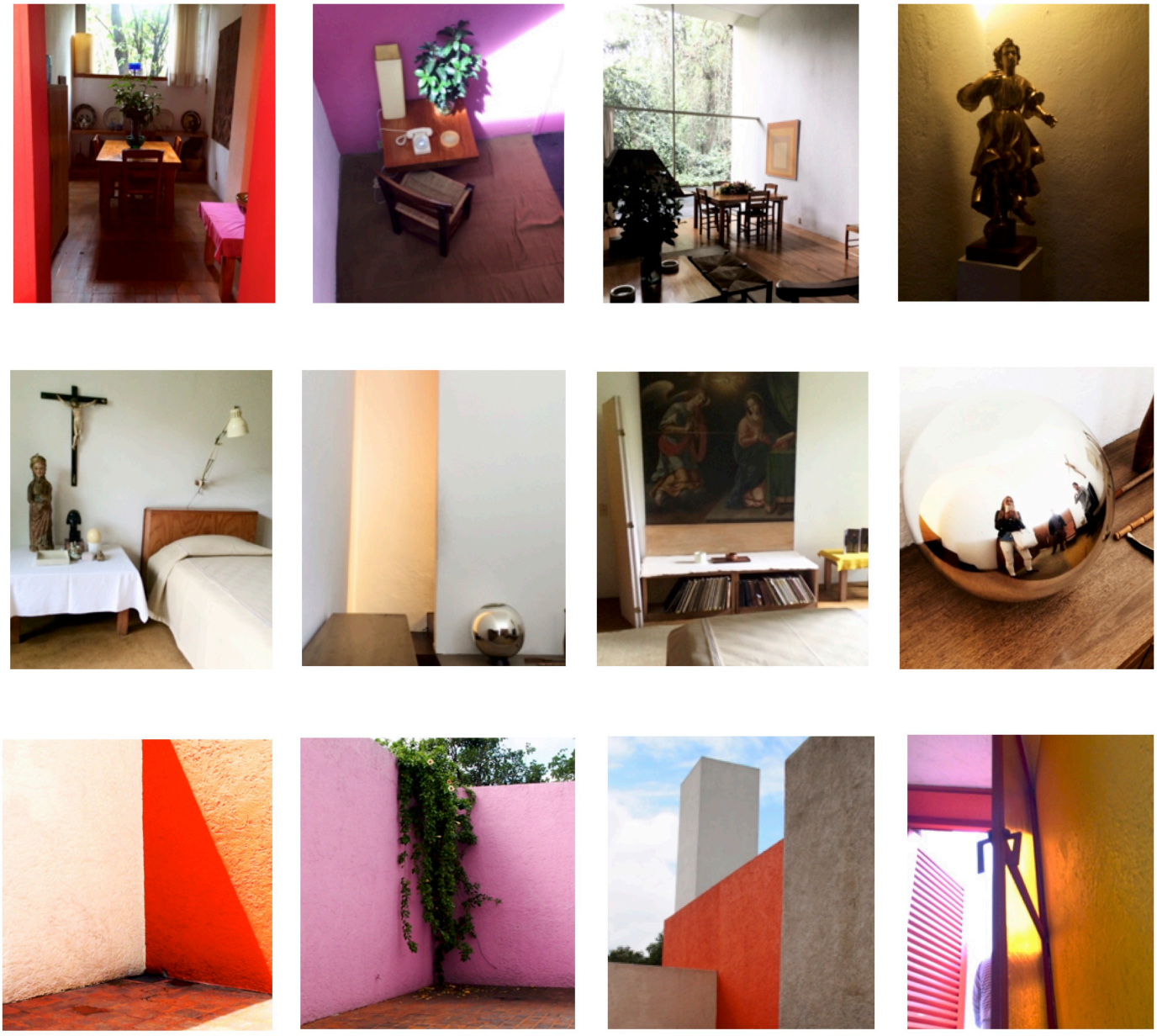
[409] **The East façade:** On this issue, Weston (2004) summarizes: '' Externally the Barragán House and Studio is stark and unremarkable, an anonymous presence in an unpretentious neighbourhood. But once inside the ambience is unique.'' (Weston, 2004, p. 96). Shields (2014) accentuates: '' The grey stucco walls remain unpainted and simple apertures disguise the complexity of the spaces contained within. From a distance however, the top of the structure begins to reveal a playful quality, as a pure white tower and planes of colour begin to project above the grey street wall. '' (Shields, 2014, p. 221).

immediately opens up onto the garden, by a very large glass square window, framed by only a 'cross' like structure that acts as the encasings. The glass window fills the whole façade, from top to floor and side to side; also, to increase the illusion that the garden is actually in the space, Barragan projected the walls, ceiling and floor after the glass panel creating an even greater depth. Following this center area of the space, in front of the window, with a table, chairs and reading area, is the library and desk area. These are formed as a succession of spaces, organized through several screens; these create private and intimate areas, but also make the spaces belong to the wide area. The double height space of this main room is separated only by these lower partition walls, which separate and segregate the ample space into different private and intimate areas. The library area connects to an adjacent space, a space for being, with a composition of a wooden staircase leading up to the top floor, a yellow painting and a small table for prayer and meditation. These spaces also connect to the studio space, also known as the workshop that today is being used independently from the house as a room for temporary exhibitions – can also be accessed by the street. This space is ample and high, with yellow painted wooden ceiling. This workshop space was designed to be isolated from the world, a sacred space for creation, as such there are no direct windows opening to the outside in the line of sight, just some skylights and a high long window to allow natural light inside the space. The service areas, located at the other side of the house, are composed of kitchen, everyday meal area and a large dining area. The rooms all possess windows opening towards the garden, allowing the natural light (early morning light) to come into the rooms. Both rooms are furnished with wood, and the breakfast room is flooded by red accents and red light, while the dining room is flooded by a soft yellow light; the table is attached to the wall on one of the sides; there is a picture by Chucho Reyes of an Archangel. From these spaces the visitor can walk onto the gardens or return to the main space and go up to the second floor.

The Second Level: The second level, accessed by the main square pink room, is composed of a series of bedrooms and sitting areas, intimate in scale, and different in character. One of the first rooms, 'sitting or dressing room' (also known as the room of Christ, for it possesses a large Christ hanging on one of the walls); it is white and light yellow, and opens up to the master bedroom and to the terrace. This room acts as a filter room, allowing for a certain 'spiritualization' and 'depuration' before entering the master bedroom. The room is simple in character and nature, and seems to be a space for thinking, praying or simply for contemplation: it emphasizes Barragán's spiritual and religious character. The Master Bedroom also simple in character, furniture and accessories, is light, white and brownish tones (extension of the previous room); it possesses a very large window that opens up to the garden (the top of the trees), bringing natural light and greens into the space. Both rooms are austere in character. After these two rooms, follows 'the afternoon room' or the space for leisurely activities; more colourful and in an overall 'brighter' tone, the room is filled with a very large painting, a large window to the garden, sitting areas, and different kinds of objects. Lastly, on the opposite side of the house, is the other bedroom, the guest bedroom. This room, austere in character possesses two main focus points: the folding window and a painting. The folding window, a cruciform shaped window, is a design by Barragan that when it is opened forms a cross of light. Next to it is 'the music room' (that sits directly on top of the living room area, to which it opens up to on top only). From one of the rooms, a hidden staircase allows access to the top terrace.

The Top Terrace: The terrace (can only be accessed by the white meditation room), is confined by high walls in all directions. From every perspective, the terrace seems like a colour and geometric art composition; white, pink and red walls compose the totality of the space that accentuates it's vibrancy against the blue skies and the green vegetation left intentionally to come down on one of the white walls at the far end.

The Garden Spaces: When entering the garden space, one is faced with wild vegetation and a large dense green area in front. Winding paths guide the visitor through the side of this wild garden, beneath a tree and across into a tiny little space that is filled with water contained in a small square like form, painted with pink walls and possesses a number of 'pots'. From this small and intimate space arouses the sense and the imagination one is conducted back into the 'atelier'.



Source: Sarah Frances Dias Photography, photos taken by the Author

PLATE 45: SPATIAL ANALYSIS: FIRST, SECOND AND TOP FLOOR

… Spaces: Elements, Symbols, other Attributes and Qualities

It is the interior spaces, from the very first step into the house, that display Barragán's vision and ideal. The house functions as an interdependence of multiple individual spaces, that work around themselves, in a kind of maze like way. Each space is a succession of the other, both completely independent and completely associated to its adjacent space: in other words, there is fluidity between all spaces; however, all of them have their own individual character and charm. This succession of spaces, both as a whole and independently, are designed to generate and provoke a series of visual and spatial effects. Where as the bottom floor, the public space and the spaces for activity, is flooded with expressive elements, bright colour, contrasting shadows and delicate poetical elements, the top floor, the space reserved for intimacy and rest is more subdued, peaceful and quiet, using white and yellow soft tones to create its atmosphere. The spaces are thus, simultaneously rich and depurated, complex and simple, visually stimulating and simultaneously soothing, in what seems to be an hypostatic balance. They are apprehended as spacious but also as intimate, experienced as open but also as enclosed and sheltered, viewed as rich but simultaneously simple and depurated, complex but true.

One of the main feature elements of the house is a large cross, defined by the glass encasing: '' You look into the garden through a vast sheet of glass divided by a thin cruciform mullion: the religious note is deliberate, adding a mystical quality to the boundary between interior and garden.'' (Weston, 2004, p. 96), This cross, continues the author, was one of his last interventions in the house, and it's 'timeless form', was designed to be seen against the 'ever-changing' garden that was 'abandoned to fate'.

… Gardens and Terrace

In the terrace, Barragán covered up the structures of the house, that needed to reach the top floor (such as water talks or utilities) with volumes and planes, hiding them in a carefully thought out composition of colour and form. The terrace, an empty space, functions as a space for contemplation and meditation. About the terrace, Weston (2004) explains: '' Barragan raised the walls in 1954, six years after moving in, so that its abstract, almost surreal world now opens only to the sky.'' (Weston, 2004, p. 96). Also referring to the terrace walls, Shields (2014) adds: '' This change also results in a unique experience in which the architecture and landscape are silenced, reading only as abstracted planes and volumes of colour. '' (Shields, 2014, p. 224). The outside spaces, the garden spaces, on the ground floor are composed of two areas: the first (the garden in view from the main square cross like window) is filled with trees and dense vegetation. Barragan believed that the main garden should be wild and free, and left alone to grow it's own way; the idea was to achieve a natural and 'wilderness' like ambience. Weston (2004) explains: '' Barragan places no objects in the garden, and reportedly, never entered it again, allowing free rein to the natural processed of growth and decay.'' (Weston, 2004, p. 96). The second, 'the patio of pots', *Patio de las ollas,* defined as a small intimate space, bringing emotions of peace, contemplation and intimacy; this squared space possessed pink walls, a reflective pool area painted black, and the area with about thrity different sized pots. The idea was, that when it rained, the whole space would be filled by centimetres of water (not only the pool area), making it one whole mirror like space. The pots are a symbol of Mexican tradition. Hanging from one of the walls is large vegetation that fall

down the wall, adding the colour green in perfect proportion. The gardens allowed Barragan to move from his house and into the studio space of work freely and without having to step outside into the world.

…. The conception of light and colour considerations

Barragán's spaces are recognized and known for the use of colour and light, and in the house and Studio, this certainly is no exception. There is an emphasis on colour, light and shadow throughout all the spaces, that allow for an immersive and unique experience to take place.

… (a) Light

Both natural and artificial light floods each space; both types of light were carefully designed, analyzed and positioned in such a way as to create a specific atmosphere and light environment. Strategies were used to amplify the light in the space such as reflexions: objects such as art or the globe like mirror spheres were placed in strategic places, close to light sources, so as to receive the light and through the reflective surfaces project it onto the space.

… (b) Colour

Barragán's use of colour was founded in the notion that architecture is an extension of nature itself. As such, the colours that should be used in the interiors should reflect the fact that man comes to the interior world after coming from outside, from nature. As nature is flooded with blues and greens, so, the interiors should contain and reflect their opposing complementary colours or the colours that are not featured in nature with abundance: yellow, pink and red. Besides this more pragmatic and spiritual understanding of colour, the colours bold pink, yellow and lilac colours chosen by the architect, are rooted in the Mexican tradition. Barragán's choice of colors created a strong environment in some areas, and in others, by contrast, he allowed the whiteness to simply exist, amplifying the light. The bold colors throughout the house create a mystical and spiritual architecture and atmosphere.

… Interior Spaces: Furniture and Art

The interior spaces are filled with specific elements that create a unique environment. These respond to the architectural requirements of for each space but also add another dimension: they act as an extension of Barragán's vision and as such, act in harmony with the whole environment. The furniture and accessories used within the spaces, were found in local Mexican Markets, keeping up with the Mexican tradition. Mostly made of wood, these elements are simple and depurated. Besides the furniture, Barragán filled the space with many other iconography, symbology and art. These aim to create another layer of meaning within each space. Relics of popular culture, symbols and animal sculptures are found throughout the house, as objects or little detail accents. Crosses are found in multiple rooms: in details within the architecture (window's and doors) and added to the space as sculptural elements. For example, the red cross embedded into the door frame in the transition of the two dining rooms, is strategically places so that whenever the maid or himself were walking with a tray of food, they were forced to place it down in the small table to the left in order to be able to open the door, thus bowing to the cross standing above.

… (a) Art: Painting, Sculpture and Space

The house holds a very close relationship between the space and the artworks. It possesses an art collection, Barragán's own private art acquisitions, including art works from Picasso, Josef Albers, Diego Rivera, Chicho Reyes, José Clemente Orozco, Mathias Goeritz and Miguel Covarrubias. These are a result of Barragán's love for art, and his devotion to collecting pieces he loved. Each art piece has its own space within the house, acting and functioning as a continuation of the architecture itself. For example, in the main pink hall, the gold painting of Mathias Goetitz is located at the top of stairs in from the long narrow window, in order to capture and reflect the light into the whole space. In Barragán's bedroom, a painting of the Holy Mary and the Angel is placed right in front of his bed, and beneath it a small elongated wooden table hold personal elements such as candles and a glass of water; as such, every morning, when Barragán woke up and needed elements from the table he would bow to the Virgin in respect. Art is an extension of the architecture in multiple ways: first it conducts the actions of the habitant, second it act as an architectural element in reflection of light and as a statement piece that demands attention, third, it continues the form and colour theories that were defined for the space, and fourthly it acts as a smaller vision of the overall statement of the house (a micro element that defines the whole).

(6) Key principles, concepts and values

… Emotional Architecture: Seclusion, Solitude, Serenity, Time and beauty

Defining all of Barragán's architecture is a deep spiritual connection to life. This is translated to architecture, in what he defines as an emotional architecture: an architecture that creates specific emotions of seclusion, solitude, serenity and beauty, allowing for the spirit and hearts of man to find stillness. Weston (2004) summarizes: '' Deeply Catholic, Barragán believed in the redemptive power of beauty and regarded acceptance of solitude as the necessary response to the human condition.'' (Weston, 2004, p. 96). In order to do this, architecture connects to the 'absence' of time or to the pasing of time; Barragán claimed: '' For this matter the most refined art, the most difficult and dangerous, is that of patina.'' Luis Barragán.'' (Shields, 2014, p. 219)

… Architecture as Painting and the metaphysical dimensions

There is a connection that can be defined in the architectural works of Barragan with painting. This is emphasized by author Durão (2012) when she refers to Barragán's works as 'three-dimensional paintings', where the body finds a 'communion' between the physical and the metaphysical dimensions. In order to achieve this, the author continues, Barragan relates the forms to a sort of primary essence of the world and of the being (primordial, timeless and endless), that like mythology, can be further reshaped[410] .

[410] **Metaphysical dimensions:** The form, Durão continues, to achieve this, works as a 'mythologem' (a well known tale, still open for further reshaping like mythology); the spaces, like the myths, do not need explanations of 'causes' they are, what Durão describes as 'aetiological': ''(…) to the extent that, according to Aristotle, the *aitiái* are *archái,* i.e. 'the beginnings or first principles such as primary states like water, fire, or the boudless'.'' (Durão, 2012, p. 4). On the *archái* concept, she further explains: '' To Jung

… The creation of atmospheres: intangible qualities

Another specific property that can be defined by Barragán's creations is the idea of the atmosphere: which can be understood as the creation of intangible qualities. This is derived of an 'undefined' language, connected to time, and to the emotional conditions that emerge from it. For the various authors of the book '*Barragan: Paradises'* (2001), atmosphere is the only word that can describe this unique property[411]. This is also echoed by Siza Vieira (1995), when he identifies atmospheric qualities as the one thing that describes Barragán's unique architecture. For the author, atmosphere can be understood as '' An Architecture that involves us as a physical presence, simple and dense, impossible to describe, to imitate or to photograph: universal and actual.'' (Siza et al., 1995, p. 11)[412]. He continues explaining that in Barragan, the spaces are so atmospheric one doesn't want to disturb them or to interrupt that stillness.

… Searching for the lost paradise

It is possible to define Barragán's work as a search for a sort of lost paradise. Siza Vieira (1995) claims: '' There is no innovation. There is a re finding of the innocence, a conquest of the State of Grace, so that the Memory is not lost.'' (Siza et al., 1995, p. 11)[413]. This idea of recapturing memories and finding the lost State of Grace are other ways of understanding the same idea: a striving towards the lost perfection.

… The expression of an Interiority: Poetry, Spirituality and Meaning

One last property that needs to be defined is Barragán's spaces as an expression of interiority, through poetry, spirituality and meaning. For the author Durão (2012) in her paper 'Colour as Pathway of Light: Searching the Shadow in Luis Barragán' this is derived from a correlation between colour, beauty and spirituality. For the author, Barragán's spaces express this connection between beauty and spirituality, as a result of an 'introspective search' that is deeply rooted in the artistic phenomena[414]. The corporeal, form, represents the spirit through the creation of intimacy, and can be understood as the sublime (space

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and Kerényi, the happenings of mythology are the *archái* to which everything individual and particular goes back and out of which it is made, while they remain ageless, endless, timeless and primordial (…).'' (Durão, 2012, p. 4).

[411] **Atmospheres in Barragan:** They explain that the intangible quality that defines Barragán's spaces: '' A language, when it is loaded with meaning, resorts to an economy of means and responds – more that to the direct forms of objects -, to the internal rhythms of the discourse, to the production, in architecture of 'Atmospheres', to *'tempos'* which contain and implicate people.'' (Barragán et al., 2001, p. 19). The authors continue, it is this idea of *'tempo'* that is found in Barragán's atmospheres, creating a 'synthetic quality' that is unique and charged with emotion. '' It is advanced more by suppression than by addition, it is defined more by what It lacks than by the multiplication of gestures and effects.'' (Barragán et al., 2001, p. 19).

[412] Free translation from: '' Una Arquitectura que nos envuelve como presencia física, simple y densa, imposible de describir, de imitar o de fotografiar: universal y actual.'' (Siza et al., 1995, p. 11).

[413] Free translation from: '' No hay innovación. Hay un reecuentro de la inocência, una conquista del Estado de Gracia, para que no se perda la Memoria. '' (Siza et al., 1995, p. 11)

[414] **Spirituality, revelation and Barragan:** In Durão's (2012) words: ''For Barragán, beauty is a source of spirituality that mingles the colours with Gods, art and Mexican nature, in a choreography of shadows and the implications of the sun.'' (Durão, 2012, p. 1). Explaining that Barragán's work was indeed an echo of an **'introspective' search**, and that for him, the roots of the artistic phenomena is linked to spiritual concerns. Furthermore, his studio-house in itself reflects an 'introspective' dimension, creating a sense of an 'inner being' and encouraging 'meditation' '' The studio house of Barragán is situated in Tacubaya, which means 'place where water comes together'. It develops inwards, underlining the sensation of inner being, and encouraging 'meditation', as Barragán intended. The sense of intimacy was picked up by Louis Kahn when he visited the studio house and remarked that it was not just a house: it is the house.'' (Durão, 2012, p. 3). Durão (2012) also explains that for Barragán: ''(…) the corporeal has the transcendent mission of representing the spirit and 'the more intimate a human being is, the greater his nullification, which means that his body will talk more of his soul'. '' (Durão, 2012, p. 4). This, she clarifies, is known as the 'sublime', a specific experience 'space' or 'energy' '' (…) that is so overwhelming, that the individual diminishes, in order for revelation to take place.'' (Durão, 2012, p. 4). Art, in this way, is a form of revelation rather than imitation.

of energy) that is overwhelming in order to diminish the individual and allow for a revelation to occur. To achieve these spiritual and metaphysical dimensions, Barragán uses colour and light, creating serenity and integrating the body with the spirit.

> ***Ending Remarks:*** *Barragán's belief that art, architecture and religion do grant 'meaning to life', led him to creating spaces that allowed for 'meaning' and significance to emerge naturally and gracefully, by expressing interiority, emotions and their own hidden meaning, through poetry, colour and light. Architecture is seen and understood not only as a space for existence but a spiritual and emotional space that can shape man's life in better, profounder and deeper ways. For him, spaces need to contain elements of 'magic', 'serenity', 'enchantment' and 'mystery', in order to convey these deep meanings; through those combinations they can allow for spiritual emotions and poetical encounters to emerge with the user. For Barragán, a space of architecture should convey emotions of peace, tranquillity, stillness and serenity, in order to shelter and protect the user from the outside world and create a sort of 'utopian' place where he can find that inner peace and contemplation state of the spirit. A unique particularity, is that Barragán, didn't consider architecture to be finite or closed but an open living organism, always open to change; as such, architecture should embrace other dimensions such as nature (creating a connection to the landscape around itself), art (using artistic works such as painting and sculpture as an extension of architectural space and meaning) and objects (that add other layers of meaning to the space). Every element in the space, thus, continues the architectural vision and ideal, creating a space that is significant and meaningful at multiple layers of depth and communication.*





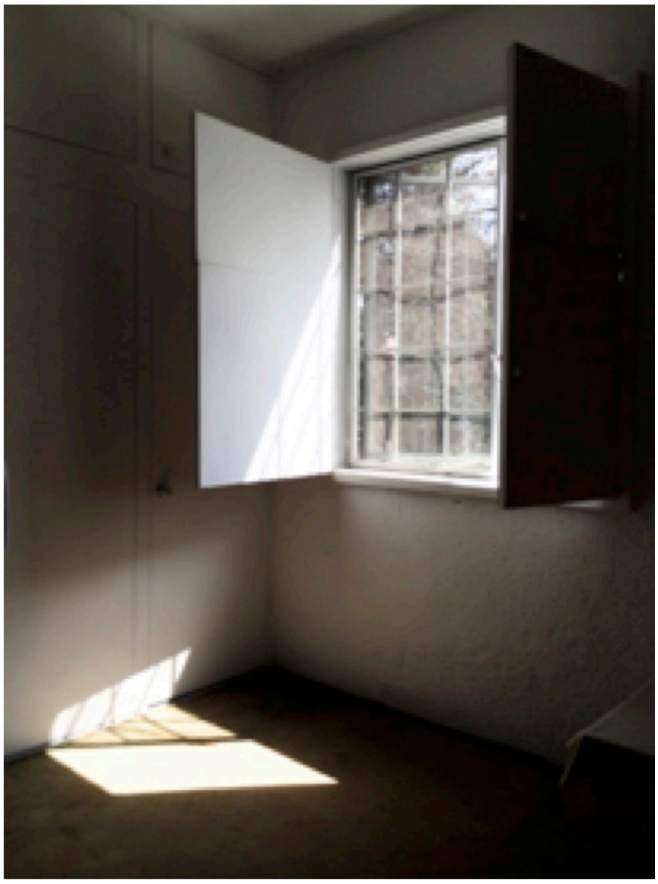




Photo 1: Colour details in various spaces of the house; Photo 2: Sculptures in their niches; Photo 3: Detail of furniture and spatial elements such as the sphere; Photo 4: Light and darkness, interior view of bedroom, same window open (first picture) and closed (second picture); Photo 5: The 'patio of pots'; Sources: Sarah Frances Dias Photography, photos taken by the Author.

PLATE 46: LIGHT, COLOUR AND ART

Summary Notes: Barragan

1. *Barragán's work is a pursuit for an emotional architecture: that allows for tranquility, serenity, poetry, stillness, magic and enchantment qualities to emerge, creating an 'isolated' utopia and allowing man to find his own place in the world and in himself. From this intuitive ideal, vision and desire, emerges architecture's meaning and significance.*

2. *An emotional architecture moves people through it's beauty and can act poetically on the spirit of man. It is in beauty and emotion that mere architecture is elevated into an art.*

3. *Understanding the causes of emotions, the root of what makes man be moved by a space, allows for the creation of those emotions in both art and architecture.*

4. *Architecture can convey the most poetic and beautiful idea possible of the passing of time, creating a 'depth' in life and art. This idea of 'beautification by time' is associated with 'Interiority' as 'lived time' and 'leisure' as 'enchanted time'.*

5. *A space that appeals to all the senses uses light, colour, form, art, shadows and darkness, nature and landscape and objects that accentuate it's inner meaning: unity between all forms of expression and art, where architecture holds the vision.*

6. *Colour creates emotion: should be founded in the notion that architecture is an extension of nature itself.*

7. *Architecture should create tranquility and serenity at a spiritual level, allowing man to find peace within its spaces.*

8. *The use of colour and light creates a mystical and spiritual architecture and atmosphere.*

9. *Architecture is a reconciliation of the past with the present, of tradition with the modern, of the arts (embracing all the arts), of nature and construction, of colour and white, of darkness and light. In this reconciliation lies it's ability to move people and communicate poetic emotions.*

10. *Art, architecture and religion grant 'meaning to life'.*

11. *Spaces express an interiority and a hidden meaning: An ideal space needs to contain elements of 'magic', 'serenity', 'enchantment' and 'mystery'.*

12. *Conceptual Summary Table:*

Table 5: Luis Barragán's Conceptual Chart

CREATION	CONCEPTS / EXPLORED FRAMEWORKS					EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Table 6: Luis Barragán's Conceptual Chart

LUIS BARRAGAN

1. FIELD:
- *Architecture, Landscape (garden design) and Art*

2. EDUCATION/BACKGROUND:
- *Studied Engineering in City of Mexico*
- *Took additional architectural studies and qualified as both an engineer and an architect*
- *Travelled to Europe*
- *Worked with his architect brother, Juan José.*

3. EVOLUTION:
- *Gradual perfection and clarification of his own ideals*
- *Increased use of colour and light.*
- *Growing integration of the arts (collaborations)*
- *Desire to manifest more emotions and spiritual connections.*

4. CONTEXT:
- *Emerges in Modernist and Mexican context*

5. INFLUENCES:
- *by the Alhambra, and the Parisian Exhibitions in his travel to Europe.*
- *by the french designer and artist Ferdinand Bac*
- *by European culture and Modern Architecture such as Le Corbusier*
- *by the popular sense of Mexican architecture: the landscape and the vernacular architecture .*
- *by the nomadic lifestyle, of the indigenous people, that create an open, free and 'atmospheric' way of being*

6. CREATIVE PROCESS:
- *Architectural process, then, is never finished, but an open system, that feeds off the living space once it constructed and alive*
- *The design, reveals itself over time; it unravels, as the space is lived and experienced.*
- *Use of experimentation through trial and error, in situ.*
- *decision-making was led by an intuitive vision*
- *a 'collage', as an assembly of different elements*
- *juxtaposition of elements and influences that translate into one single vision.*

7. PERSONAL COSMOLOGY:
- *Architecture is not a static element, but instead a living organism: a house is never finished, it is an organism in constant evolution.*
- *an open living system that should adapt, change and mutate, according to the living requirements*
- *light and colour qualifies and transforms space*
- *the belief in the importance of art, architecture and religion in granting 'meaning to life'*
- *believes in an 'emotional architecture', that he considers very important for humanity*
- *belief in an architecture that moves people through its beauty*
- *beauty and emotion elevate mere architecture to an art.*
- *the belief that an ideal space needs to contain elements of 'magic', 'serenity', 'enchantment' and 'mystery'*
- *the idea of 'beautification by time' associated with 'Interiority' as 'lived time' and 'Leisure' as 'enchanted time'*

8. EMOTIONS
- *Serenity, Tranquility and Peace*
- *Awe and beauty*
- *Peace and Harmony*

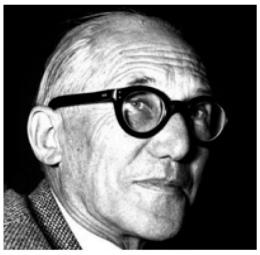
9. OBJECTIVES:
- *to create an emotional architecture that moves people through beauty*
- *to pursue the causes of 'emotions': decoding and understanding emotions*
- *to create serenity and tranquility*
- *the desire to create a 'formula' that would allow man to 'rest' and find tranquillity in his own home*
- *the goal of giving the most poetic and beautiful idea possible of the passing of time*
- *the creation of 'depth' in life and art*
- *to create a space that appeals to all the senses*

10. CHARACTERIZATION:
- *his early work defined by glass and concrete buildings, with roof terraces and factory like windows*
- *his mature work merges modern materials and minimalistic cubic forms, with references to local culture, personal memory and Mexican and Mediterranean vernacular forms*
- *reconciliation of modernism with the indigenous architecture of Mexico*
- *use of colour to have the pleasure of being around them*
- *each 'colour composition' is complex depending on a multitude of factors*
- *defined by a sense of isolation from the outside world, the incorporation of artistic elements and the overall poetical elements.*
- *emphasis on color, light and shadow throughout the spaces: used as main design features.*
- *use of colour is founded in the notion that architecture is an extension of nature itself*
- *the use of colour and light creates a mystical and spiritual architecture and atmosphere*
- *elements are added to the spaces in order to accentuate architectural and artistic meaning.*
- *art acts as an extension of the architecture in multiple ways.*
- *Spaces express an interiority and a hidden meaning.*

11. CONCEPTUAL FRAMEWORK:
- *Light*
- *Colour*
- *Space*
- *Perception*
- *Senses*
- *Unity*
- *Integration*

12. VALUES
- *Poetic, Spiritual, Sustainable and Emotional.*

13. MEANING/SIGNIFICANCE
- *Poetical meaning emerges as a connection to the interior worlds of the self and of the soul.*
- *Creation of a spiritual and emotional peace and tranquility.*



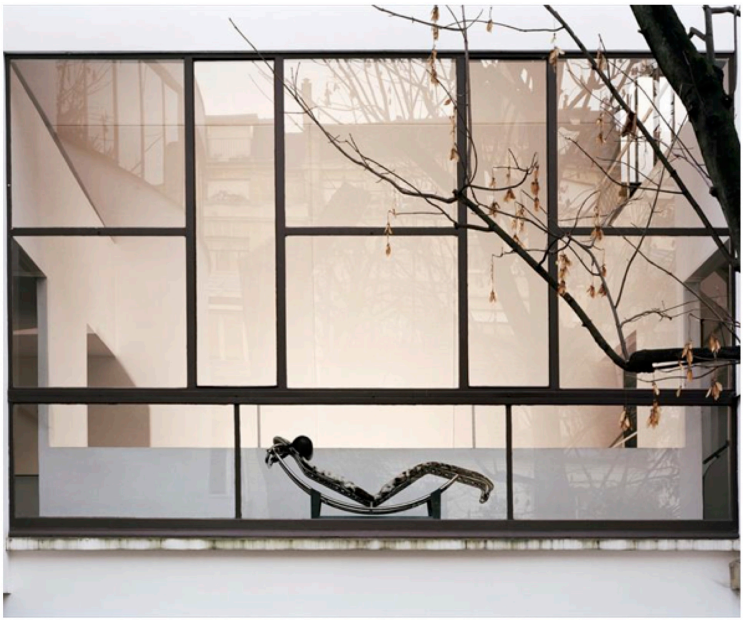




Photo 1 : Le Corbusier portrait; Source: http://cajondearquitecto.com/2014/07/30/le-corbusier-iii/; Photo 2: outside window of the Villa Roche; Source: http:// www.fondationlecorbusier.fr/corbuweb/morpheus.aspx?sysName=redirect150&sysLanguage=en-en&IrisObjectId=8286&sysParentId=150; Photo 3: Le Corbusier at his painting exhibition at Musée National d'Art Moderne; Source: http://www.fastcodesign.com/1670866/ultra-rare-photos-of-le-corbusier-in-color#4

PLATE 47: LE CORBUSIER

6.4. LE CORBUSIER

(1) artistic evolution, context and characterization

… Artistic/Architectural Context

Le Corbusier's architecture can be generally contextualized as belonging to the Modern movement, Modern architecture or modernist architecture, on which he had a profound influence shaping and determining new principles for a modernization of society at the beginning of the 20th century. Above all, Modernism sustained an architectural language of simplicity of forms, elimination of the superfluous (such as decorative elements), emphasis on technological innovations and honesty of structure and materials, trying to defines an architecture for the modern man.

> **Modernism:** The term refers to the architecture of the beginning of the 20th century that aimed to define new principles for architectural design that could accommodate the new technological uses and the overall modernization of society. The Modern Movement increased in popularity and scale after the second world war, with its leading architects including Ludwig Mies van der Rohe, Le Corbusier, Walter Gropius, Frank Lloyd Wright, Louis Sullivan, Gerrit Rietveld, Oscar Niemeyer and Alvar Aalto, to name a few. Modern architecture can be understood by some of its underlying themes or principles that sustained most of the architectural designs. Those are: the idea of simplicity of forms and an elimination of the superfluous, the idea of 'form follows function' defined by Louis Sullivan, honesty of structure and materials (structure should be seen, rather than hidden and materials should be used as they are), the use of technology and technologically produced materials, emphasis of straight lines (verticality and horizontality), the use of white as the predominant atmosphere, and the open space (free uncluttered space, responding to functional needs). Each architect further introduced his own principles and concepts, but the underlying principles related to ideas and forms remain more or less the same throughout the various architectural designs. Overall, there was also the desire to create a new type of visual and existential language that could sustain the 'modern man' in a new world; accompanying this, is the 're-definition' of the classic traditions, at various levels. In art, the modern movement also saw the desire to create a new visual language, and a general tendency towards abstraction. It is said to have begun with the heritage of painters like Vincent van Gogh, Paul Cézanne, Paul Gauguin and Georges Seurat, the developments of Henri Matisse, and Pablo Picasso.

Leonardo Benevolo, in *'History of Modern Architecture: Volume 2'*, (1977) further describes the local context within which Le Corbusier's work emerges. The economic and cultural situation in France during the years of the First World War, was mainly a concern for qualitative problems, such as improvements of lifestyle and general overall circumstances. While the rest of Europe was being swept by Art Noveau, France tried to create a new academic reformulation in order to refit the needs of modern society and life. In this scenario, Le Corbusier emerges, managing to create a link between both, maintaining the traditional aspects of France aesthetics (and traditional architecture values) and combining them in a new way to better define modernity (both ordinary life and overall existence). In Benevolo (1977) words: '' Thus he would act as a mediator between the modern movement and French traditions, and introduce into international culture some of the values inherent in this tradition.'' (Benevolo, 1977, p. 436).

… Artistic/Architectural Evolution and Characterization

For Le Corbusier, a new language of architecture (a new spirit) should be brought about not as a clean break with the past, '' (…) but as a recovery of architecture's authentic principles, (…). '' (Padovan,

2002, p. 23). For Le Corbusier, the architecture of his time had lost sight and understanding of architecture's role and its fundamental principles and it would be through a new type of architecture (as an art), through the rediscovery of unchanging fundamental, that these could be reclaimed, once more[415]. Le Corbusier's evolution was a progressive clarification of his ideals and views about the world of art: in both painting and architecture. His work (and his evolution) can be categorized in two main groups: the purist phase (a search for a more simplified language), and the after purist phase defined by a broader use of colour (a more intense focus on particular vibrant hues), and a gradual shift towards a more formal expressive type of abstraction, which begun to emerge in his paintings in the beginning of the 30's. Both these two phases define their own type of formal characteristics, and both were used simultaneously in painting and in architecture.

… (a) The Purist Phase

To begin with, the purist phase, which formulates the early stages of his career until the end of the 20's, is characterized by the definition of purism (purist colour and formal language). This early stage is marked by his friendship with Amédée Ozenfant (cubist painter and designer) that largely contributed to the clarification of his early views (rejection of cubism), and together they defined the purist movement (sustained pure and simple geometric forms and a reduced colour palette) and wrote numerous articles and books[416]. Along with the poet Paul Dermée they also established, in 1920, the purist journal L'Esprit Nouveau (The New Spirit), that became the soul of purism[417]. A co-dependency between form and colour is established in these writings and defines the basis for Corbusier's 'purist architectural polychromy', that will later be challenged by himself in his post war works, clarifies Klinkhammer (2011). Amédée Ozenfant and Le Corbusier were friends from 1917 to 1925, when each began to develop other views. One of the aspects defined by Purism was a 'unifying factor' of colour that linked together the elements of the design, be it in painting or architecture; they marked a reduced colour palette, based on the properties of each specific colour and created hierarchical colour groups or '*gammes'* based on each shade, which reflected their properties and how they should be applied[418].

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[415] This new spirit, continues the author, aimed to bring new life, and a new aspect to human 'constants' that in their essence, remain unchanged. His aim, through his writings and his architecture was to reclaim architecture's strengths and power, and in doing so, to '' (…) redirect architecture to its unchanging fundamentals.'' (Padovan, 2002, p. 23).

[416] **The purist movement:** Le Corbusier met Amédée Ozenfant met in February 1917, when he was newly relocated to Paris. they became friends and collaborators, until their separation in 1925. Both artists had a profound rejection of cubism for being 'irrational', and established purism, a new artistic movement that sustained pure, simple geometric forms. Purism aimed to be a new art form that pertained to all the arts (general to painting and to architecture); overall, it was seen as a constructive art that included painting as much as it did architecture. This collaboration and friendship was the beginning of Le Corbusier's (then still known as Jeanneret) work as a painter and as a writer. Together they published the book Après le cubism (After Cubism), an anti-cubism manifesto, that quickly became the purist's manifesto. They also published an article together entitled 'Le purisme' (Ozenfant and Jeanneret 1918;1921).

[417] **The Journal:** The journal criticized past artistic movements and sustained a new 'purist' movement along with functionalism in architecture and in the arts. With it's first publication, Jeanneret became Le Corbusier. During those years they also developed a 'purist colour theory', which defined principles and guidelines for the use of colour, as well '' (…) as the establishment of a palette dedicated to purism as a 'constructive art.'.'' (Klinkhammer, 2011, p.4). The author Klinkhammer (2011), further explains that '' Chapter IV of Après le cubism defines for the first time the relationship between colour and form; form is defined as the dominant element, while colour is subordinate.'' (Klinkhammer, 2011, p.4).

[418] **The purist colour palette**: was defined by the spatial dynamics of different hues and by a reduced palette, based on the properties of each specific colour (''(…) based on the specific advancing and receding properties of hues.'' (Klinkhammer, 2011, p. 4)). As such, they created hierarchical colour groups or *gammes* based on each shade: grande gamme (yellow, red, ochre's and earthly tones), gamme dynamique (lemon yellows, oranges (chromium and cadmium), vermilions), and gamme de transition (the madder reds, emerald green, all the lacquer colours). These groups are organized by spatial properties derived from the colour effect of

This purist phase, can be interpreted by multiple principles and characteristics derived from the purist vocabulary, that sustained both Le Corbusier's architecture and his paintings. First, the use of the restricted colour palettes, and each *gamme,* applying colours in a disciplined way, based on their colour properties and the affinities to human beings from nature; connected to the psychological effects that colour had on human beings; second, the use of white (fundamental element between 1922 and 1931), that acts as a unifying tone, and represented the 'renewal of society', symbolizing purity, newness and health and echoing a 'harmonic culture', a metaphor for 'morality', honesty and pureness[419]; third, there was a focus on the creation of compositions through pure forms (that should be whole rather than dematerialized like the Cubists); this 'pure form' vocabulary was translated into architecture, by Le Corbusier, that sustained that each element in space should act as an individual form (staircases, chimneys, chairs, paintings, etc.) and exude its own specific influence; and lastly, the idea that principles of creation could be applied simultaneously to architecture and to painting. These views are mostly summarized by author Klinkhammer (2011).

However there are other characteristics that sustained Le Corbusier's work and defined this stage, such as the use of reinforced concrete, led to the creation of prefabricated affordable housing and open plans, which represented the beginning of Le Corbusier's architectural language. An example of this stage is the Citrohen House[420]; secondly, the definition of the 'the five points of architecture' that defined the rules of modernism and summarized his ideas about the modernists architectural vocabulary. Notable projects from this phase include: the La Roche house (1923), the villa of Michael Stein (1927) and the Villa Savoye (1929–31), at Poissy, which is considered the best example of the incorporation of all these ideals, including the five points language[421].

> **The Five Points of Architecture:** Firstly published in his journal L'Esprit Nouveau and defined as the 'five points of architecture'. The five points can be briefly summarized as such: the building should be raised on 'pilotis', a free plan, a free design of the façade, horizontal ribbon windows, and the roof should be flat and possibly incorporate a garden. Overall there is a desire to free architecture into space, allowing space to be used not only freely but more simple and more intensely. The five points defined the 'rules' of modernism; overall, they defined a simple formal language, devoid of accessories, decoration and excessive furniture, much in the lines of what the purist movement defined.

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human experience. The first has constructive properties, the second, vibrating and mobile properties and the last group, *gamme de transition*, has no constructive properties and so has no use in purist art and architecture. The group further demands that purisms should use only the first, *grande gamme*, of colours; these were sufficient to produce different colour combinations, and did not need any other colours. The red, should be replaced by the ochres, in order to create unity in the whole work. Klinkhammer (2015) explains: «Ozenfant and Jeanneret demanded a "unifying factor" (facteur unique) linking all elements in the composition. This was achieved either through exclusive concentration on light and shadow, or, as is the case for purism, by replacing or introducing a "local tone" (ton local) based on a qualifying hue within the grande gamme family.» (Klinkhammer, 2011, p. 5).

[419] **The use of White:** Whitewash – with its pure, gleaming white paired with the disinfecting effect of lime – represents the renewal of a society that will be built upon traditional values, such as balanced social structures and a harmonic culture. White is a metaphor for morality, honesty, and pureness and is the incarnation of all things aesthetic. In the Law of Ripolin, white also serves as a background to enhance the reading of coloured volumes in space. As Le Corbusier states: "The white of the whitewash is absolute, everything stands out from it and is recorded absolutely, black on white; it is honest and dependable." (Le Corbusier 1925, 187-195)'' (Klinkhammer, 2011, p. 6).

[420] **Affordable Housing and Open plans:** In the beginning of his architecture practice he begun theorizing about the use of reinforced concrete, that led to the definition of a new idea: the creation of affordable prefabricated housing (that had the aim of aiding in a rapid way the rebuilding of cities after World War I ended), with open floor plans, the design became the beginning of Le Corbusier architectural style and language. Notable projects that expressed his views on architecture and life that marked this period were the The Citrohan House (which led to the development of his five principles for modern architecture, five years later[420]) and various city planning principles and ideas. The first materialization of these ideals, along with prefabricated houses were built in 1925-1926: a workers' city of 40 houses (following the Citrohan house ideals) at Pessac, near Bordeaux.

[421] **Villa Savoye:** The openness of the Poissy site allowed him to create a freestanding building and realize his five-point program. The materials used were concrete and plaster that allowed for smooth surfaces and soft textures. In regards to the formal design of the plan, Le Corbusier used the ratios of the Golden Section, demonstrating his love for the proportion systems of the past (anticipating the creation of the Modulor). The completion of the Villa also marks the end of this early stage of his work.

… (b) The After-Purist Phase

The after purist phase, is indicated by an abandonment of the purist principles in search of new ways of expression. Corbusier himself, explains this change, as an 'enlargement of the pictorial vocabulary' and he became intrigued by what he describes as 'objects of poetic reaction' that defined a new search for form that found its vocabulary in human figures and objects of daily life. Mainly, his artistic vocabulary expands away from the constraints of the purist's ideals, searching through different colours and forms a new way to express his ideals. This marks the beginning of a search for new forms of expression. The first example that assimilates the transition of colour application and conceptualization in architecture, leaving behind the purist approach is La Roche-Jeanerette House, in 1925. Colour potentiates the space, enhancing it, and accentuating its formal qualities. Colour allows for the ''camouflage'' of objects, for organizing and unifying the final result. In 1926, also, there is a transition in Corbusier's painting, that leads to a more sensuous figurative type of painting and applies vivid colours, as opposed, to only the ochre's and subdued tones. The use of colour and it's expressive qualities is also explored in the Swiss Pavilion in the Cité Universitaire (1930's) as a polychromy, with the understanding that colour produces the 'final spatial expression' of architecture and the Unité d'habitation in Marseille, that used an 'architectural polychromy' with a bold palette.

> **Le Corbusier's Polychromy:** In 1930's, with the design of the Swiss Pavilion in the Cité Universitaire district of Paris, the colour schemes changed drastically in Le Corbusier's design, initiation an 'After Purism' phase, where a bold polychromy makes diversity possible in the student's classrooms; he was using grey and the Salubra colour keyboards. However the multicolours treatment of walls was rejected in favour of one colour per wall. This importance of polychromy was explained by Corbusier in his article presented in a conference in Rome, in October 1936, entitled 'Rationalist architectural trends in relation to the collaboration of painting and sculpture'. In this sense, space and form are not only determined by plan and sectional view but depends also on the colour scheme. Klinkhammer (2011) explains: ''Plan and section determine the sculptural framework, while colour produces the final spatial expression.'' (Klinkhammer, 2011, p. 11).

Author Klinkhammer (2011) explains that colour began to emerge in a more vibrant way in Le Corbusier's buildings after World War II, as a design feature that interplayed with architectural elements, associated to textured forms in order to evoke 'strong emotional responses'[422]. This new search for expression wasn't only manifest through colour but also through form. Forms begun to abandon the rigidity of the pure forms in space, and started to be freer themselves, expressing more vibrant qualities. Both in painting and in architecture, there was a growing desire to be more 'expressive' through form, in nature, content and meaning. This new way of perceiving and creating form in architecture begun to be defined as 'Brutalism' (from the french Béton Brut meaning raw concrete). Overall, there was a new focus on the psychological effects of colour and form, with its application to provoke specific emotional responses. Projects that are of relevance of this phase include urbanism plans for the reconstruction of France, The Marseille project (unité d'habitation) (1952), the chapel Notre-Dame-du-Haut at Ronchamp (1950–55), convent of Sainte-Marie-de-la-Tourette at Eveux-sur-Arbresle, near Lyon, the city planning of Chandigarh (1951 onwards) and the Carpenter Visual Art Center at Harvard University (1964).

[422] Reference to: ''Vibrant colour is applied next to rough exposed concrete to evoke strong emotional responses.'' (Klinkhammer, 2011, p. 3).

Synthesis: *As a synthesis, Le Corbusier's first phase was described by his first use of a restricted colour palette, the use of white as the colour of purity and muted subtle tones and the use of rigid pure forms that created compositions. His second phase, after-purism, used both colour and form in a more expressive way; colour was applied in spaces in order to fulfil specific functions and create a unique atmosphere: pale pigments, the 'light series' were used to create warmth, depth, and a sense of a light atmosphere; whereas deeper pigments, darker tones, were used to create spatial effects (camouflage, receding, or enhancing objects or walls). And form was used freely to communicate the expressive nature of the human spirit and provoke specific emotions. Corbusier's two phases, are thus clearly marked by his use of colour: the first, pre-war, using muted tones and white, focused on a clean, minimalist and purist approach; the second, post war, with his use of various strong colours, that aim at creating emotional responses and dramatic architectural compositions.*

(2) creative process, methodology, techniques and characteristics

… Creative Process and Methodology

Le Corbusier's creative capacities and mastery, equated to those of a 'genius' (mastery of form), as pointed out by Leonardo Benevolo (1977), derived greatly from his personal values that gave his work 'extraordinary strength' and from an inherent aim: the desire to create an 'objective perfection'[423]. It is possible to understand this creative mastery in two ways: firstly as a result of his complex design process and secondly as a result of the connections between the arts (painting as a laboratory).

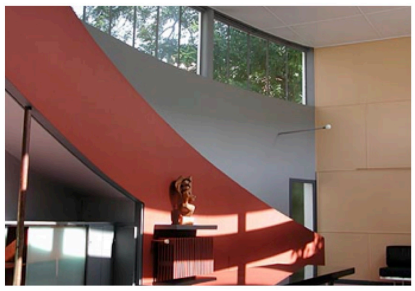
… (a) The Design Process in General for Le Corbusier

Le Corbusier created the preliminary design of any project in three distinct stages: '' 1. Integrate with the site; 2. Spontaneous birth (after incubation) of the whole world, all at once, at a stroke; 3. The slow execution of the drawings, the design, the plans and the construction itself. '' (Pauly, 1997, p. 72). As Le Corbusier himself claims, the first stage is intrinsically connected with the site and the spirit of the landscape; the second stage is related to 'incubation' that leads to the spontaneous birth; Pauly (1997) explains that this 'incubation' phase (gestation), which is of the essence for any design process, occurs prior to any sketching when the idea develops freely in the mind, feeding off different elements, as an exploratory stage that assimilates and processes large data and includes an 'empirical and subjective dimension'. Once the incubation stage leads to the 'spontaneous birth of an idea', the third stage begins, which is the drawing stage: and serves to act as a 'transcription' of the mental concept that has already been formulated in the mind or in the artistic spirit. The drawing evolves freely in a process of form finding and lastly, once this form finding in 'solid', these are translated into technical drawings and models.

[423] **Creative mastery:** In regards to Le Corbusier's creative capacities, Leonardo Benevolo (1977) claims: '' If there really is anything like artistic genius in the strict sense, as attributed to the great creators of the past, i.e. the complete mastery of form, Le Corbusier possessed this gift to a degree that has no equal in our time, and had few possible comparisons even in the past. '' (Benevolo, 1977, p. 436). Simultaneously, driving his creative approach, was an inherent aim, as Benevolo continues clarifying. His driving aim, was that of a '' patient research'', that strived to create '' (…) not an individual but an objective perfection, offered to all and not connected to a personal guarantee, but capable of providing itself on its own (…). '' (Benevolo, 1977, p. 436).

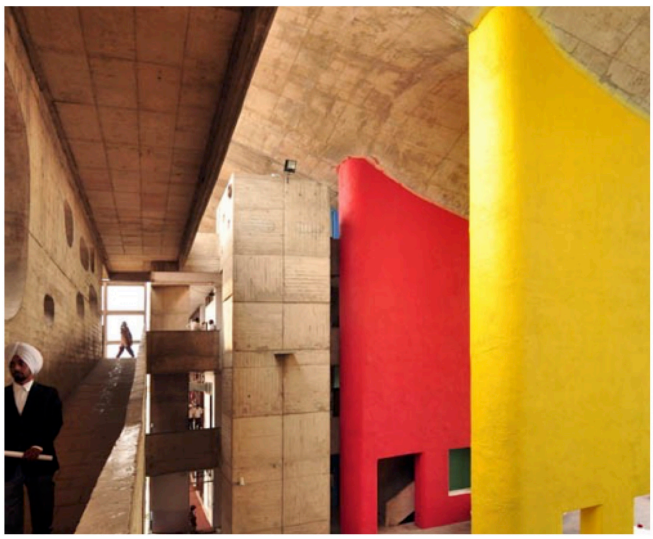






(a) Purist phase: reduced colour palette and pure forms

Photo: Le Corbusier, Nature morte Indépendants, 1922; Source: http://arttattler.com/archivelecorbusier.html; Photo 2: Vila La Roche, completed in 1925; Source: http://www.galinsky.com/buildings/laroche/;Photo 2: Villa Stein-de Monzie, designed by Le Corbusier and was built in 1926-28. Source: http://www.nytimes.com/2014/03/07/greathomesanddestinations/french-historical-gem-restored-to-its-simple-glory.html





(b) Post-war phase: expressive colour and form

Photo 1: Detail of the High Court, Chandigarh; Source: https://www.flickr.com/photos/scottnorsworthy/4867374995/; Photo 2: Ozon, 1963, by Le Corbusier; Source: http://www.fondationlecorbusier.fr/corbuweb/morpheus.aspx?sysId=13&IrisObjectId=6499&sysLanguage=en-en&itemPos=7&itemSort=en-en_sort_string1%20&itemCount=10&sysParentName=&sysParentId=72;Photo 2: Interior of the High Court at Chandigarh; Source: http://www.mimoa.eu/projects/India/Chandigarh/High%20Court/?utm_expid=3171585-1.pFu_x39wQKuggy22EudlKA.0

PLATE 48: LE CORBUSIER'S PHASES: PURIST AND EXPRESSIVE

This design process, for Corbusier, was a way of maintaining loyal and true to the creative instinct and the initial impressions that fuelled the very beginning of the project: throughout the whole process, by this progression, the whole project would maintain the artistic impulse. In regards to the artistic creation process, Corbusier summarizes: '' The only possible atmosphere conducive of artistic creation is steadiness, modesty, continuity and perseverance.'' (Corbusier and Žaknić, 1997, p. 85). It's this modesty towards nature and man, steadiness and constant continuity in time, that so well defines Corbusier's creative process.

… (b) The Artist and the Architect: Painting as a laboratory

Le Corbusier, as both painter and architect, created multiple connections between these two forms of artistic expression that allowed him to define a unique approach and a different way of conceptualizing and envisioning both arts: painting and architecture. Muller (2004) says that '' Examining his evolution as an artist provides significant insight into his architectural interests. '' (Muller, 2004, p. 9) and that it is precisely this understanding (the interdependency between art and architecture) that allowed Corbusier to develop his own unique artistic and architectural vision and that made his work so unique. Le Corbusier, used methods and principles from both artistic forms, integrating them, and crafting a new vision and a new ideal for both architecture as an art and painting.

To this end, Le Corbusier's creations reflect his search for links and 'commonalities' between the artistic disciplines of painting, sculpture and architecture, creating and transferring knowledge between them. One of the main reasons for this, is because he used his paintings to create an exploratory field of art, in order to clarify principles and ideals that were later transposed to architecture. Some of these common pursuits can be summarized by Klinkhammer (2011): '' (…) systems for ordering and proportion, layering techniques, the language of form, and simultaneous perception of multiple spaces, as well as the use of colour based on common rules.'' (Klinkhammer, 2011, p.13). Another commonality is pointed out my Muller (2004) as abstraction and the use of free forms in space[424]. Le Corbusier found in painting an innate freedom that allowed for a search of these multiple principles and ideals.

(3) inspiration, influences, conceptual framework and themes:

… Influences

There are various influences that deeply affect Le Corbusier's creative process and project development that can be traced in Corbusier's notebooks, find echo through his artistic work and architectural projects. These can be organized in four main types: classical architecture and ideals of order and proportion, nature, folklore and expression theories of art.

… (a) Classical Architecture: Order and Proportions

[424] **Painting as a Laboratory:** Author Muller (2004) also adds that it is through painting that Corbusier explored his artistic views, plastic constructions and free forms in space. It is this freedom found in painting that allowed Corbusier to explore his own expressive artistic language, and then to transpose these values and principles to architecture. One premise that was transposed from painting to architecture and that was explored in both fields, Muller (2004) clarifies, is the growing desire for 'abstraction', that is clear by Corbusier's abandonment of the Purist phase (as with all the figurative elements that featured there) and a journey towards a more 'abstract' language of art, in the sense that he 'replaces details with primary shapes and forms' in an abstracted vocabulary.

First, there were three main architectural discoveries that he derived from his early travels to Europe that deeply influenced his thoughts on architecture: firstly the idea of 'living cells' (derived from Tuscany), second, the discovery of classic proportions (rooted in Palladio and the Veneto) and third the use of geometric forms (derived from the Balkan peninsula). These three main aspects shaped his early thinking about architecture (as summarized by Choay's views)[425]. These influences grew on Le Corbusier, and his appreciation for the proportions of the classical tradition carried on throughout his life. He was also deeply influenced by classic geometry such as the golden number, the golden proportions and the Fibonacci sequence; these greatly shaped his ideas on form and ultimately led him to defining The Modulor. But there is another way in which the overall classical tradition as well as the Renaissance's ideas deeply influenced him: the belief that architecture can indeed be an art, that accommodates and incorporates the other arts (with a shared significance and meaning) and the idea that architecture could establish an order that is part of a more universal order. For Le Corbusier, (as it was in the classical tradition) creation is part of a bigger whole, and should follow those principles in order to communicate them to the observer.

… (b) Nature

As another major influence on le Corbusier, there is nature and organic forms. On this regard Muller (2004) explains, that Le Corbusier's search for the organic forms of nature (began in the post-Purism designs of 1927-28 and extended into the 30's) had the purpose of understanding their own inherent poetic content and value. This inspiration drew from the groundings of John Ruskin and Owen Jones, as well as from his travels, which allowed him to explore nature as a source for creative endeavours of drawing, art and architecture. This growing interest in natural forms finds evidence is his sketchbooks that document his interest is nature's forms such as objects, shells and crystals. In general, Le Corbusier defended that nature was the source of all design, so, understanding nature, it's forms and it's harmony, would allow architecture to be free in content and in formal expression[426].

… (c) Folklore

Also, there is the influence of Folklore. Corbusier's appreciation for Folklore is linked to his love for nature, the natural and the landscape, finding in 'folklore' the means by which man joins nature. On this influence, Muller (2004) explains that for Corbusier '' (…) folklore was essential to reconciling the modern condition with the material and spiritual.'' (Muller, 2004, p. 38). By contrasting both elements, bringing the primitive into the modern era, Corbusier created a link between these two characters.

[425] **Classical Architecture Inspiration:** As such, Le Corbusier begun his architectural practise designing villas, with these three main pillars that defined his architectural views and ideals. Reference to: '' The Charterhouse of Ema at Galluzzo, in Tuscany, provided a contrast between vast collective spaces and "individual living cells" that formed the basis for his conception of residential buildings. Through the 16th-century Late Renaissance architecture of Andrea Palladio in the Veneto region of Italy and the ancient sites of Greece, he discovered classical proportion. Finally, popular architecture in the Mediterranean and in the Balkan peninsula gave him a repertory of geometric forms and also taught him the handling of light and the use of landscape as an architectural background. '' (Choay, 2015).

[426] **Nature as Inspiration:** Muller (2004) concludes: '' By imitating and copying nature, Le Corbusier subsumed nature as an art form whose integration was essential to the architectural event.'' (Muller, 2004, p. 36). Corbusier believed that nature was the source of all design; as such, ''Le Corbusier approached architecture from the perspective of the creator.'' (Muller, 2004, p. 56). Understanding nature, how nature creates, was a way of understanding harmony, and of 'acquiring grace, flexibility, precision and serene perfection'. Nature granted Corbusier form freedom: '' Forms from nature, such as tree trunks to enclose the view, are adapted as a source of architectural innovation, enabling the architecture to assume any shape that meets its aesthetic and pragmatic objectives, (…) '' (Muller, 2004, p. 28).

Folklore as such, was of great importance for Corbusier, precisely because it could 'blend' the modern world into 'the natural world' of organic forms and through that union allow for a revelation of the 'spiritual' ideas.

… (d) Expression in art

Although there are no references as to direct connections to Le Corbusier's influence of expressionist's theories of art, it is clear, through his work that it had a profound impact on him. Mainly through the trails, that art movements as well as individual artists of their time were establishing, such as cubism and Picasso, there was this underlying idea that the strength of art was precisely in the power of expression. This is exactly the idea that Le Corbusier sustained, both in his art and his architecture, specially his later works.

… (e) Others

The are a number of other influences that should be announced but that are presented as below as themes (because they are Le Corbusier's creations themselves; they are The Modulor (that was defined by Le Corbusier himself, between 1942 and 1955) and was deeply used in various of his projects as a tool for harmonious proportions and plastic connectivity and the Colour keyboards, also presented bellow, used by Le Corbusier for the selection of colour combinations in both his paintings and his architectural spaces.

… Conceptual Framework and Themes

There are four main conceptual frameworks that drive all of Le Corbusier's work, and all of them are ideas and principles developed and created by him: the first regards architecture, and was defined by Le Corbusier as the 'Five Points of Architecture'; the second regards proportions and form, and was defined as The Modulor; the third regards colour, and was created as 'Colour Keyboards'; and lastly, is the symbol, which is the symbol of 'The Open Hand'. Following is a description of each, and how they were used and applied in each creation of his.

… (a) The Modulor: The Search for the Laws of Forms

Le Corbusier developed 'The Modulor' between 1942 and 1955 and published the book in the following years, with his research entitled '*Modulor: A Harmonious Measure to the Human Scale, Universally Applicable to Architecture and Mechanics'*. Mainly, the Modulor is a system of proportional measurement (derived from the combination of multiple proportional systems such as the Fibonacci Series, the Golden Section and the number Phi), which followed the classical idea that systems proportions define the order of the world of nature and of the universe, and so, should be applied to the creation of all arts. The Modulor, thus, aims to be a continuation of the legacy defined by Vitruvius, by Leonardo da Vinci's 'Vitruvian Man', by the work of Leon Battista Alberti, and others, that sustained that the proportions of the human body designate an inherent order of the world.







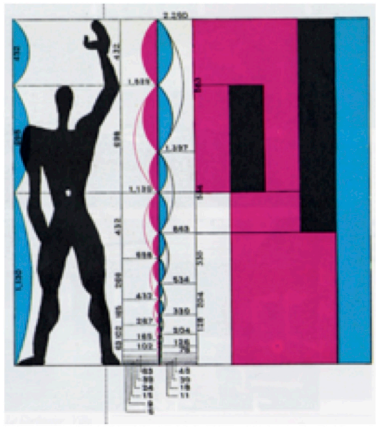








Photo 1: Lithograph coloured in watercolor, 1960, by Le Corbusier; Source: http://www.museoreinasofia.es/en/collection/artwork/chute-barcelona-fall-barcelona-study-lithography; Photo 2: Le Corbusier sculpture, La Mer; Source: https://pt.pinterest.com/pin/294282156873450078/; Photo 3: Interior of the Vila Savoye; Source: https://pt.pinterest.com/etsipal24/architecture-l-le-corbusier/;Photo: The Modulor, By Le Corbusier; Source: https://wharferj.files.wordpress.com/2010/12/45_le-corbusier-le-modulor-dor.jpg; ;Photo 2: J. Ach, the Modulor imprinted on the concrete, Unité d'habitation, Nantes, Rezé, Photograph, © FLC, ADAGP, Paris 2015; Source: http://www.inexhibit.com/marker/paris-le-corbusier-mesures-de-lhomme-exhibition-centre-pompidou/;Photo: Page from Polychromie Architectural; Source: http://www.madebyhvh.co.uk/2014/08/le-corbusier-polychrome-architecturale/; ;Photo 1: The Open Hand motif in a painting by Le Corbusier; Source: http://www.stylepinner.com/hand-le-corbusier/aGFuZC1sZS1jb3JidXNpZXI/

PLATE 68: PROPORTION, FORMS AND EXPRESSION: THE UNIVERSAL MAN

The Modulor derived from an intuition, as a sort of 'revelation', that allowed Le Corbusier to understand that everything in the universe (nature, man's masterpieces, simple forms such as shells and simple huts) used human measures as their guidelines[427].

Hence, the Modulor itself, based on the number 1.618, as Le Corbusier explains, is based both on geometrical constructions (linked to intuition and aesthetics) and on the play of numbers (requiring both geometry and numbers, that should be done separately and then added together); therefore it demands the full knowledge and mastery of both disciplines. Using the Modulor, for Le Corbusier, allows for sureness and creative freedom.

The Modulor manifests Le Corbusier's vision that there are an infinite number of laws and principles that remain hidden and that sustain our human existence; discovering the Modulor, applying it and understanding it, only made that even more clear. Muller (2004) accentuates a deeper particularity of the Modulor. She explains that there are multiple sketches in Le Corbusier's notebooks that feature the Modulor as a 'poetic device' that allowed to '' (…) recombine the organic with the mechanical by translating natural proportions into a mathematical formula for use in his art and architecture.'' (Muller, 2004, p. 38). In fact, just like the classical tradition also believed, for Le Corbusier, the right proportions conveyed the harmony of the world, and thus could communicate the underlying principles of the universe, allowing creations to be communicative as a sort of 'poetic device'.

… (b) The Colour Keyboards: The Search for the Laws of Colour

Le Corbusier's '*Vers une Architecture' (*1923), has no reference to colour, however, in 1931, about ten years later, Le Corbusier turned to colour creating the *'Claviers de Couleurs'* (1931) or the Colour Keyboards. With the Colour Keyboards, he tried to solve the problem of the accurate reproduction of colour in architecture, with the aim of being given to clients for an accurate selection and reproduction of colours; or as the author Scavuzzo (2010) explains: '' (…) the aim of the keyboards is to save the compositive choices from arbitrariness.'' (Scavuzzo, 2010, p. 435). The author Klinkhammer (2011), contextualizes this shift in perspective explaining that it was probably the use of primary colours associated to floating planes by Theo van Doesburg that triggered his new views on architectural polychromy[428]. Simultaneous, his manuscript '*Polychromie Architecturale'* was completed at the same time of the publication. The colour keyboards specified colour harmonies and colour combinations (entitled, sky, sand or landscape) that could be applied, in order to evoke specific atmospheres, feelings, emotions and associations. They create a sort of metaphor that is embodied in their application.

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[427] **The conception and inspiration for the Modulor:** In his book he explains that the conception of the Modulor, derived from an intuition, '' (…) that intuition being the fruit of many years of study of all things connected with proportion.'' (Corbusier, 2000, p. 17), that is, according to Le Corbusier, a miracle related to 'numbers' derived from the Gods. This 'miracle' resulted from a passionate quest related to harmony and to proportion, that had been the object of study for many years. He explains that this quest, had led his search always into similar solutions, no matter in which fields he would be searching. In his words: '' A varied personal experience, extending to many branches of activity though all the same kind: town planning, architecture, sculpture, painting, typography, had all made me trace and retrace the same roads over and over again, raising the same questions and proposing the same solution.'' (Corbusier, 2000, p. 17). On this issue, and on the importance of his discovery, he explains that all the great masterpieces (both modest such as a fisherman's hut or sublime lie the Parthenon) all used human measures as their base guideline. In this way, from the observation and study of both classical and humble structures, art creations and nature, the Modulor was composed. It's inspiration thus lies in the classical creations sustained by geometrical proportions such as the golden section and the works developed by Vitruvius, and its inherent values of human proportions and harmony.

[428] '' Seeing the axonometric drawings and model of Maison particulière and of counter-constructions designed by van Doesburg and van Eeesteren with their coloured floating planes reduced to primary colours likely triggered Le Corbusier thoughts about his own distinct approach to architectural polychromy.'' (Klinkhammer, 2011, p. 6).

The Colour Keyboards: The Colour keyboards are composed of a series of colour combinations, (12 'colour keyboards' made up of 43 colours) inspired by natural pigments, by the ancient frescoes and by the grande gamme developed with Ozenfant during the early 1920s (as explained by Author Scavuzzo (2010) and author Klinkhammer (2011)) creating a series of harmonious colour combinations: '' With a few exceptions, each saturated hue is assigned three or four different brightness values.'' (Klinkhammer, 2011, p. 7). Furthermore, there was an atmospheric natural conceptual tone to each of them, accentuated by their titles, that had natural themes such as Space, Sky or Velvet. Overall, the Colour keyboards defined a new way of approaching and understanding colour. By the late 30's there was a growing relationship between the connections of colour and form, instead of an exclusive focus on colour. And the focus on colour, became increasingly more evident with Le Corbusier's evolution.In 1959, Le Corbusier added to his Colour Keyboards, by creating a second colour collection, composed of 20 plain and vibrant colours, greater emphasis on red and blue, and overall darker tones. This palette was also inspired by the colours of nature and defined a natural scheme; however it included mainly synthetic colours, aimed at fulfilling dramatic, emotional and enhancing effects, with more high contrasting and dynamic colours. Author Scavuzzo (2010) summarizes the distinctions between the two sets of colour palette, explaining that while both continue the 'musical metaphor', '' (…) while at first colour plays with other instruments of the spatial composition in a subordinate position, later it becomes a single voice engaged in variations on self-pace like in a polyrhythmic composition.'' (Scavuzzo, 2010, p. 1).

… (c) The Symbol of the Open Hand

The Symbology of the open Hand (La Main Ouverte) was a continuous motif in Le Corbusier's art and architecture; it is an 'integrative element', that appears in Corbusier's paintings, sketches and sculptures (such as the sculpture in Chandigarh, that was meant to 'represent peace and reconciliation'). It also appears in the Modulor's calculations, and many other references. According to Muller (2004) the repetition of this Symbology is a 'concern' with the hand, as a 'symbol for communication', a means of unification, of welcoming, and of establishing a connection. It is a sign that represents peace and reconciliation.

(4) underlying theories and ideals

… Theories and Writings

Le Corbusier's was a prolific writer (expanding on various themes), creating his own theories that were the base of his creative process. His most influential book, *Towards a New Architecture* (1923), for example, clarified his vision for architecture inspired by the emerging modern era, and designated a theory of architecture as a 'machine for living': defending not the reduction of man to the level of a machine, but that the environment in which man found himself should embody the precision and definition of the greatest technological advancements. Le Corbusier also formulated a number of projects and theories in regards to City Planning. He summarized his views on urbanistic concepts in the *Voisin Plan for Paris* (1925) and a series of other plans, such as, Chandigarh, the capital of the Punjab, India, which begun in 1953, and which was the only plan to be developed. Despite all his various writings and theories, what most concerns the present research are his personal theories and ideas in regards to both Art and to Architecture (what is it, what it means and how it can change the lives of people through it's significance) and how the two relate to each other.

… Personal Cosmology and Art beliefs

… (a) The Power of Architecture: Le Corbusier's Vision

Le Corbusier had a very unique view of what architecture was and what it was capable of doing. In regards to the non-satisfaction and non-signification of the architecture of his time, Le Corbusier, in his book 'Toward a New Architecture' claims: '' We are unhappy living in unworthy houses because they ruin our health and our morale. (…) Our houses disgust us; we flee from them (…). We become demoralized.'' (Corbusier and Cohen, 2007, p. 94). As such, he aimed to do the opposite: through architecture create a better kind of atmosphere for the users, one that had the capacity to elevate human emotions and that could be capable of accommodating the spirit. In the same book, he further explains his fundamental view on the true role of the architect; for him, the architect, through the use of forms affects our senses by provoking 'plastic emotions'; these, are connected to a sense of an order that is in accordance with the world and generates a specific experience of beauty, affecting both our minds and our hearts[429].

This understanding of the architect's role and mission is accompanied by a complex understanding of what architecture is. For Le Corbusier Architecture is an 'artistic fact' that deals with the stirring of emotion; as a pursuit, it is completely different from mere construction (which is that which holds things together and is a skill)[430]. Therefore, for Architecture to exist an Architectural Emotion needs to be created and occur; architectural emotion occurs when the works resonates inside of us and is in tune with the universe (as an echo of universal laws). Thus, our ability to recognize beauty is linked to that which 'touches the heart and minds': which is Architecture and is Art; it occurs by the transcendence of the requirements through the establishment of new connections that stir up emotions. Consequently, the architectural work to be elevated to the condition of an art needs to arrange the elements in such a way so that they create a poetic instance and act emotionally and powerfully on the senses of man, communicating a sense of 'order' or a vision of the world.

For Le Corbusier, plastic architectural elements should be arranged in order to 'affect us' by specific emotions (such as fineness, serenity or interest); they should, he continues, act on our senses psychologically: generating relations that act on consciousness and create a state of bliss '' (…) (consonance with the laws of the universe that govern us and which all of our act are subject), in which man makes full use of his gifts of memory, of examination, of reasoning, of creation.'' (Corbusier and

[429] **The Architect**: In Le Corbusier's words: '' The architect, through the ordinance of forms, realizes an order that is a pure creation of the mind; through forms, he affects our senses intensely, provoking plastic emotions; through the relationships that he creates, he stirs in us deep resonances, he gives us the measure of an order that we sense to be in accord with that of the world, he determines the diverse movements of our minds and our hearts: it is then that we experience beauty. '' (Corbusier and Cohen, 2007, p. 92).

[430] **Architecture:** In his words: '' ARCHITECTURE is an artistic fact, an emotional phenomenon that is outside questions of construction, beyond them. Construction: THAT'S FOR MAKING THINGS HOLD TOGETHERE; Architecture: THAT'S FOR STIRRING EMOTION.'' (Corbusier and Cohen, 2007, p. 97). This distinction makes it clear that for Le Corbusier not everything that creates space is architecture… there is a difference between construction (mere building things together) and Architecture, as that which creates emotions. In his words: '' Architectural emotion: that's when the work resounds inside us in tune with the universe whose laws we are subject to, recognize, and admire. '' (Corbusier and Cohen, 2007, p. 97). And also Le Corbusier on this issue, further claims: '' "One uses stone, wood, cement, and turns them into houses or palaces; that's construction. It calls for skill. But, suddenly, you touch my heart; you make me feel good. I am happy. I say: it's beautiful. This is architecture. It is art....You have not only adapted raw materials to the functional requirements of a project but also, ***transcending*** these requirements, have established relationships that stir my emotions. That is architecture.'' '' (Muller, 2004, p. 54)

Cohen, 2007, pp. 95, 96)[431]. As a synthesis: it is this capacity to stir our emotions and communicate psychologically and the ability to create relations that act on our consciousness (putting us in accordance with the laws of the universe) that makes Architecture be Architecture (an Art).

There is yet, another point that is of the essence in Le Corbusier's views of Architecture that expands on the previous ideas. He believed that Architecture's 'objectivity' through 'abstraction' and its ability to create sublimity could appeal to man's highest faculties. It is in Architectural abstraction, a unique quality, that can spiritualize what he defines as 'brute fact' (which is the materialization of an idea or symbol); in other words, through architectural abstraction a spiritualization of the 'brute fact' (that contains symbols and ideas) occurs[432], and emerges through a sense of order. He further adds about these specific emotions that emerge as order (as part of the consciousness, as part of the universe): '' The emotions aroused by architecture emanate from physical conditions that are ineluctable, irrefutable, forgotten today. '' (Corbusier and Cohen, 2007, p. 102). And that is another role of architecture… to re-create and re-define, to make clear these universalities, these orders (manifested by 'brute facts') that are irrefutable and forgotten today.

An important concept that further defined Architecture as an Art for Le Corbusier, was the principle of *modénatur, or* the 'interplay of light and shades'; the *modénatur,* sets the tone for the architectural piece, explains Muller (2004), and implies that: '' (…) the architect cast aside his (her) persona as engineer in favor of plastic artist or sculptor.'' (Muller, 2004, p. 57). For Le Corbusier, The Parthenon was the supreme example of *modénatur.*

… (b) Art as the creation of spirit: Le Corbusier's View's on Art in general

An equally important clarification, is Le Corbusier's views on Art in general. Le Corbusier claims: ''Art is this pure creation of the spirit which shows us, at certain heights, the summit of the creation to which man is capable of attaining.'' (Corbusier, 2014, p. 221). It is this idea, of art as a 'pure creation of the spirit' that sustains all his creation in the broader sense, and that elevated the 'role of the architect' and of the artist as a 'noble spirit' [433]. Author Muller (2004) says that this 'pure creation of the spirit' was found through his 'art making', his painting, and then transposed to his innovative views on architecture. If it be true or not, that this vision of art as the spirit derived from painting, is not of relevance, but indeed the fact that Corbusier strived to create from the spirit and to the spirit of man, through his art, in whichever means of expression.

A characteristic Le Corbusier believed should define all great art (including architecture) is

[431] The full quote: '' Architecture, which is a thing of plastic emotion, should, in its domain, ALSO BEGIN AT THE BEGINNING, and USE ELEMENTS CAPABLE OF STRIKING OUR SENSES, OF SATISFACTYING OUR VISUAL DESIRES, and arrange them in such a way THAT THE SUGHT OF THEM CLEARLY AFFECTS US through finesse or brutality, tumult or serenity, indifference or interest. These elements are plastic elements, forms that our eyes see clearly, that our minds measure. These forms, which are primary or subtle, supple or brutal, act on our sense physiologically (sphere, cone, cylinder, horizontal, vertical, oblique, etc.) and shake them up. Being affected, we are able to perceive beyond raw sensation; then certain relations will come into being that act on our consciousness and put us in a state of bliss (consonance with the laws of the universe that govern us and which all of our act are subject), in which man makes full use of his gifts of memory, of examination, of reasoning, of creation.'' (Corbusier and Cohen, 2007, pp. 95, 96).

[432] Reference to: '' Architecture has graver ends; capable of sublimity, it touches the most brutal instincts through its objectivity; it appeals to the highest faculties, through its abstraction. Architectural abstraction has the distinctive and magnificent quality that, while being rooted in brute fact, it spiritualizes this, because brute fact is nothing other that the materialization, the symbol of an idea.'' (Corbusier and Cohen, 2007, pp. 101, 102).

[433] Reference to: '' This approach elevated the role of the architect to one of the professional, consistent with Le Corbusier's beliefs about architects as noble spirits. '' (Muller, 2004, p. 61)

simplicity; simplicity was a way of revealing the 'spiritual system'[434]; through simplicity geometry and proportions could manifest their conditions. With this view, Le Corbusier elevated art (and architecture) to its highest form… that of being a 'pure creation of the spirit' that communicates to the spirits of man. Overall, for Corbusier the architect, just like the artist, is a 'creator of emotion, beauty and order'; creations, as art, create from the spirit emotions that convey order and communicate consciousness (universal principles). For him, then, architecture and art are indeed co-existent, co-dependent and co sharing in meaning, for they can become at their most intense when they are placed together, working as one.

… (c) The Symbiosis and Synthesis of the Arts

Another main issue that is brought about by Le Corbusier's theories is the idea of the union between all the arts, which was just briefly approached and will now be expanded on. Author Muller (2004) explains that Le Corbusier became increasingly intrigued with the possibility of a synthesis of the arts in the mid-1940s, he advocated for a collaboration between architects and the plastic arts. In his treatise, 'Ineffable Space' (1945), Corbusier argues, explains Muller (2004), '' (…) that architecture, sculpture and painting are dependent on space, which 'releases' the aesthetic emotion.'' (Muller, 2004, p. 54). As such, a 'phenomenon of accordance' occurs, when the work of art is perfectly in tune with the space it is set upon. Thus Le Corbusier appeals for a union and synthesis between all arts: architecture, painting and sculpture. He further sustained that this 'concordance' is achieved by intuition of the artist (painter, architect or sculptor) and allows for 'the consummation of plastic emotion'[435].

In such a way, the significance of each work would be amplified, and would communicate at deeper levels to the viewer. However, Muller (2004) further writes that through Le Corbusier's work there is both a 'synthesis' and a 'symbiosis' between the various arts; where as Le Corbusier used the idea of a 'synthesis' of the arts in his theoretical discourse, she sustains that in La Ronchamp (as well as his overall theory and practice conceptual analysis) there exists an underlying symbiosis between all the arts, rather than merely a synthesis. The Bauhaus, for example, Muller (2004) continues, believed in an integration of the arts, an incorporation of the all the arts into one form, project or space; however Corbusier, established deeper levels of meanings between the arts, recognizing them as 'co-adjuncts' and exploring the 'symbiotic nature of art and architecture', sustained by a unique belief: one that believes art is 'distinct' from architecture, however dependent in an unilateral way, that architecture needs art in order to clarify its 'architectural premise'[436].

Now, a clarification of the concepts used by Muller (2004), that of Synthesis and Symbiosis is of

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[434] Reference to: '' Further, as Le Corbusier articulated in Precisions sur un etat present de l'architecture et de l'urbanisme, he considered simplicity to be integral to art: "Great art - we must never tire of repeating this - is produced by simple means.. ..Simplicity, which results from judgment and choices, is a sign of mastery. It gives, through a clearly perceptible play of forms, the means of expressing a state of mind, of revealing a spiritual system. It is like an ***affirmation,*** a path leading from confusion to clear geometric statement.'' (Muller, 2004, p. 57),

[435] '' The "phenomenon of concordance" is the consequence of the achievement of proportion by a process of intuition on the part of the artist, architect or sculptor and of comprehension by the privileged few who appreciate its significance. This miracle of ineffable space was what Le Corbusier referred to as "the consummation of plastic emotion. '' (Muller, 2004, p. 55).

[436] Reference to: '' (…) Le Corbusier, it will be argued, sought to **exploit the symbiotic nature of art and architecture**, recognizing them as co-adjuncts within the design process. Rather than an architecture of unification in which the fine arts were incorporated into a single form, as the Bauhaus advocated, Le Corbusier valued art as distinct from architecture, yet correlative in its ability to explicate the architectural premise. '' (Muller, 2004, p. 10)

the essence. By Synthesis, Muller refers to the 'combining of the parts into a whole', specifically, to integrate fine arts with architecture for ''the purpose of balancing humankind's emotional or spiritual needs''[437]; where as Symbiosis refers to the 'interdependence' and mutual relationship of benefit between the arts and architecture, suggesting and implying that they ''derive meaning from their mutual association'' adding to each other's aesthetic value[438]. In her own words: '' To be symbiotic is to have a relationship of dependency. '' (Muller, 2004, p. 86). As such, according to these two definitions, a symbiotic relationship is of deeper value and meaning than that of a synthesis connection only. Where as in a synthesis of the arts, the art is part of the whole, however, art is not a necessary condition for architecture to succeed. In a symbiosis both depend on each other. Muller (2004) states that various pursuits allowed for Le Corbusier to clarify his views on the symbiosis of art and architecture: the theoretical explorations, the creative painting and sculptural endeavors, the notions of 'purism', the quests for form within the sketchbooks. In Corbusier, Muller (2004) continues, there is indeed a symbiotic relationship between the arts, in Ronchamp as an architectural example, but mainly underlying his theories, his belief system and ideal; more so, Muller continues, demonstrating and explaining that not only are they united in meaning and content, but that the architectural realization would not have been possible without the presence and validation of the fine arts that inhabit the space: '' (…) without the art co-existing in the service of the architecture.'' (Muller, 2004, p. 13).

(5) specific work analysis, examples and key features

6.4.1. LA RONCHAMP

... Introduction

With La Ronchamp, Le Corbusier found a space to express his most poetic and artistic views due to his complete creative freedom. According to Gans (1987), once the project was complete, the 'architectural world' was in shock: those that knew Corbusier and associated him to the 'machine age' and to 'reason' perceived the chapel as an 'expressionist aberration'; where as others '' (…) saw its organic form as a humanistic enrichment of modern architecture and its Modulor proportions as evidence of its underlying rationality.'' (Gans, 1987, p. 74). However it was perceived and received at the time, today, it is unquestionable that La Ronchamp most represents 'the total work of art' that so well describes and defines Le Corbusier; considered a true masterpiece by many architects and critics, La Ronchamp escapes labels and categories (neither brutalism, neither modernism, neither post-modernism, as explained by Muller (2004) (Muller, 2004, p. 82)) and has grown to be an architectural icon of the contemporary architectural and artistic world. The chapel is a *poiesis*, claims Pauly (1997): '' (…) a poetic masterpiece that explores various forms of expression.'' (Pauly, 1997, p. 123); just as the ancient cathedrals, the chapel

[437] Complete definition: '' Synthesis refers to a combining of parts into a whole." In the context of this discussion of art and architecture, when used with reference to Le Corbusier, synthesis means to integrate fine art (painting, sculpture, ceramics, tapestries), other media, such as electronic music, and architecture for the purpose of balancing humankind's emotional or spiritual needs with its cerebral or functional needs.'' (Muller, 2004, p. 13).

[438] Complete definition: '' Symbiosis means to be interdependent and to derive benefit from a mutual relationship. (…) Therefore, to suggest that art and architecture are symbiotic is to suggest that they derive meaning from their mutual association and that architecture is in itself art, just as art contributes to the overall aesthetic value of architecture. '' (Muller, 2004, p. 13)

seeks to be a union of the arts and of life, she concludes. It is a dual character (the fact that it breaks with the past and the fact that it offers an exploration in the fields of the plastic arts) that makes Ronchamp a 'manifesto', explains Pauly (1997); another reason, the author continues, is that it summarizes Corbusier's in a symbolic synthesis of his 'fundamental concerns'. The Chapel has been studied through multiple perspectives, however, in this case study, the approach is to clarify the artistic and architectural aspects, the creative and poetic principles and the work process that led Le Corbusier, to create this unique sacred and timeless space.

… The History and the Context of the Site

The site is located high on a hill near Belfort in eastern France. It is an isolated landscape, with the Jura Mountains located at the distance and the steep hill itself dominating the character of the landscape: an open freestanding hill, with distant views over surrounding regions on all four sides and also possessing the spirit of a 'forest'. The site faces north to the Voges hills, east of the town of Belfort, west to the Langres and South to the Jura mountains, forming a unique condition that encloses what has come to be known as 'the four horizons'; the mountain/hill free standing, in the midst of such a landscape thus possesses '' (…) an aspect not unlike his much-admired Acropolis. '' (Muller, 2004, p. 71), explains Muller. These unique hills of Le Ronchamp are a sacred site of pilgrimage and have a long historical tradition dating back to the time. Gans (1987) explains that the history of this hilltop can be traced back in time through multiple generations all the way back to the Romans (Gans, 1987, p. 75). Muller (2004) adds even more historical context to the site, such as a connection with military defence a result of the positioning of the site in invasion routes of the Romans, a site of shared landscape between the Swiss and the Germans, as well as being the site of pagan worship, and lastly, the historical context that most evidence today, the site of miracles, that functions as a religious polo for pilgrims (Muller, 2004, p. 71). All these historical events have made the site be celebrated throughout the ages as a spiritual place (a sacred site) and, as such, it has possessed religious buildings that honour its unique values since the XIX century. The original chapel, a small space in scale, was renovated and transformed to fit the requirements of the pilgrims, and by the 1930's it was transformed into a larger cathedral, that was completely destroyed by the bombings of World War II. In regards to the influence of the site in general, Corbusier claimed: '' (...) the site is the nourishment offered by our eyes to our senses, to our intelligence, to our hearts. The site is the base of the architectural composition.'' (Corbusier, 1999, p. 40).

… The Commission and the Program

After the bombings and the complete devastation of the existing Church, with its unique sacred space devoid of a religious place for worship, the Notre-Dame-du-Haut property development company, decided to launch a commission for the project of a new chapel; they had initially intended to restore the former chapel, but due to cost, decided on a complete reconstruction instead. When Le Corbusier was contacted for the commission, he initially refused the offer (due to the rejection of the Saint-Baume project by the ecclesiastical), however he agreed to further listen to the proposal: a chapel for a pilgrimage site, that was still very much alive in its tradition, and to which Le Corbusier would have complete creative freedom. Corbusier became interested in the project and the program, but it was the site and the

landscape that was the determining factor, an interest that grew from the very first visit to the site[439]. The program for the new chapel was simple in character: the main nave, three small chapels (for independent services), an outdoor sanctuary for open-air ceremonies for pilgrims, dedicated to Virgin Mary should house a 'seventeenth century sculpture' of the Virgin and Child in wood, a sacristy and a small office in the upper floor, and lastly, the ability to collect rain water (due to water being rare on the hill). Muller (2004) accentuates that besides the programmatic references, ''(…) the architectural program at Ronchamp embraces premises of sanctuary, pilgrimage and humility. ''(Muller, 2004, p. 71); and that these specific emotions were integral part of the programmatic requirements. Simultaneously, other restraints conditioned the project: such as the lack of road access to transport building materials to the site, and the clients desire to re-use the old materials in a manner of 'economy', of means but also a way to convey humility and sustainability through the chapel.

… The Designing Process

… (a) The Gestation Phase: Influences, Visual References and Research

Le Corbusier's creative process (as previously defined) followed a gestation stage and a flash of insight, which can be understood as illumination. These stages were followed in La Ronchamp too: first, the gestation phase, which drew upon multiple sources such as 'travel references', research gathered from other projects, and personal references (' (…) information gathered during formative years, elements from previous projects, and personal reminiscences.'' (Pauly, 1997, p. 88)). In parallel to the conceptual form development, Corbusier also did research on the program, consulting various 'religious art journals' so as to understand the ecclesiastical requirements. What deeply accompanies this stage and the 'insight' stage that follows is the search for form and expression through drawing. It is possible to understand that phase two seems to overlap with phase one, as Corbusier was instinctively inspired by the very first visit to the site, and begun drawing from the very beginning, however those drawing stages, were profoundly intertwined by the 'search' for knowledge and inspiration. Gans (1987) explains that Corbusier was driven by two opposing tendencies throughout all of his life: '' one toward the generation of universal types applicable to any setting and the other toward site-specific responses to landscape.'' (Gans, 1987, p. 74). In the Ronchamp, too, both forces are found at play: at the one side the search for universalities and archetypes that define the artistic, poetical and rational existence on the other side, the desire to respond uniquely and specifically to the atmosphere of the landscape. For Corbusier, in La Ronchamp, the landscape imprinted such strong emotions that it was the site and its sacredness that fuelled his creative energies: in Corbusier's words: '' '' One begins with the acoustics of the landscape, taking as starting point the four horizons…. They are what gave the orders…. To them the chapel addresses itself.'' ''(Gans, 1987, p. 74). Le Corbusier, thus, possessed two main influences for Ronchamp, the landscape and the sacredness of the site: the site's history as a 'sacred place' of pilgrimage, and the landscape's depth and amplitude converted into what he stated as 'the four horizons'. Understanding the 'genius loci' of the environment and the energies of the specific site location, led to the unique conceptualization that

[439] Pauly (1997) explains that in Corbusier's first visit to the site (4th of June 1950), '' He lingered there for several hours, surveying the landscape at length and making few drawings in one of his famous sketchbooks from which he was rarely separated.'' (Pauly, 1997, pp. 60, 62).

fed all the stages of the design, acting both locally and universally, and finding a way to bridge the gap between those two apparently opposing principles.

… (b) The Project Development: Conception, development and presentation

Corbusier's vision developed in a kind of 'form search' through drawings and sketches, mostly in his notebooks: which begun with his very first visit, after which Le Corbusier defined a chapel with two strong and curved lines (the south and east walls)[440], that were a sort of response to what has become known as 'the four horizons' (the landscape views), where the overall concept for the chapel seem to already be clearly outlined[441]. In the series of drawings that followed Corbusier defined the elevations (featuring the outdoor altar and choir gallery), and also the curved sweep of the roof structure. After this 'form finding' stage, another visit to the site and a series of perspective studies, Corbusier focuses on the plan, aiming to clarify form, content, site, program and concept simultaneously, within one single gesture or form, creating what he defines as an 'organism' (a whole essence), that was a manifestation of the 'initial idea' and created a 'dialogue with the landscape'. According to Cohen (2004), another major influence on the plan development was the position of the altars[442]. The plan results in an asymmetrical, irregular shape: a synthesis of that initial 'impression'.

After the generation of the form in the sketchbooks, Corbusier proceeded to design in the Atelier the detailed drawings for the project, during which Corbusier defined the organic roof structure. After this stage, models were created (of wire and wood), upon which the final design and plan on 1952 was based, followed by a formal presentation to the Archbishop of Besançon in November 1950.

This whole process was not an abstract or logical development, but instead, as Pauly (1997) says, it responded to a 'sensation', a 'visual and sensory experience'. The construction of the chapel begun in September 1953 and was finished on June 1955. This second stage of the project, Pauly (1997) clarifies, runs from the presentation date to September 1953 when construction begun; this second stage is defined by a series of transformations: explorations of the North and West façade, interior perspectives and details, exploring the materials and construction details, clarifying tensions and concepts, etc.

… Influences

Le Corbusier drew upon multiple influences for La Ronchamp. Firstly the site and the landscape: on this issue, Muller (2004) adds that Ronchamp, strives to define and understand a 'sense of place', deeply influenced by 'regional architecture' and specific building materials while simultaneously defining forms that are based in nature's language. According to Muller (2004) there are four other major influences that strongly define Le Corbusier's work and that deeply influenced the creation of La Ronchamp. Those are Organic Forms from Nature (that deeply influenced the overall form), The

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[440] Pauly (1997) explains: '' Although, as Le Corbusier points out, this particular sketch has been lost , there does exist a sketch on tracing paper drawn at the architects practice and dated 6th June 1950. This is a faithful transcription of the first concept: two curves open out – one towards the south and the other towards the east, towards sweeping landscapes.'' (Pauly, 1997, p. 63).

[441] Pauly (1997) explains that ''These initial sketches reveal that even at this early stage the elevation of the south entrance façade had already been determined, and that its design would undergo very few changes before being accorded its definitive form.'' (Pauly, 1997, p. 66).

[442] Reference to: '' The chapel's plan, which became increasingly asymmetrical as the planning phase progressed, was governed, inside and out, by the positions of the altars.'' (Cohen, 2004, p. 65)

Proportions of the Modulor (that defined the proportions of the forms and their dimensions), Folklore (that was used as a language - connection to a more rural setting - and a reference for details and sayings) and the Symbology of the Hand (previously defined, in Le Corbusier's influences). It is these distinct four influences, co-operating together, that contribute to the symbiotic connection between architecture and art in Ronchamp, concludes Muller (2004). Le Corbusier was also greatly influenced by his own theories of what architecture could be and how it should interact with the other arts. Another influence is the inspiration behind the calottes towers, Le Corbusier drew from travels (around 1911) to the Vila Adriana in Tivoli, inspired him to create the carved out towers on the inside. These multiple sources of influences created a rich visual language, of various symbols, architectural references and emotional sources that found light in a complex and multi layered meaning in La Ronchamp.

… The Architecture: Spatial Description

… (a) The Procession: The 'promenade architecturale'

Gans (1987) points out that Corbusier, influenced by the architecture and sculptural character of the 'acropolis' conceived Ronchamp as a sort of 'acropolis' in itself; the site's landscape, for Le Corbusier, carried great resemblance with the Jura Mountains of his youth and the Acropolis, two defining great influences in the project: '' As on the acropolis, the procession is orchestrated by a sequence of axial perspectives defined but not enclosed by the built forms of ziggurat, chapel, and youth hostel.'' (Gans, 1987, p. 75). The procession rests at the arrival at the door; next to the open-air altar, the place for the pilgrims. Besides this initial conceptual 'procession' influenced by the acropolis, La Ronchamp also is a tribute to the concept developed by Corbusier as 'promenade architectural', that claims, architecture should be lived and experienced as a succession of spaces, as a wandering through space. So too, at La Ronchamp, Corbusier applied this principle, that also echoes the 'pilgrimages' journey. The chapel is designed to be discovered successively, where each façade and each space echoes its own meaning. Pauly (1997) on this issue, also explains that in order to fully grasp the outside forms it is necessary to embark in a journey around the volumes, observing each façade at a time, walking through the paths and gazing at each form; however, in the interior, the author explains an opposite situation occurs: the process of understanding the essence of the architecture, '' (…) occurs through the visitor, experiencing a series of different sensations, generated by the ambience created through the play of light within the spatial composition.'' (Pauly, 1997, p. 45).

… (b) The Facades

The facades, in order to be fully apprehended and experienced need to be observed from the 'walking' experience around the chapel, contemplating and 'living' each façade at its own pace, and understanding the opposing principles, the distinct forms, elements and character that make clear each one of them. North and West facades are concaved, closed upon themselves, they represent the more functional aspects of the chapel, both co-operate together in creating a poetical encounter by accentuating a 'play' of mass, form and space (see below); the South and East façades (where the outside open chapel is located) bend in to admit light, receive long distant views, are open and receiving in character, designed

to communicate and allow for gatherings, and the East façade's outdoor sanctuary is composed of free-standing forms that define the liturgical elements (altar, bench, pulpit and choir gallery) (see below). It is from the southeast facades that the chapel is approached, and the south entrance door (the main access to the chapel) is comprised of two revolving doors of two square sized panels (one facing the outside and one facing the inside) painted by Le Corbusier in his studio.

The enamel paintings, much like Le Corbusier's work, are intuitive and expressive creations; they use primary colours and their derivatives, in a sort of free-form expression, and possess a visual vocabulary and language that seem to find its origin in nature (organic forms, landscapes, mountains, stars, clouds, and rivers) and in geometry (pyramids, lines, circles, shapes and triangles), echoing the conceptual and poetical references that originated La Ronchamp in the first place; this fact finds more evidence in the representation of the hands that clarify the meaning of the chapel itself: on the outside paintings of two hands are represented, open one in welcoming and one offering[443], where as in the painting facing the inside space are represented hands in prayer and meditation. They are a sort of archetype of Corbusier's poetical vocabulary and artistic values that are echoed throughout the chapel: a balance between geometry and intuition, free forms and order, poetry and symbolism, etc. The doors are made of sheet steel enamelled in vivid colours; each door consists of eight panels painted with enamel paints. It is a pivoting door on the centre.

> **The North and West Façade, Closeness and Poetry:** The North and West facades, the posterior of the chapel, in opposing concepts and forms, are enclosed and confined. Although they represent the more functional aspects of the chapel, both co-operate together in creating a poetical encounter by accentuating a 'play' of mass, form and space; also, they accentuate the plastic elements of the chapel and create a mysterious '*promenade architecturale'*. Where these two facades meet, two towers (back to back against each other) create a vertical reference, and a gap is defined between them containing the entrance used on a day-to-day basis by the users of the chapel. Both facades are defined by 'parabolic curves' and complete whiteness of almost 'solid' walls. Where as the north façade contains only some small openings, the west façade, (the only one with no openings), possesses a second tower at the far end (the highest of the three towers) that allows for the chapel to be spotted at a far. This façade also possesses the rain collecting elements, that were transformed into a poetical and artistic 'form' like sculpture: concrete free forms define the gargoyle (gun like projecting form, in an oblique angle), a 'receptacle' raising from the ground, and 'free forms' such as pyramids and a cylinder within the receptacle. Pauly (1997) explains that: '' These elements create a sculptural object, and ''vitalize'' the façade.'' (Pauly, 1997, p. 42); furthermore, they are a 'keynote' within '' (…) the formal composition of the chapel and constitutes a 'plastic event' within the *promenade architecturale*: the viewer pauses on its way, looks at it, leans towards it and carefully studies it from all angles.'' (Pauly, 1997, p. 44).

> **The South Façade, The East Façade and the Outside Chapel Openness:** The south and east walls, as a response to the site, are respectively 'receivers' and 'transmitters': they are open to the landscape and address the people in a welcoming and embracing way; while the south wall 'receives' and welcomes the public and the crowds of people leading them to the indoor spaces (it possesses a beacon tower and an open wall), the east wall 'transmits' and 'communicates' through the small outdoor chapel, a 'sanctuary' designed to 'communicate' open air ceremonies on pilgrimage days. Both facades are defined by the projection of the roof structure that defines a covered area for gatherings, with the floor defined by paving stones that follows the form of the roof and the roof structure tilting down (to the north and west side) that accentuates even more the 'openness' of the chapel. Where as the South façade is defined by a series of openings in a 'vast' white wall, the East façade's outdoor sanctuary is composed of free-standing forms that define the liturgical elements (altar, bench, pulpit and choir gallery); the altar, the primordial element is composed of a block of white stone, placed on orthogonal bases defined by the Modulor proportions. According to the author Danièle Pauly (1997), these

[443] Firstly identified and clarified by Pauly (1997). On these paintings, Pauly (1997) also claims: ''The enamel-painted signs on the two surfaces of the door are inextricably linked with the symbolic nature of the chapel. As with the forms of the building, these simple signs evoke a dialogue with the landscape.'' (Pauly, 1997, p. 52).

elements create 'a human dimension' to the space and '' (…) highlight the thickness of the wall, emphasizing its solid appearance.'' (Pauly, 1997, p. 38). The south wall is thicker and tapered more intensely than the others, it possesses its own unique character, being the façade from which the interior is accessed.

… Structure, Materials and Roof System and Symbology

The building itself is composed of reinforced concrete columns, on which the shell of the roof 'rests'; the walls (except the south wall) re-used the stones from the old chapel; Pauly explains that '' (…) one can imagine this building as a skeleton with a 'skin' stretched over it, both inside and outside.'' (Pauly, 1997, p. 100). The structure is mainly in reinforced concrete, due to the freedom it allowed and also for the numerous finishing it allowed, but other materials were also used; concrete was sprayed to the outside surfaces, and then covered in white washes. All materials serve to accentuate the features of the building and contribute to the plasticity of the language. Pauly (1997) adds: '' Even on the construction site itself, Le Corbusier integrated chance elements into his work.'' (Pauly, 1997, p. 103). The towers are stone masonry topped with cement domes; the towers poke through the roof. The North and West walls are built of stone, where as the South wall has a reinforced concrete frame. The roof structure is comprised of two membranes ('conceived as an airplane's wing') separated one from the other; they follow the Modulor proportions, are made of reinforced concrete, and measure about 6cm depth. Pauly (1997) claims it is the roof dynamics and form that accentuate the inclination and changes its strengths within the interior space that allow it be dynamic and rich in nature[444]. Gans (1987) claims that the roof in an echo of Corbusier's search for the 'architectural primal tent': '' The roof of the two 6cm thick concrete shells, held 2m apart, makes the chapel part of this search for a new structure for the primal tent.'' (Gans, 1987, p. 76). The roof has many other symbolic associations: the wings of an airplane, the shell of a crab, and even the wings of a bird; it is it's poetic nature and 'organic' form that allows for many interpretations.

… The Interior Sculpted and Emotional Space

The interior space is a rich and is visually complex atmosphere. It can be accessed in two ways, each providing its own set of emotions: the main doors to the South or the smaller entrance of the north; according to Pauly (1997), the impressions received from both the entries and the emotions generated from both occasions are 'equally intense and sensationally rich'. Echoing these two types of entrances, the interior space is composed of two types of individual sensations, from two distinct types of spaces: the main central space of the chapel, corresponding to the south and east facades, and the north and west spaces, that are formed as nuclear systems, containing the individual and smaller chapels. The first, the general main space of the central chapel is perceived as open but yet confined; It is, like the outside form, a balance between reason and emotion: orthogonal lines define a kind of order (the cross and the mass of the altar), where as curved lines of the west wall and the weight of the curved roof creates a more emotional kind of sensation; it creates a space for seclusion, introspection and meditation, through its sombre, shadowy and mysterious atmosphere.

[444] Reference to: '' It is this building mass that lends the interior space its dynamic form, broken up at intervals by furnishings in order to create ''pauses'' in the composition.'' (Pauly, 1997, p. 48).







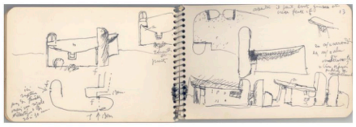










Photo 1 and 2: Ronchamp and the painted doors; Source: https://www.pinterest.com/pin/383368987003797214/; Photo 3 and 4: Corbusier project development sketches, 1950-51; Source 1: http://www.fondationlecorbusier.fr/corbuweb/morpheus.aspx?sysId=13&IrisObjectId=6834&sysLanguage=en-en&itemPos=192&itemCount=300&sysParentId=15; Source 2: https://www.pinterest.com/pin/482448178802046538/; Photo 2: North Façade; Source: http://www.fondationlecorbusier.fr/corbuweb/morpheus.aspx?sysId=13&IrisObjectId=5147&sysLanguage=en-en&itemPos=3&itemCount=5&sysParentName=Home&sysParentId=11; Photo 5: Stained glad windows with inscriptions; Source: http://www.fondationlecorbusier.fr/corbuweb/morpheus.aspx?sysId=13&IrisObjectId=5147&sysLanguage=en-en&itemPos=3&itemCount=5&sysParentName=Home&sysParentId=11; Photo 6: Side chapel; Source: https://www.pinterest.com/pin/545217098610789532/; Photo 7: Main central space of the chapel; Source: http://www.archdaily.com.br/br/01-16931/classicos-da-arquitetura-capela-de-ronchamp-le-corbusier/07-rory-hyde ;

PLATE 69: LA RONCHAMP

This main space is organized around the stone centre altar, located beneath the highest point of the building, placed (traditionally followed) on the East: a central focus and centre of the architecture (various joining forces, lines and geometries), the spatial perception and the poetical and spiritual dimensions.

Le Corbusier later described the importance of the altar for the monastery La Tourette, as a masking of a 'gravity' and an establishing of 'hierarchies' both psychological and physical [445]. The slope of the floor, follows the natural slope of the hill, and slopes towards the alter; the floor is made of cement paving; the interior is modest and bare in character, with plain wooden pews down the south side. Above the central altar, the east wall is perforated by several pinhole like windows and by a window with the Madonna and Child in silhouette; this window's image also serves the outside altar used during pilgrimages. The second type that is on the other side of this interior main space is a more darkened area, corresponding the North and West facades; just like it's exterior, it is emphasized by dramatic shadows and the absence of openings; it contains the individual chapels. One of three chapels in the interior is painted red. Both types of spaces create a visually rich and emotionally and spiritually balanced space. According to Gans (1987) what is most striking, within the interior, is the emotion of stillness and emptiness. Pauly (1997) explains that this interior environment grew out of Corbusier's desire to create both a place for 'silence and meditation' and a place that 'symbolized the dramatics of prayer'.

… Secondary Elements: Additional Elements, Furnishings and Details

The secondary elements, the furnishing and all the details are designed by Le Corbusier, and as such, are an extension of his artistic and architectural vision; these echo the values and the emotional qualities of the space and as such form an integral part of the whole design adding aesthetic value to the architectural space. These elements serve various functions, Pauly (1997) explains: they serve a functional purpose, they structure the space (such as ramps, benches, etc.), inject a sense of equilibrium (altar, pulpit, etc.), they create rhythm of space and of mass and contribute to the 'hollow' like feel of the space. On the whole, the volumes originated by the cubic pulpit in concrete, the stairs leading up to choir gallery, the orthogonal volume of the confessional are designed and perceived as solid spaces and elements; they are each designed with geometrical lines, and introduce the verticality and horizontality element in the space. The benches are designed in iroko wood, defining solid horizontal lines. All these forms possess an inherent sense of plasticity and aesthetic value. In Pauly's words: '' (…) these elements impart a sensation of stability and, as in a score in music, form dark graphic notes that stand out sharply against the white stippled surfaces.'' (Pauly, 1997, p. 50).

… Light, Colour and Sound

… (a) Light and Volumes

For Corbusier, it is light that immerses the space, grants it its unique atmosphere and transforms it into a poetical experience. In Ronchamp, light is contained and used controllably, in creating a deep mystical experience: an atmosphere of shadows and midst's highlighted by a poetical and metaphorical

[445] In Corbusier's words: '' The altar marks the center of gravity and engenders a value, a hierarchy of things. In music there is a key, a range, a chord; here it is the altar – the most sacred of places that creates this note, and whose role it is to trigger the radiance of the oeuvre. This is facilitated by proportions. Proportion is an ineffable thing.'' (Pauly, 1997, p. 48).

contained use of light. Pauly (1997) clarifies this same principle: ''Light in fact takes the lead, qualifying the space and lending a spiritual dimension to the edifice.'' (Pauly, 1997, p. 113). Light, is each space, is treated differently and uniquely: in the main central chapel it floods the space from above from a little opening left in the joining of the roof with he wall systems, it also frames the altar with little openings that resemble sparkles of stars and finds its way in the shadowy space through the coloured and filtered small openings, where the tiny openings on the outside open up to large and deep poetic instances on the inside. Also of reference is the way by which light falls from the 'heavens' in the side chapels: it is captured, reflected and drawn down through the rough surfaces to fall straight into the plane of the alters; each of the towers is lit differently, according to the orientation of the tower and the different times of day. The interior space is flooded with darkness and that darkness is then flooded in specific areas by streaming light; as such, the space is enclosed and mystical, and it is revealed only through light. Each specific way light is conceived creates a mystical experience within those shades of 'darkness' that define the interior spaces. Light reveals from the darkness, is not only a physical manifestation within the chapel, but also a metaphorical, artistic, poetical and spiritual one.

Pauly (1997) accentuates another particularity: the intensities of the light in the inside space vary according to the movement of the sun; as such, sunlight pierces into the space at different angles, different intensities and different colors, creating a rich spatial composition. The author summarizes: ''This almost scenographic organization of the play of light and shadow is the key to the interior composition, engendering an atmosphere of meditation and spirituality within the sacred building.'' (Pauly, 1997, p. 116). Light is indeed one the fundamental means of expression and of creation of the spatial and special poetical atmosphere defined in Ronchamp. It is this complex and unique treatment of space and light, shadows and darkness that creates an environment for meditation and contemplation.

… (b) Colour

The atmosphere of the chapel is white, both outside and inside, however colour finds its way inside the space in little details: such as the windows or the doors. According to Pauly (1997), '' (…) colour is present to accentuate the white stippled surfaces, against which the colour stands out sharply.'' (Pauly, 1997, p. 118). This is part of Corbusier's theory and understanding, that in order to truly understand and perceive white, colour must be present in a polychrome way. The side windows in the main space and the painting that compose the doors use vibrant colours, mainly primary colours. In these 'little details of bold colour', (coloured glass, enamel doors, etc.) colour vitalizes the atmosphere and adds poetical and artistic value; these small openings, the south façade, convert into the interior space as large and expressive ones; each containing a different type of glass, colour and motif (coloured or painted glass, inscriptions of praise to the Holy Virgin and motifs inspired by nature such as birds, stars, sun, butterflies, etc.). The colour used in the windows (one for each window) echoes the colours used, in the painting of the doors: blue, red, green, yellow and violet. Some of the windows that are left transparent, allow for the viewing of the landscape outside. Colour is also applied in more intense ways: at the side chapel painted red and the violet adjacent wall; these spaces are not perceived from the main space but instead they need to be 'walked into' adding an element of surprise and mystery through colour; the dark violet, creates an effect where the wall 'dissolves in the shadows'; it is the colour of Lent, and refers to the notions of

Sacrifice. Both ways of applying colour create an emphasis in the architecture and in the poetical and mystical experience of the space. Colour, as such, is an integral part of the architecture itself, rather than a decorative element; it characterizes, defines and accentuates specific points in the space adding another dimension to it: a poetical or mystical experience. The use of colour is not only functional and spatial but also symbolic, emotional and spiritual.

… (c) Sounds and Touch

The sound of Ronchamp was important to Corbusier in various levels and possesses a specific value within the poetics of the space. Firstly, as a metaphor, for Corbusier believed Ronchamp to be 'an architectural symphony'; on the Chapel being an 'acoustic' form, Muller (2004) also explains: '' Le Corbusier considered the chapel a "land of acoustic sculpture," or an "acoustic plastic work," (…).'' (Muller, 2004, p. 79). For Corbusier believed the 'acoustic forms' were the result of a true work of architecture or sculpture in the environment. Secondly, as Pauly (1997) and Gans (1987) explain, Corbusier believed there should be music coming from the chapel at specific times, coming from the bell tower; these were intended to play modern music by Edgar Varèse, '' (…) so that Ronchamp would have a '' limitless voice coming from the most distant ages and reaching the most modern hours of today.'' (Gans, 1987, p. 75); the sound was to propel the form beyond the space in which it found itself. Third, the sound within the space functions as a kind of echo space, where silence abides, but every sound is magnified; and finally, the sound of the water coming from the gargoyle on the outside, a surprise element that acts as a 'meditative' and contemplative element for the users wandering around the chapel. As for the 'touch' element, although not referred by any of the writers, the tactility of the materials also has a central role in the experience of La Ronchamp; the materials and the textures vary creating a rich experience for the user: either rough and very tactile (the overall skin of the building) or very smooth and soft from the polished alters or the wood of the benches, create an enriching experience that engage all of the senses.

… The 'Total Work of Art'

According to Pauly (1997), volumes, light, colours and materials, turn Ronchamp into a total work of art, but also, the inherent poetics of space and the ability to awaken emotion: '' Ronchamp emerges as a total work of art which harmoniously integrates diverse elements within the sculptural ensemble. '' (Pauly, 1997, p. 123). However, La Ronchamp is a 'total work of art' for multiple reasons: because architecture is perceived and created as an art, created as a sculptural form following an artistic process; because it incorporates within itself multiple art forms that contribute to the overall artistic vision, and because as a work of art, it communicated poetics and provokes specific emotions in the viewer. But La Ronchamp can be understood as a total work of art in a deeper way: as a synthesis between the arts.

… The Principle of Art and Architecture: Interdependence and Symbiosis

Corbusier has a unique vision concerning the union of architecture and of art; he elevated architecture to its most noble aspirations, that of being an art (communicating to man's inner worlds), being a 'mother' of the other arts and housing them within architecture as a unique 'poetic and artistic'

vision. In La Ronchamp, he found the freedom and the 'sacredness' he needed to create these ideas and makes them manifest in a 'total work of art': creating a synthesis between the multiple art forms[446]. Muller (2004) explains that although critics have diverse opinions, they do agree that the chapel 'represents a synthesis of art and architecture'[447] on various levels. However, what is of the essence, continues Muller, is that the 'art is an integral part of the architecture' '' (…) and that the piece functions as a consequence of the interdependence of the art and architecture**,** rather than the art functioning as a constituent of the whole. '' (Muller, 2004, p. 26). This synthesis established a collaboration between the arts, in a mutual dialogue. The difference between a synthesis and a symbiosis, explains Muller (2004), as is evident in Ronchamp, is that the art is not merely a 'decorative' element, nor is there an effort in joining art with architecture (as is in a symbiosis); instead, it is Ronchamp as a whole, as a synthesis of all the arts, each element supports the overall ideal and vision, in creating a unique and meditative space[448]. At the Ronchamp chapel, the art and architecture are interdependent, functioning in a mutually subordinate relationship; this fact, establishes Ronchamp as a unique architectural element and adds more value to the archetype that summarizes Corbusier's ideals in regards to the union of the arts, its interdependence and its symbiosis in content, form and meaning; it creates and establishes new paradigms and ideas about the symbiosis of art and architecture. This interconnectivity and connection functions at multiple levels: conceptually, symbolically, metaphorically, and in meaning.

… The Sculpted Space and The Free Forms: A Plastic Artistic Expression

Corbusier's approach to space was to consider it as a mass, a whole entity and then removed specific parts to create the whole of the architecture. When Corbusier asserts '' (…) ''transfer lyricism to the materials, to flex and bend them to best serve the design''.'' (Pauly, 1997, p. 110) he views form as a sculptor, clarifies on this issue Pauly (1997). Pauly (1997) further argues that the plastic language developed by Ronchamp, is a synthesis of Corbusier's quest in the paintings of the twenties and the sculptures of the forties and fifties. This plasticity of form, highlights the sensory aspects of the spatial elements in a kind of visual language that had been being developed, by Corbusier. As such, he modelled the materials as a sculptor would, as an organic form, shaping them and carving them, to express the unique concept and the overall driving idea. The volumes of the chapel, as a result, seem to be carved out, as hollows; the overall form, thus, both considered like a sculpture and perceived as a living sculptural

[446] On this issue, Pauly (1997) explains that the complete freedom given to Corbusier allowed him to explore and 'make manifest' an idea that he was exploring since the thirties and that he had made manifest in writings and conferences until the fifties – recurrent in all his research work: '' (…) the notion of architecture as a forum which allows for a synthesis of various art forms.'' (Pauly, 1997, p. 108). As such, Pauly continues, a work of art may be integrated into a building in which it must enter into a 'genuine dialogue' with its architectural context; the many arts are incorporated into the major art, the architectural environment, which Le Corbusier defined as a 'collaboration of the arts'.

[447] ' Reference to: ''Those critics who comment about the function of art in Le Corbusier's architecture display a diverse array of opinions about the motivations for Ronchamp, however, they generally coalesce around the belief that the chapel represents a synthesis of art with architecture.'' (Muller, 2004, p. 25).

[448] **Synthesis of the arts as explained by Muller (2004):** '' What evidence exists then that Ronchamp represents the symbiosis of art and architecture? In arguing that Ronchamp represents a symbiosis, as opposed to a synthesis of art and architecture, the argument is made that the art is not merely applied decoration nor that any effort is particularly made at Ronchamp to bring together elements of fine art for the purpose of achieving synthesis. Rather, it is argued that the architecture of Ronchamp is the art and that the art is integral to the architecture in that it enables the architect to achieve the requirements of the commission for a modernist piece of art/architecture.'' (Muller, 2004, p. 91) With Ronchamp, Muller (2004) continues, not only is it Le Corbusier's premiere integrative work of art, but also '' (…) the art is integral to the architecture to the extent that the architecture is art and the architecture could not respond to the demands of the form without the art. '' (Muller, 2004, p. 63).; in Muller's words: '' (…) the art at Ronchamp (…) assumes a sense of mutual interdependence, or symbiosis, in which each artistic and architectural element is reliant on the other in order to support the whole. '' (Muller, 2004, p. 84).

space. Besides this specific approach to a create a kind of **'sculpted space',** the forms, just like in a sculpture, are conceived of as plastically free, each carved out to its own unique shape with its own poetical and artistic statement that resonates the whole space. Pauly (1997) also clarifies, Corbusier himself, described Ronchamp as an '' acoustic sculpture'' and aimed to create a ''phenomenon of concordance'' between the landscape and the space, through sculptural forms.[449]. Appropriately, all the free forms, from the micro to the macro, create a poetical language that engages the user visually, emotionally, poetically, metaphorically and spiritually, acting as an artistic object.

*... **Metaphor and Symbolism: Stories, Visions and Nature***

The Ronchamp carries within it a series of associations and connections, images and meanings that are associated with other elements of both the architectural and the natural world. This fact, adds mystery and contributes to the whole *poiesis* of the space, and roots the chapel in the imagery of the 'metaphorical' language of both nature and the spirit. Drawing from archetypes that possess their own meaning, Le Corbusier adds more layers of depth to the essential experience. The associations from the free form of the Chapel are many: '' (…) the form of the east side of the chapel resembles a full sail, or an airplane's wing''. (Pauly, 1997, p. 36). It is it's abstract 'metaphorical' form that allows for this open and rich interpretation. The elements of nature are brought forth in multiple ways; according to Gans (1987), the ocean is called for by the shape of the roof, by the exterior water basin, the inscriptions on the stained glass windows explains and the inside of the chapel also recalls the sea. But other images are also called for, pointed out by author Cohen (2004) and Gans (1987): the openings of the altar resemble constellations, 'ski-jumping' and gargoyles associated to the roof, the symbol of a sacred mountain and the ziggurat, the bells and the fountain[450].

Through these associations, opposing principles are reunited in La Ronchamp, through concepts, metaphors and symbols: man and nature, architecture and landscape, poetry and construction, ocean and mountain, expression and unity, abstract organic forms and poetical/artistic meaning. But form and space are not only a metaphoric representation of man and nature; as a whole, the chapel is metaphorical in all its form: metaphorically, the walls and roof weigh down on the worshiper and force his mind in the direction of meditation and prayer; symbolically, the journey from the outside in, represents the journey of the pilgrim that finds rest and repose even in the midst of darkness. Through the language of art,

[449] As a result, and as described by Pauly (1997), the shapes communicate amongst themselves and with the landscape: '' These shapes complement and communicate with each other in the same way as they ''dialogue'' with the surrounding landscape and the four horizons.'' (Pauly, 1997, p. 44), thus, establishing a dialogue: the dynamics of the roof, the curvilinear forms of the volume, the free standing elements of volumes projected, the receding forms, the masses of the towers, etc.; all the elements communicate amongst themselves and echo the overall artistic vision conceived of as a 'sculpted space'.

[450] **Symbolic and Associative Langua**ges: '' The altar wall, known as the constellation wall because of its pattern of tiny scattered openings, immediately evokes an association between the darkened interior and the heavens.'' (Gans, 1987, p. 76). On this issue, Cohen (2004) also clarifies: '' Besides the crab's shell, other disparate images fueled Le Corbusier's inventiveness: modern images, like ''ski-jumping'' gargoyles protruding from the roof, borrowed from hydroelectric dams, as well as those drawn from the earliest memories.'' (Cohen, 2004, p. 65). According to Gans (1987), even further numerous symbols and symbolisms can be driven from the imagery: the ancient burial mounds, the dolmens of Britany; the ziggurat (the memorial of the dead, but also an ancient altar or a sacred mountain), the fountain (collecting and storing water, both as a functional and a sculptural form 'also suggests a microcosms complete with heavens, sea and mountain.''), the elements of the bells that create a sort of acoustic landscape, and so on. Gans (1987) claims: '' Tafuri has commented, '' the sloping floor contributes to the programmatic loss of center. (We see) his art in search of its own origins.'' The supposed point of arrival, the interior, is like another point of origin and another site awaiting the pilgrim.'' (Gans, 1987, p. 77). It is this ever unfolding cycle of meaning and metaphor that contributes to Ronchamp's uniqueness, openness and poetical universality.

metaphorically, poetically and spiritually the being finds a sacred space that echoes man's most timeless aspirations.

> ***Ending Remarks:*** *Corbusier claimed: '' Nothing is transmissible but thought. (…) Thought alone, the fruit of labour is transmissible. Days pass, in the stream of days, in the course of a life….'' (Corbusier and Žaknić, 1997, p. 83). So too, La Ronchamp captures many poetical and artistic 'thoughts', left for humanity for appreciate and understand. At the Ronchamp chapel, the art and architecture are interdependent, functioning in a mutually subordinate relationship; as previously seen, not only as a synthesis but as a symbiosis; this fact, establishes Ronchamp as a unique architectural element that summarizes Corbusier's ideals in regards to the union of the arts, its interdependence and its symbiosis in content, form and meaning. Thus, it creates and establishes new paradigms and ideas about the symbiosis of art and architecture: where not only do they act to support each other, but that in a specific space they enhance each other's meaning and work collaboratively and sustainably towards one 'whole'. It was found, that all aspects of the chapel contribute to this fact: cooperating as a whole, driven by harmony and intensity, to promote a poetical experience sustained by vision and emotion. The research shows, that not only is Ronchamp's uniqueness and meaning sustained by a series of properties and architectural elements that create a rich and complex environment, but also (and mainly), by an interaction and cooperation between all fields of artistic expression that work together in creating one single vision: Corbusier's vision for a space that belonged to the landscape, a union between metaphorical opposing principles such as light and darkness, a place for worship and contemplation that unified people, and lastly, a space that is and acts, as an Art in its most noble sense (communicating through multiple artistic expressions) to the spirit of man.*

(6) Key principles, concepts and values

… Colour as symbol and meaning

According to the author Scavuzzo (2010), Corbusier's colour palettes (in theory, in architecture and in painting) were a way of creating a system of signs that possessed their own meaning; colour turns into an ''autonomous element of a symbolic machine''. He likewise adds that his colour schemes were a way of creating 'timeless archetypes', 'symbols' and 'figures with a mythical origin', allowing the transformations of ''(…) each work by Le Corbusier, in architecture, painting and poetry, into a kind of symbolic machine.'' (Scavuzzo, 2010, p. 432). He further explains: « The music colour parallel indicates that what changes is not only the role of colour, but the nature of the composition itself, once it has become a system of signs referring to a system of meaning, saved from arbitrariness to a level higher even than the laws of history and nature, in a transcendent dimension.» (Scavuzzo, 2010, p. 437). This is expressed mostly by the second Salubra collection: the colours, closer to prismatic ones, evoke ''metaphysical references', but furthermore, continues the author, the ''colours are immaterial essence'' themselves, just like the dawn painted by Corbusier when he was flying over Chandigarh. The keyboards, the author concludes, are a way to reach « (…) the real destination, that is a poetry that can touch the soul of man, making him aware of being part of a greater mystery.» (Scavuzzo, 2010, p. 438)

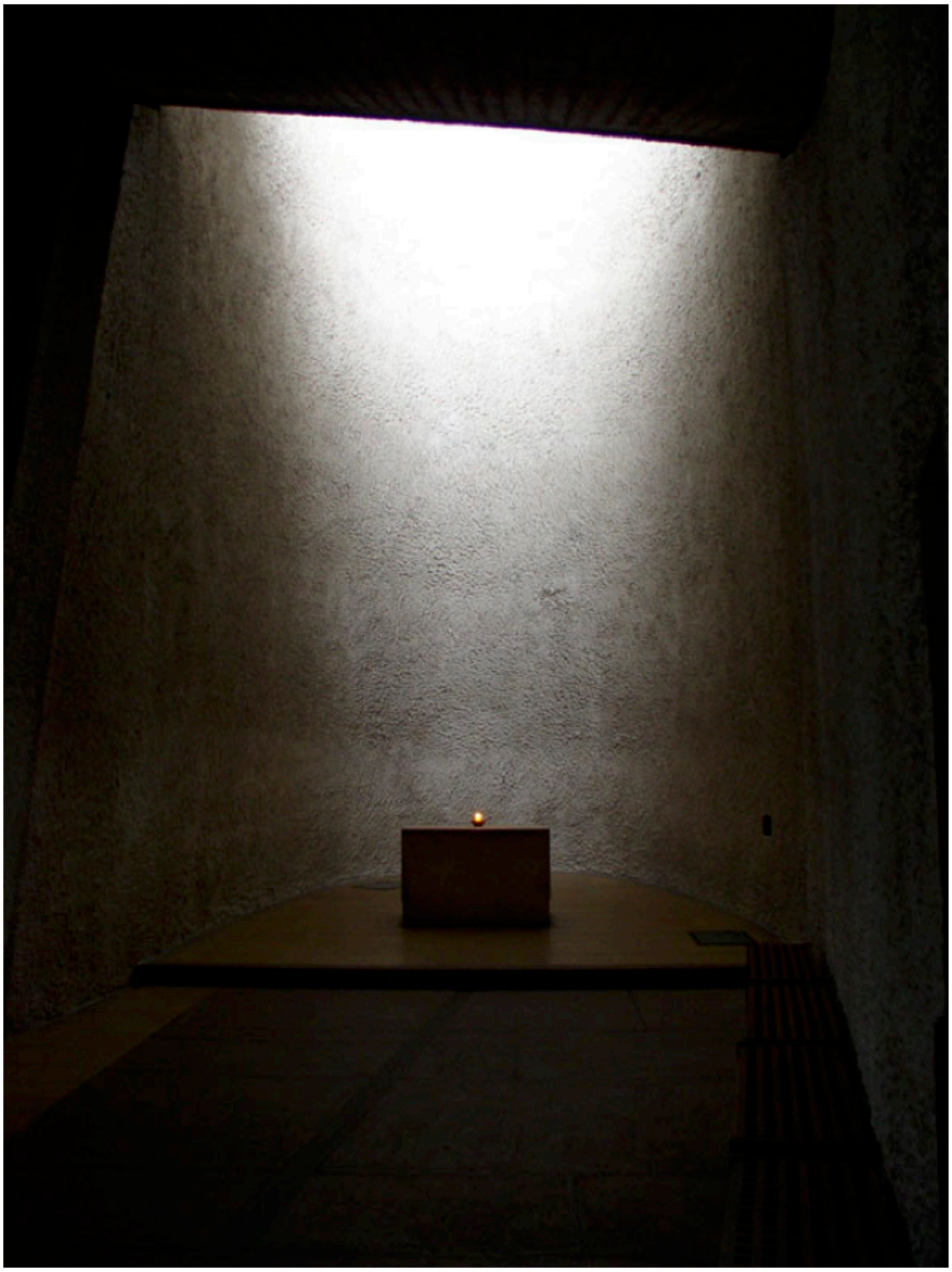


Photo 2: One of the side chapels at La Ronchamp; Source: http://experiencingarchitecture.com/2011/03/24/light-church-in-ronchamp/

PLATE 51: POETRY AND EMOTION

… The Principle of Harmony: Proportions and Wholeness

Corbusier himself claimed: '' Harmony can only be attained by that which is infinitely precise, exact and consonant; by that which delights the depths of sensation without anybody's knowing; by that which sharpens the cutting edge of emotions.'' (Pauly, 1997, p. 52). As such, in order to achieve this type of harmony**,** all elements must be in accordance, in a mysterious and subdued hidden way. For Corbusier, there was an inextricable link, between the emotions, a form conveyed and the proportions that guided its inherent existence; as such, the proportions aim to create an innate sensation. Le Corbusier believed that 'architectural sensations' were indeed the result of specific geometric forms and of the proportions that defined them. In the Ronchamp, for example, the play of proportions is a crucial element that unites the whole of the space, both outside and inside, in the various scales of the building. The dimensions of all the chapel, as well as the secondary elements and details were calculated by the use of Modulor, so, each element (including furniture) is in harmonic consonance with the proportions of the whole chapel. As such, Pauly (1997) explains, they participate '' (…) in what the architect called the jeu symphonique (symphonic interplay) of architecture, (…).'' (Pauly, 1997, p. 52). But harmony is also present in yet another way, in all of Le Corbusier's work, specially in La Ronchamp, one that depends on the harmonies of the proportions but also lives beyond it: it is the sense of harmony of poetry that allows for the spirit to be moved. These harmonious principles that define the whole of the space as well as the detail, that allows for a poetical engagement with the user, is the core that allows for a 'presence' to emerge. This is summarized by Corbusier himself when he claims: '' Everything is harmony, relationships and presences. (…) There are presences: the eternal aspect of that which is permanent.'' (Corbusier and Žaknić, 1997, p. 83).

… The Principle of Intensity (of Emotion and Poetry): Joining Opposites

In La Ronchamp, there is an inherent balance of opposites and a desire to represent both aspects of intensities throughout the whole design of the Chapel; in emotions (with emotions of expansion on the outside and contraction in the inside), in light (creating intense dark shadow areas inside contrasting only by small hints of controlled light), in forms (where the geometrical forms act as a kind of geometrical counterpart to the curved forms of the roof and the main structure), in colour (opposing the blaring whiteness of the chapel with elements of controlled colour accents) and in (…). As such Corbusier doesn't exclusively represent one side of the polar contrast, but instead represents both sides, contrasting one against the other; like two sides of the same coin, each potentiates and amplifies the depth of emotions and the intensity of the poetical experience. This ideal of 'depth' and of 'intensity' through polar contrasts is found both at a micro scale and at a macro scale: from the very little detail to the overall from. An example of this is the East and the South façade concept that contrasts with the north and west facades, both types represent two opposing polarities: where as the East and South facades are open, inviting and respond to the human scale; the west and north facades are enclosed, concave, and dramatic in scale. Both poetically and emotionally, these opposing concepts amplify and intensify the experience of the space. However this idea of emotional and poetical intensity is carried out throughout all of Le Corbusier's work, in one form or another.

… The Principle of Emotion: Emotional Values

Le Corbusier was interested in provoking emotions, in creating sensations; he did so in a very unique and complex way in Ronchamp. Throughout the whole chapel there exists a multiple range of emotions that come forth: group gathering and the emotion of union (outside) contrasting with solitude and meditation in the interior; enclosed and protected element (viewed from the outside) yet disturbing, embracing and mystical experience (when on the inside); where as light, welcoming and intriguing emotions flood from the outside, within the inside, the viewer must sit in darkness and 'find' the light. Emotions range from stillness, solitude, happiness, contentment, contemplative, intrigued, unknown, discovery, mystery, mysticism, awe, and resignation. These complex emotions do not occur on one single instance, but occur as the 'promenade architecturale' unfolds: as the user travels through the space, each space echoes back its own range of emotions. Besides this complex range of emotions, there is also another type of emotion that characterizes La Ronchamp: and that is the underlying aesthetic emotion that is echoed forth through the space as a union, as a whole, as an artistic unity in its own accord. The aesthetic emotion is complex in nature, and therefore, should also be understood and perceived as a unity. Nothing else about it can be said or added. As such, it is also this underlying aesthetic emotion that so well defines La Ronchamp. On this issue, Pauly (1997) claims: '' After all, was this building not intended to be a *machine à émouvoir*? As Le Corbusier wrote: ' The Chapel? A vessel of silence, of sweetness. A wish: Yes! To achieve, through the language of architecture the feelings evoked here.'' (Pauly, 1997, p. 45).

… The Principle of Poetry: Poetical Values

On the intensity of the poetic value at La Ronchamp, Pauly (1997) claims: '' Although the poetic phenomenon, generator of emotion, is always present in Corbusier's work, it would seem to be most intense in this building.'' (Pauly, 1997, p. 127). Le Corbusier said: '' '' Painting, architecture and sculpture are unique phenomena of plastic nature in the service of poetic research in that they are capable of releasing the poetic moment.'' (Pauly, 1997, p. 123). So too, with Ronchamp, Le Corbusier aimed to create this poetic moment: so intense and so vibrant that it allowed for a flow of 'sacred' life to find a space to occur.

Ending Remarks:

For Le Corbusier all art, is a creation of the spirit, and therefore communicates to man's spirit. Architecture as an art has precisely this role and mission: to create 'emotions' that act on man's consciousness and spirit and communicate universal ideals and principles through it's existence. In this idea, quest, and way of creating architecture lies Corbusier's significance. It is Architectural abstraction, a unique quality, that can spiritualize what Corbusier defines as 'brute fact' (which is the materialization of an idea or symbol); in other words, through architectural abstraction a spiritualization of the 'brute fact' (that contains symbols and ideas) occurs, and emerges a sense of order. This sense of order (as part of the consciousness, as part of the universe) is another role of architecture… to re-create and re-define, to make clear these universalities, these orders (manifested by 'brute facts') that are irrefutable and forgotten today.

Summary Notes: Le Corbusier

1. *Le Corbusier's architecture, is a pursuit for that which is universal and can speak to the spirit of man. It is in this belief, that lies his architectural significance.*

2. *Art is a creation of the spirit, and Architecture is an Art.*

3. *For Corbusier the architect, just like the artist, is a 'creator of emotion, beauty and order'.*

4. *Creations, as art, create from the spirit emotions that convey order and communicate consciousness (universal principles).*

5. *For Corbusier architecture and art are indeed co-existent, co-dependent and co sharing in meaning, for they can become at their most intense when they are placed together, working as one. This is what can be defined as his belief in the Synthesis and Synthesis of the Arts.*

6. *Architecture's 'objectivity' through 'abstraction' and its ability to create sublimity can appeal to man's highest faculties.*

7. *Architecture is a 'thing of plastic emotion' that should use elements that 'strike our senses' and 'satisfy our visual desires'; plastic architectural elements 'affect us' by specific emotions (such as fineness, serenity or interest); they act on our senses psychologically. It is this capacity to stir our emotions and communicate psychologically and the ability to create relations, that act on our consciousness (putting us in accordance with the laws of the universe) that makes Architecture be Architecture… an Art.*

8. *Architecture, as an art, is an artistic fact that deals with the stirring of emotions; space, then creates an Architectural Emotion, a poetic instance that acts emotionally and powerfully on the senses of man.*

9. *Conceptual Synthesis Chart:*

Table 7: Le Corbusier Conceptual Chart

CREATION			CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Table 8: Le Corbusier Synthesis Chart

LE CORBUSIER

1. FIELD:
- *Architecture, Painting, Sculpture, Furniture Design and Writer*

2. EDUCATION/BACKGROUND:
- *wanted to become a painter and studied the art of enamelling and engraving: art history, drawing and the naturalist aesthetics of art nouveau*
- *continued studying architecture and got his first commissions from the help of his Professor.*
- *In 1917 he moved to Paris, where he worked as an architect*
- *In 1922, Le Corbusier opened his architectural studio with his cousin Pierre Jeanneret*

3. EVOLUTION:
- *progressive clarification of his ideals and views about the world of art: in both painting and architecture.*
- *gradual search for a more expressive language: using a broader use of colour and combinations of forms to create specific architectural and artistic experiences*

4. CONTEXT:
- *Modern movement: aimed to define new principles for architectural design*
- *Leading architects include Ludwig Mies van der Rohe, Le Corbusier, Walter Gropius, Frank Lloyd Wright, Louis Sullivan, Gerrit Rietveld, Oscar Niemeyer and Alvar Aalto.*
- *Defended: simplicity of forms, elimination of the superfluous, 'form follows function', honesty of structure and materials, emphasis in straight lines and pure volumes and the use of white.*

- ***5. INFLUENCES:***
- *Purism as a movement for the arts*
- *Classical Architecture: Order and Proportions*
- *European Culture*
- *Nature, Geometry and Folklore*
- *Contemporary art*

6. CREATIVE PROCESS:
- *Believed the design of any project followed three stages: 1. Integrate with the site; 2. Spontaneous birth (after incubation) at a stroke; 3. The slow execution of the drawings.*
- *Saw the architectural creation as an artistic process*
- *Used painting as a laboratory for his ideas and for architecture.*
- *Guided by intuition and reason*

7. PERSONAL COSMOLOGY:
- *The belief in the synthesis and symbiosis of art and architecture: the arts can share meanings and significances and contribute to one another int he same space.*
- *The belief in multiple connections between these two forms of artistic expression: painting and architecture.*
- *All art is a creation of the spirit.*
- *Architecture as an art:*
  - *has the capacity to elevate human emotions and is capable of accommodating the spirit.*
  - *through the use of forms affects our senses by provoking 'plastic emotions'*
  - *is an artistic fact that deals with the stirring of emotions therefore through space an Architectural Emotion needs to be created*
  - *creates a poetic instance and acts emotionally and powerfully on the senses of man*
  - *creates a universal order that acts on man's consciousness.*
- *Believed architecture and art was a means of communication, union and establishing a connection.*

8. EMOTIONS
- *Purity, Simplicity and Contention*
- *Expression, Movement and Imagination*

9. OBJECTIVES:
- *Recovery of architecture's authentic principles*
- *To create a new spirit and a new architecture for a new type of life.*
- *The define the new 'modernist' architecture formal language*
- *Desire to free architecture into space, allowing space to be used not only freely but more simple and more intensely.*
- *Communicate the expressive nature of the human spirit and provoke specific emotions.*
- *The search for underlying principles (universal rules of forms and colour) that sustain the different forms of artistic expression.*
- *Create his own system of proportions (The Modulor) that would belong to a universal order.*
- *Create his own colour combinations, that echoed specific emotions and atmospheres.*

10. CHARACTERIZATION:
- *The use of white represent the 'renewal of society', echoing a 'harmonic culture', a metaphor for 'morality', honesty and pureness.*
- *The definition of a new architectural language: open floor plans, roof terraces, horizontal windows, pilotis, (the five points), pure spaces, pure forms, with little decoration and overall a subdued type of space.*
- *Simple formal language, devoid of accessories, decoration and excessive furniture*
- *His Purist Phase is defined by*
  - *search for a more simplified language, deeply influenced by purism and the purist's ideals*
  - *marked by his friendship with Amédée Ozenfant*
  - *co-dependency between form and colour*
  - *restricted use of pure forms and reduced subdued colour palette*
- *His After-Purism Phase is defined by*
  - *search for more expressive means of creation: 'enlargement of the pictorial vocabulary*
  - *broader use of colour (a more intense focus on particular vibrant hues)*
  - *gradual shift towards a more formal expressive type of abstraction*
  - *search for symbol and other more expressive meanings*
- *Coordination of proportion, rhythm and harmony, defining ideas of 'order', and establishing a connection between man-made objects and nature*
- *Used the interplay of light and shade.*

11. CONCEPTUAL FRAMEWORK:
- *Proportions: The Modulor*
- *Colour: The Colour Keyboards*
- *Light and Shadow*
- *Expression and Artistic Impulse*
- *Poetic Experience*
- *Simple lines and pure forms*

12. VALUES
- *Poetical, Emotional, Spiritual, Sustainable, Symbolical Metaphorical and Philosophical.*

13. MEANING/SIGNIFICANCE
- *speak to the spirit of man*
- *communicate universal truths and principles*





Photo: Tadao Ando's by Luca Vignetti; Source: http://www.arcspace.com/features/tadao-ando/; Photo: Tadao Ando's Church of Light. ; Source: http://designspiration.net/image/78866720385/

PLATE 52: TADAO ANDO

6.5. TADAO ANDO

(1) artistic evolution, context and characterization

… Artistic/architectural Context: Critical Regionalism

Tadao Ando, is generally and loosely qualified as being an architect that belongs to the Critical Religionalism movement (opposing modern architecture and placenessness, the movement defends both universalism and local traditions[451]). For some authors, like Philip Drew (1996), '' Frampton was searching for something that would mediate the impact of a universal civilization with elements indirectly derived from the peculiarities of each region.'' (Drew, 1996, p. 6), and as such, Tadao Ando's work reflected precisely these concerns and architectural considerations. However, for other authors, like Gutschow (2006), the term doesn't apply easily to Tadao Ando's work; he explains that although Ando is clearly against the '' (…) "standardized, unindividualized souvenirs of Modernism," which create a "formal expression that is isolated from human life," an architecture that does not address the human condition.'' (Kai, 2006, p. 7) and approximated nature (creating a dialectical relationship between architecture and landscape, which Frampton has defined as one of the criteria of critical regionalism), it does establish connections to Critical Regionalism, however surpasses it, in search of other values and principles.

… Architectural/Artistic Evolution

His architectural evolution can be understood as a gradual moving towards a condensation of significance and substance. Another way to understand Ando's evolution is to describe it as a clarification (and uncovering) of his intuitive and innate understanding. Either way, Tadao Ando strived to define his own language, and to clarify and perfect that language: immersed in both the ideals of the legacy of modernism and his own Japanese culture (that sustained a more 'grounded' and attached to life and to the world type of existence). Ando, in consequence, evolved constantly and accurately, gaining with each project a new understanding of his own beliefs and finding new ways to materialize those principles.

… Architectural/Artistic Characterization

Tadao Ando's architecture, is known for his focus on experience rather than the visual aspects of the buildings; his spaces are simple purified spaces composed of simple materials, allowing the user to focus on the feeling and the emotion that emerges within each space. Tadao Ando creates a cosmos with each piece of architecture that echoes in the spirits of the users, like any other artistic creation; his spaces

[451] **Critical Regionalism:** 'Critical Regionalism' is an architectural term that defines a unique approach to both universalism and local traditions and culture. The term 'Critical Regionalism' was originally coined by Tzonis and Lefaivre in their article "The Grid and the Pathway," where the authors oppose modern architecture for being thought to be ''(…) impersonal and monolithic, destroying the humanistic qualities in architectural expression which would be reinstated by a new form of regionalism.'' (Kai, 2006, p. 3). The author continues explaining that Frampton, following the standards defined by Tzonis and Lefaivre, accentuates a critical nature against the 'placeless monotony'. Furthermore: ''In the article "Towards a Critical Regionalism," Frampton defines critical regionalism as "an architecture of resistance," seeking "to mediate the impact of universal civilization with elements derived indirectly from the peculiarities of a particular place," thus aiming "to reflect and serve the limited constituencies in which it was grounded."'' (Kai, 2006, p. 4). As explained by Kai Gutschow (2006) clarifies the concerns and the issues surrounding 'Critical Regionalism' as a term that describes the works of Tadao Ando, and in his paper 'Concrete Resistance: Ando in the context of critical regionalism'.

resonates as a painting or as a piece of music, and transports the user into another dimension. Ando interprets and recombines the principles of his precedents, the various traditions, the multiple influences from modern architecture and the essence of the abstracted landscape, creating an overall independence, a unique approach to his work and to architecture, responding only to his own inner vision and quest. Kai (2006) indicates that Tadao Ando's work, reflects a self-fulfilling quest and goal that drives his work explaining that it is his 'poetry' that is most crucial: « Ultimately, it is the poetry of his work that is the most important: "Rays of light, stroking past the coarse surface, are absorbed and crystallized by each of the block units creating an infinite sparkling brilliance."» (Kai, 2006, p. 6) Tadao Ando's architecture is a contemporary re-interpretation of Japanese aesthetics, but transcends it through modernity, moving past modernism itself, into what leads to a philosophy of time, place, of being in the world and of experiencing and understanding the spiritual dimensions that define and sustain the human being.

(2) creative process, methodology, techniques and characteristics

… Creative Process and Methodology

Tadao Ando's work process, can be characterized as a systematic sort of reasoning, which uses drawing to uncover intuitive and primal understandings. For Ando, drawing is the base of the architectural understanding, from which the character and the qualities of the architectural space emerge. Therefore, the project develops based on those intuitive drawings, that make architectural qualities clear, and create the capacity for 'substance' and 'substantive' qualities to emerge. The architectural project, then, is a search for the substance of things: a search for the primal core of the matter that wants to become.

…. Themes and Particularities of Ando's Spaces: Forms of 'Being' and 'Awareness'

Tadao Ando's architecture has a deep connection with the land that surrounds it and its tradition. There is an overall incorporation of nature within the architectural works, and a strong connection between the architecture, nature and the landscape, is echoed constantly. Through the spaces, one becomes aware of nature, and that awareness allows for an understanding and development of the condition of 'being' and an understanding of the 'impermanence' and 'appreciation' for the frugality of life. The reinforced concrete wall is another of the characteristics of Tadao Ando's work that contributes to the materialization of these principles. The 'wall' echoes a separation from the modernist architecture principles. These walls are made of 'in-situ' poured in concrete, and are thick structures, permanent and carefully technically executed. The enclosure of the spaces is surrounded by these concrete walls. Tadao Ando explains that the main reason for this is to create a space and a place for the individual; the wall is a means of creating a particular space that divides and transforms, as well as creates a space that can be 'enriching' . The concrete walls, are polished, becoming smooth and reflective, and thus resulting in a glass-like surface that reflects and registers the different qualities of light and echoes the different vibrations of water. The concrete wall allows for an echo of the light and the water, permitting, an incorporation of the elements of nature within the space in a phenomenological way. This reflects the underlying 'impermanence' principles.

The use of pure geometrical elements is also crucial, reflecting the influence of Kahn's architecture and his recurrent use of pure form, the spaces are organized by geometrical relations and connections, between pure forms. These pure forms create a space that is pure and simple, clear of noise and chaos, and purified from the core of the buildings. The depuration of form allows for a materialization of 'nothingness' and accentuating the concept of 'being'. Light is also a vital tool explored by Ando, in creating these spaces of 'emptiness'. The quality, the emotion and the direction of the light is of vital importance and shapes the mood, the atmosphere and the spirit of the space. Light is both metaphorical and physical, acting between those two dimensions, just as it does, between the material and the spiritual dimensions. Tadao Ando points out and accentuates the importance of light describing it as the 'origin of all being' .

Tadao Ando also uses water and its sound as part of the compositional components of his spaces, and as a way of echoing these principles of 'stillness' and 'nothingness'. Water becomes a condition through which the space is determined and characterized, but most importantly it is the element that allows the being to transcend visually and emotively the conditions of the material world: it creates an alternate dimension, evoking movement, reflexions, sounds and substances that act as a 'tool' for the experience of 'nothingness' within the being. Light, earth, water and air, are key components and elements prevalent in most of his works; they evoke the sense of nature and the coherence and balance between all the elements, allow for a coherence of the being in space.

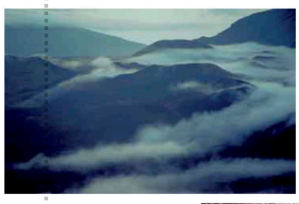
In his works, Ando makes the user circulate within the architectural form, before reaching a point of contemplation. This is a complex movement and approach that leads to the core of the building; the approach to the building is often emphasized. His work seems to be all about allowing for the emerging of certain spiritual forces, and the form and flow of the space allow for a materialization of the 'inward' quest of the being; this is reflected in the configuration of the space, that flows towards a centre, a 'heart' of the experience, and also echoes, metaphorically, the journey of the self towards those inward spiritual spaces of silence and absoluteness.

(3) inspiration, influences, conceptual framework and themes:

… Influences

There are two main influences that shaped Tadao Ando's views: firstly there is the traditional Japanese architecture and philosophies and secondly there is the legacy of the Western midcentury architects, such as Le Corbusier, Frank Lloyd Wright, and Louis Kahn.

In relation to Japanese Culture, this influence deeply shaped Tadao Ando's views on architecture and the world. Kai Gutschow (2006) explains that Ando's architecture reflects the sense of tradition and sentimentality imbued into Japanese culture, evoking a 'nostalgic feel for a familiar past'; he is deeply influenced by the nostalgia of his childhood memories.

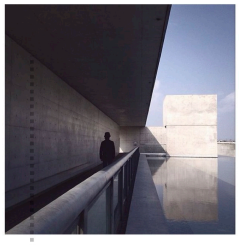




INFLUENCES







CHARACTERISTICS





INFLUENCES: Photo 1: Zen Garden of RyoanJi-Dry; Source: http://en.wikipedia.org/wiki/Wabi-sabi#mediaviewer/File:RyoanJi-Dry_garden.jpg; Photo 2: Photo: Zen Principles: the impermanence; Source: http://www.exeas.org/resources/photos/mountains-of-clouds.jpg; CHARACTERISTICS: Photo 1: Tadao Ando's Water Temple Section. ; Source: http://www.oocities.org/vinzrainier/thesis13.htm; Photob 2: Tadao Ando's Water Temple Interiors. ; Source: http://www.tofugu.com/2012/12/01/awaji-islands-breathtaking-architecture/; Photo 3: Prefectural Sayamaike Museum, Osaka, Japan by Tadao Ando; Source:https://pt.pinterest.com/pin/251075747955023794/; Photo 4: Textures of Concrete in an Ando space; Source: https://pt.pinterest.com/pin/251075747955023790/; Photo 5:Benesse House Museum, by Tadao Ando; Source:https://pt.pinterest.com/pin/251075747955023797/ Photo 6: Space for meditation; Source: http://www.evermotion.org/vbulletin/showthread.php?75271-Space-For-Meditation

PLATE 53: INFLUENCES AND SPATIAL CHARACTERISTICS

Tadao Ando, conciliates the influences of western architecture with the embodiment and the echo of Zen philosophies, in both the conceptualization and definition of his structures and as a 'way of life'. The traditional architectural and aesthetical Japanese principles are not neglected but incorporated in a new way: the use of clear geometry, the importance of light, the simplicity of the space, to name a few, as well as the incorporation of the overall Zen philosophies. This is suggested and explained by Philip Drew (1996) as well as Masao Furuyama (1996) that consider Tadao Ando's architecture, to reflect a 'spiritual' dimension that finds form through the Zen philosophies.

Regarding the Western midcentury architects, Modern architecture, such as Le Corbusier, Frank Lloyd Wright, and Louis Kahn, they influenced Tadao Ando's views on contemporary architecture: through their use of materials, contemporary materials, the new visual architectural languages (such as the flat roofs, the use of concrete, the use of white), their goals and aims, and the way in which space was used to create specific experiences. Another main influence on Tadao Ando, was something that all these three architects have in common, which is their views on what Architecture is and what it is capable of doing: provoking emotions at deep levels of human existence. Both these influences intertwined created Tadao Ando's unique language. If on the one hand he was imbued with the tradition of Japan and the search for a contemplative Zen like existence, on the other hand, he found in the Western architects the architectural philosophies and languages he needed, to create his own vision.

… Conceptual Framework and Themes

… (a) Japanese Philosophies and Principles of Spiritual Dimensions

One of the themes or conceptual frameworks explored and echoed by Tadao Ando's work is the dual nature of existence, that result from the influence of the Japanese Philosophies; the dual nature of existence, echoes both the material and the spiritual condition of the human being, bringing out an awareness of the spiritual within the material, an awareness of the timeless within the self. The classical Japanese philosophy understands reality as being in constant change, of being in an impermanence (Buddhist expression based on the idea of '*mujō'* which means impermanence). It is understood as a fundamental condition of existence that pervades the various spheres of existence as well as the arts in Japan. Deriving from this understanding of the transience of all things, is the concept and phrase of 'mono no aware', that refers to a "pathos" (aware) of "things" (mono), and literally translates to an 'awareness of things' . Furthermore, the concept entails an appreciation with life and an awareness for the environment and the things that define and sustain our existence: '' Insofar as we don't rejoice in life we fail to appreciate the pathos of the things with which we share our lives.'' (Parkes, 2011, p. 1). This concept also finds direct correlation to the work of Tadao Ando.

Another concept central to Japanese philosophy is that of *'Wabi'*. *Wabi*, is understood as simple and austere beauty: the beauty of the ordinary and the mundane. Furthermore: '' Wabi reaches its peak of austerity in emptiness—which is a central and pervasive idea in Buddhism.'' (Parkes, 2011, p. 1). Simple structures, that celebrate *Wabi*, can echo philosophical depths; decorative elements, for example, subtract from the simplicity and beauty of the simple space. The authors continue: '' Then let the emptiness that's opened up fill with a play of light and shades.'' (Parkes, 2011, p. 1). The concept of *Wabi* is echoed in the work of Tadao Ando, but for a deeper understanding of this concept, a clarification of the concept of

'nothingness', as the central theme of Buddhist philosophy and the central concept that defines the work of Tadao Ando is crucial.

… (b) The purified universal space: The Sacred and The Secular

Kai Gutschow (2006) states that Ando turns away from the 'vagueness' of the urban environment by creating a space that isolates away the outside world; this kind of space, a 'purified space', is a means of introducing an order in the lives of those who inhabit the space. This order, is what Tadao Ando himself describes as 'shintai' '' (…) which means the union of body and spirit, and represents the harmony of the body experiencing the architecture.'' (Kai, 2006, p. 7). The walls create the barriers between the world of the outside and the purified inward world. Ando's purified space of *Shintai*, is a space where there is a harmony of man and nature, and Gutschow (2006) explains there is a correlation between the space and the cosmos that Tadao Ando clarifies and explains: '' ''This space can provide a special point of energy ... to reclaim and nourish their spirit and soul. I see the ideal space as being both sacred and secular, to allow the individual either possibility through the serene openness of the place ... I am talking about approaching the space of the cosmos.'''' (Kai, 2006, p. 10). Architecture, in this sense, is seen as the creation of a spiritual order within and from the chaos of the environment. This is also defended by Drew (1996), as the concept of creating a cosmos that leaves away the chaos of the unorganized and disorderly territory of the Japanese city, that '' (…) represents chaos, in contrast to the house which signifies a centered cosmic world.'' (Drew, 1996, p. 8).

Kai Gutschow (2006) summarizes: '' Within his territorial walls, Ando intends to establish a natural, Shinto-like relationship between the person, the building material and natural phenomena; the building is meant to be experienced in "body and spirit."'' (Kai, 2006, p. 12). Furthermore, Ando talks of the 'spirit' and the 'emotional contents' contained within his work. Tadao Ando's architecture, which, on the one hand, is immersed in traditional Japanese values, on the other, also represents universal qualities and spiritual dimensions that are beyond 'cultural' dimensions, and refer to the 'being' in its most broad and universal sense.

… (c) Nothingness and Spatial Emptiness

The concept of 'nothingness' is a central theme, an essential concept, in Zen thought; as a concept, it is seen and understood as something that has to be experienced rather than conceptualized. It is reflected by the word *Śūnyatā*, a Buddhist word, that translates to English as 'emptiness' or 'voidness'. It is a complex Buddhist concept which has multiple meanings and is connected to the 'wisdom of emptiness', which is considered to be the ultimate teaching of Buddhism. This notion or concept, is also understood as a state of 'being'. In this regard, Drew (1996) remarks that in Zen philosophies and tradition, '' (…) 'being' is considered to be the self-unfolding of the unformed 'Nothing' or 'God'.'' (Drew, 1996, p. 8). The author clarifies, that this state of nothingness is equal to concept of 'being' and ultimately, connects to the supreme concept of 'God'. Thus, 'Emptiness', or true emptiness or true nothingness, is not a state devoid of content, but is equivalent to 'being' and echoes a 'becoming'; '' It is both knowledge and innocence.'' (Drew, 1996, p. 8). In this sense, this perfect state of emptiness is equally equivalent to a perfect state of 'fullness', where 'nothing' is also 'everything'. 'Nothing', in Zen

philosophies is precisely the opposite to the Nihilistic philosophies of the west. Ando then, through beauty, aims to create 'beauty' that allows for an 'epiphany' of the absolute void or God[452].

He does this through this idea or principle of emptiness; this kind of emptiness in architecture, in Tadao Ando's work, is exposed and materialized in multiple ways. Firstly by an elimination of the superfluous and the extras, that might misguide and detract our attention; there is an ongoing reduction of the space to its bare essential qualities. Secondly, accentuating the properties of light and of darkness in a balance between opposites, allows for an experience of this state of 'emptiness'. Thirdly, the pure space becomes a space of ultimate silence. With these various elements, Ando creates a quality of spatial 'emptiness'; this profound spatial emptiness is seen as one of the leading characteristics of Ando's spaces. Drew explains it is particularly unique in Ando's work, so accentuated that it can be disturbing at first; it possess a quality of 'poverty' and 'stillness', which relates to a general sense of 'tranquility', serves as a bridge to spirituality, and ultimately '' (…) introduces us to the spiritual dimension, to the 'Godhead'.'' (Drew, 1996, p. 8). Drew (1996) further summarizes it as such: ''At the intersection of light and silence we become aware of 'nothingness', a void at the heart of things.'' (Drew, 1996, p. 9). Ultimately, for Tadao Ando, the concept of 'emptiness', materialized as a 'spatial emptiness' is a necessary condition for the transference of the self to a spiritual dimension. It is in the emptiness that the human being can find the space for the spiritual dimensions to occur.

(4) underlying theories and ideals

… personal cosmology and art beliefs

… (a) Architecture as Art: 'Substantive Architecture'

In his acceptance speech of the Pritzker Architecture Prize, Tadao Ando states that there are 'two separate dimensions' coexisting in architecture: the first, concerns 'function, security and economy', and deals with the aspects of living and of the 'real'. He asks: '' Can architecture be architecture with this alone?'' (Ando, 1995, p. 1) and this question leads him to define the second dimension as architecture as an art, in his words: '' Since architecture is a form of human expression, when it steps out of the exigencies of sheer construction toward the realm of aesthetics, the question of architecture as art arises. It is at this point that the other dimension, imagination, comes into play.'' (Ando, 1995, p. 1). He continues, on this issue, that since Vitruvius with his three principles (utilitas as function, firmitas as strength, and venustas as delight or beauty) considerations of the dimensions of imagination were already contained within architecture and seen as way of deeply effecting human spirituality, remarking that it is architecture's fate to live beyond the realms of mere functionality.

For Tadao Ando, making architecture is a back and forth between 'ideals and reality', between the 'fictive and the substantive', having as a purpose the pursuit of '' (…) the ideal by overlaying

[452] He further explains, that the function of the beautiful, in the eastern traditions, is to provoke an 'epiphany' of this absolute void or God. In this context, the author clarifies the connection between this 'absolute' concept and Tadao Ando's architecture: '' (…) Ando hopes to confront us with emptiness, with the Godhead.'' (Drew, 1996, p. 9). And furthermore: ''Ando treats emptiness as a kind of divine fullness which is absolutely life-affirming. He is concerned with an inwardly echoing aesthetic poverty, a quality of simplicity which is encapsulated in the Japanese term Wabi.'' (Drew, 1996, p. 9).

speculative imaginings.'' (Ando, 1995, p. 1). In this sense, his goal is to transcend the obstacles and the challenges and, in the pursuit of his ideals, to find a way to realize what he defines as a 'substantive architecture'. Substantive in this sense, refers to substance and in the general understanding of the word, it refers to everything that is 'pertaining to substantives' and that 'expresses existence'. He further says that his goal is intimately connected to the human soul and spirit: '' What I have sought to achieve is a spatiality that stimulates the human spirit, awakens the sensitivity and communicates with the deeper soul.'' (Ando, 1995, p. 1). In order to construct this kind of 'fictionality' in architecture, he emphasizes the importance and balance between reason and intuition, in order to fulfil his goal of creating a space that combines '' (…) fiction and the actual into a space of a higher dimension.'' (Ando, 1995, p. 1). In order for architecture to become this kind of 'spiritual shelter', Ando clarifies, that the imagination and the creation of fictionalities are of primary importance, and that it is this realm of fiction combined with the actual that elevates architecture into a means of expression and into the realms of art[453].

… (b) Experience: rather than aesthetics and functionalism

Architectural space is seen and understood as a stage for experiences. For this, the functionality concerns and the aesthetic aspects of the building and of architecture itself are simply dismissed and have little or no account. The sensory experience is enhanced by the reduction of the superfluous and an intensification of the experience is outlined by the simplicity of means. The experience of the space is heightened by and emphasized on the senses; elements are added to spaces with the exclusive purpose of adding to the experience, rather that responding to the 'functional' or 'aesthetic' demands. His spaces belong to a sphere of artistic creation, in the dimension of 'non-function', with elements that are completely useless in terms of physical functionality, but respond to other functions: psychological and spiritual. The sensory 'game' of the elements allows for an artistic experience to emerge, and with it, inward emotional worlds resonate within the viewer. The experience responds to feeling and to feeling alone.

… (c) The search and the sense of Communication, Nature and Meaning

In the documentary, *Tadao Ando: From Emptiness to Infinity* (2014), Ando considers the essence of Architecture '' The essence of Architecture is to open the hearts of people, and to move them so that they enjoy being in the world. The question is how to enchant with architecture? That is essential. '' (Frick, 2014). Further, it is through the development of an emotional connection wit the hearts of people that architecture moves them. This emotional connection can be developed at various levels and in multiple ways. But one of the ways that is important, is for example, in the maintenance of the building (as described in the church of light). Another way is with the use of light and its reflexions. Ando claims: '' The reflexion of light creates a very strong relationship with nature. One feels that we are not alone.'' (Frick, 2014). He further adds another dimension that is important: the process. In his words: '' If the process is not interesting, it doesn't transmit any value to the architecture.'' (Frick, 2014). The process for

[453] Architecture as and Art for Ando: '' (…) what is of primary importance are the imagination and fictionality that architecture contains beyond the substantive. '' (Ando, 1995, p.1); architecture achieves this fictionality by stepping into the 'ambiguous realms of the human spirit', and furthermore: '' Only after speculating the worlds of both the actual and the fictional together can architecture come into existence as an expression, and rise into the realm of art.'' (Ando, 1995, p. 1).

his significant architecture, is a process of reduction and formal abstraction that has into consideration the human side of life and the emotional conditions that from there derive.

About his own architecture, he continues conveying: ‘’Although my architecture uses contemporary materials, the challenge is to fill it with culture, in a way that history and tradition remain perceptible, allowing the visitor for space for self-reflexion.’’ (Frick, 2014). About the use of concrete, Ando (2014) finds that it is a material that is used everywhere in the world, and the only thing that distinguishes it from one place to the other is the means and precision of the execution; the Japanese, he says, because of their connection to nature, are very accurate in their execution and can make concrete like no other culture. This is reflected in the material and in the space and allows for a space for contemplation. He accentuates: ‘’ Communication, Life and Architecture need to be together.’’ (Frick, 2014).

Ando further describes his architecture, as a contact between all these elements; a connection between man and nature. He claims: ‘’ My architecture is very reduced, but it is completed with human life, nature and natural light; also with the seasons of the year, she is enriched and deepened. All this goes beyond minimalism. ’’ (Frick, 2014). And that is why he does not like that word to describe his work; it is incomplete. His architecture is deeper than that: it is not considered on its own, as an independent element, but instead it uses nature and human as part of architecture itself.

(5) specific work analysis, examples and key features

6.5.1. THE CHURCH OF LIGHT AND THE CHURCH ON THE WATER

… (a) The Church of Light

The Church of Light, also known as "Church with Light", built in 1989, is the Ibaraki Kasugaoka Church's main chapel, located in the city of Ibaraki 25 km north-northeast of Osaka in a small residential suburb; it was built as an annex of an existing wooden church and ministers house and is one of Tadao Ando’s signature architectural works.

In the documentary *Tadao Ando: From Emptiness to Infinity* (2014), Ando explains that his overall idea for the Church of Light. He claims: ‘’ My idea was to create a space where light reunites people and invites them to reflect.’’ (Frick, 2014). He continues saying that Le Corbusier and La Ronchamp had a great influence on him and in the design of the Church of Light. He further explains that the Church of Light was not an expensive construction, partly because of the low cost of the flooring wood system and the wood furniture, that was all built with simple wood, a natural material, instead of the use of plastic or some other synthetic material. The wood, he continues, demands maintenance, and that maintenance, carried out by the people and the faithful’s of the church allows for a development of a connection between them and the space – that is how an emotional bond can be grown. It is a small enclosed structure (area approximately of 113 m²), perceived and felt as a place of retreat from the outside world. It’s structural system is that of reinforced concrete and it consists of a rectangular volume of three

5.9m concrete cubes (5.9m wide x 17.7m long x 5.9m high) punctured by a wall at 15 degrees, that controls the circulation into the space; this wall is separated from the roof, allowing natural light to filter down into the space diffusely, and giving the impression that the roof is floating in the air. The benches and the floor boards are made of re-used scaffolding left behind from the construction, and wood (used in the elements such as benches and the altar) is the only other material used in the chapel besides concrete. The light is reduced to a minimum in the interior of the space and is only accentuated by cruciform cut into the concrete (extends vertically from floor to ceiling and horizontally from wall to wall) behind the altar; lit most intensely in the morning as it is orientated east. The reinforced concrete shell or walls are about 0,40 cm thick. The cross aims at reflecting the frailty of the human condition and the dual nature of existence: '' At this intersection of light and solid the occupant is meant to become aware of the deep division between the spiritual and the secular within himself or herself.'' ('Church of the Light', 2014). The overall space reflects an emptiness, void space, stillness and quiet, creating a sense of serenity; there are no decorative elements and no details added to the space that do not result from the construction process. The strong contrast between light and solid is felt within the chapel and shaped in such a way, that an impression of an infinite existence is echoed in the concentrated energy of the space; light is the only natural element that permeates the interior of the space, emphasizing its 'divine' properties and metaphorically and physically representing the divine light entering through darkness.

… (b) The Church on the water

The Church on the Water, was designed by Tadao Ando between 1985 and 1988, and constructed in 1988. Located in Tomamu, east of the city of Sapporo, among wooded hills. The church is isolated from its surroundings (it is part of a hotel complex) by an L-shaped wall (two arms 39.45 m and 75,425 m, east and south accordingly), leaving the mundane of the 'chaos' around, away from the sacred 'cosmos' constructed. The user, thus is conducted around the church, around the wall, through the north side of the complex and after descending and ascending some steps, reaches a space that is determined by four large crosses made of concrete; these define a cube, and their sides are separated from each other only a few centimetres; they are contained in a transparent cube of glass, that seems to 'contain light' and create an engaging and dramatic experience within the user.

From this space, staircases, dark, enclosed and circular descend to the space of the church. The church is based on a clear geometrical order and is composed of two squares that overlap in plan at one of the corners and are aligned in the same longitudinal axis as the pond. From the inside of the chapel, its front wall is substituted and replaced with an opening that opens up to the pond (to nature itself), with the cross rising up from the water centred and aligned to the midpoint of the interior ails of the chapel. The ample pond, rectangular in shape and protected by the L-shaped walls (a rectangle of 45 x 90 m), connects the church with nature and with the environment, and provides and ever shifting setting according to the seasons and the time of day. The cross, located in the pond, allows for an extension of the space outwards, bringing nature into the church or the church into nature. The interior space of the church is sober, depurated and simple, emphasizing the spiritual qualities of the space.









Photo 1: Interior picture of the space; Source: http://forums.cgsociety.org/archive/index.php?t-943364.html; Photo: Church of light; Source: http://www.mooponto.com/wp-content/uploads/2012/09/72-chapel-floor-plan-ando.jpg Photo 3: Tadao Ando's Church of Light. ; Source: http://www.fallow.com.au/blog/2014/03/22/church-of-light-by-tadao-ando/;

PLATE 54: THE CHAPEL OF LIGHT

Author Megan Sveiven (2010), in her analysis of the Church on the water, explains that, in her opinion: ‘’Ando succeeded in his intentions to design a sacred space through the ritualistic and circuitous entry route, as well as with the L-shaped wall that distinguishes the church as a secluded and protected space apart from the hotel behind it.’’ (Sveiven, 2010); she further adds that the chapel is one of the most desired wedding destinations for young Japanese women, and that only in such occasions, do the glass panels open up to create an atmosphere of union with the landscape and nature.

Stephen Sennot (2004) for the Encyclopedia of Twentieth Century Architecture explains, that the Church on the water was influenced (as pointed out by Kenneth Frampton) by Kaija and Heikki Siren’s Otaniemi Chapel (1957), for the Helsinkin Institute of Technology; however Sennot claims that the concepts explored by Ando are better executed therefore making the Church on the water more broadly recognized and accepted. Overall, Sennot (2004) explains that the concepts explored by the Church on the water were explored by Ando in subsequent projects such as: the idea of a natural amphitheatre, the free standing cross, and the scenario of nature and drama. He summarizes: ‘’ More than 15 years after its completion, the Church on the Water remains a source of inspiration for the architect. ‘’ (Sennott, 2004, p. 259).

…. (c) Both Chapels

As with the Chapel of Light, Tadao Ando uses a dramatic difference and contrast between the dark and small passageways and the opening towards the light: this reflects both a physical and a spiritual dimension that emerges through the experience of the space. Tadao Ando comments that in the Chapel on the Water, he aimed to create an experience that accentuates an ‘encounter with one’s own spirit’ and echoes the ‘experience of God’: ‘’ To experience God in this natural setting, perhaps, is to experience the encounter with one’s own spirit. I sought to create a container that can allow for this type of encounter.’’ (Ando, 1989, p. 89). The richness of the space echoes the harmonious relationship between architecture and nature, between man and the environment. The space represents the conciliation of opposites: interior and exterior, nature and architecture, confined and ample, light and darkness, profane and the sacred, the material and the spiritual. On these two chapels, as well as Ando’s quest for the spiritual space, Drew (1996) explains: ‘’ The two chapels explore the dimension of sacred space, and appear different, yet their differences are more apparent than real.’’ (Drew, 1996, p.7). The quest of the ‘sacred’ space, the author continues, is something that is explored by Tadao Ando in his various projects, including his domestic spaces. ‘’ Indeed, Ando invested the secular private domain with aspects of the sacred.’’ (Drew, 1996, p.8). This is what the author identifies as the ‘sacred quality’, that infuses and is echoed in all of Tadao Ando’s quest.

… (d) Other Relevant Projects

… (d1) The Water Temple

The Water Temple is located in Awaji Island in Japan and is an annex to a Buddhist sanctuary. Its entrance is located in the middle of the pond in a descending staircase that leads the viewer to the interior and confined space of the temple. This descent symbolizes a path to the sacred world, away and

hidden from the material dimensions. Above the ground, the structure in the form of a pure circle is filled with water and the project echoes the architectural concept of a water temple below the water. The pond is filled with lotuses, as the symbol for the temple (rather than the traditional large roots). The interior of the temple, confined and underground (underwater) is flooded with red light, creating a perceptual intensified experience. The space celebrates experience and existence.

…. (d2) The Space for Meditation

The Meditation Space is located in the UNESCO headquarters in Paris (near the Eiffel Tower) and was constructed in the years 1994 to 1995. Ando's "Meditation Space" was selected from numerous projects submitted. The intention of the project, was to create a space where all people, from whichever culture or religion, could pray for peace; a space that created a place to contemplate a world without conflict, in harmony and peace. The structure consists of a single high cylinder of reinforced concrete (six meters in diameter and height, overall 33 m^2), and the interior of the space is austere and simple. The space communicates a sense of peace, serenity and tranquillity. Light enters the space through the gap between the walls and the roof, diffusing softly into the space; the circular slab of the roof does not touch the walls. To enter the space, the visitor has to follow a 'journey', from a ramp to a path that leads to the entrance. Inside the space there are cast-iron chairs with high backs, and the underlying idea was that the discomfort would induce a state of awareness and attentiveness that provokes a contemplation state.

… (d3) The Benesse House

The Benesse House, a museum and hotel designed by Tadao Ando, is located in Naoshima, Japan. Pico Iyer (2011) revealss that the journey to the island is a unique experience: '' When I reached Naoshima itself, I began to feel as if I'd stepped out of time altogether, in a world so deep in the past – and so far ahead in the future – that I lost all sense of when I was.'' (Iyer, 2011, p. 1). As part of the complex designed by Tadao Ando, is also the Chichu Museum. '' In all my 50 years I've never seen a place as pure and elevating as the Chichu, and it speaks for the pristine futurism that makes Naoshima such a unique place.'' (Iyer, 2011, p. 1). The complex is filled with illusions and allusions to artistic pieces and art installations: there are five major pieces, being that one of them are the works by James Turrell such as the 'Open Field' .

(6) Key principles, concepts and values

… The Reflexion of a Spiritual Dimension: The Union of Body and Spirit.

Tadao Ando's architecture strives to create spaces that allow man to understand his own spiritual dimension. By creating spaces that embody the emotions that define a spiritual life (such as meditation, silence, tranquillity, awe, and solitude) he allows man to encounter those sides of himself, and creates the adequate environment for those emotions to arise. In creating this reflection of a spiritual dimension, his architecture embodies those values and those emotions, spaces communicate and resonate in the spirits and souls of the viewers; like any art, he stimulates the human spirit and the soul by awakening the

sensitivity and emotional levels that are otherwise silent. He achieves one of his main purposes which is to allow for a '*shinta*': the union of the body and the spirit. Architecture acts as a living organism in itself: that is composed both of body and spirit. His spaces strive to create a union between both, and in doing so, allow the users to experience that union and understand it for themselves.

… Poetry as the Value that communicates to the self: Metaphors

The way that Tadao Ando's architecture creates those emotional and spiritual connections both in the architecture and in the user is through what we can understand as poetry. Poetry is the tool that allows him to express his goals through architecture. Architecture as poetry creates moments and specific atmospheres that use high contrasts, of shade and darkness and statement 'awe' moments (such as the crosses in both chapels). These poetical moments, allow for a rich communication between the self and the space. They echo the condition of existence in life and in the world, in a metaphorical way: living in darkness and seeing the light, light above all other things, that there is nothing other in life but emptiness, that that which is valuable needs to be found and experienced deeply, rather than just being out there in the open, that life is a union of all elements of life (water, soil, earth and light) and that the spiritual life occurs inwardly in solitude. Through his poetical spaces, all these messages are communicated: both in a direct and a in an indirect way. In doing so, they generate human understanding and human consciousness.

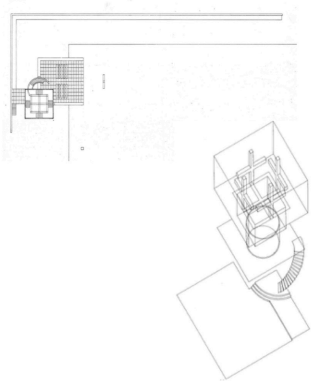
… Generating Spiritual Consciousness

Ultimately, as a union of the above principles, Tadao Ando's spaces end up provoking an 'epiphany' of the absolute void of God and our place in the universe.

Ending Remarks:

Tadao Ando's spaces hold a very unique significance and meaning within their core. They strive to create a connection between the self and it's spiritual higher self, and allow man to grow spiritually. This innate significance is embodied in the definition of the space itself, as poetry and as metaphor. Through the experience of those poetical encounters and metaphorical universal truths, man is separated from the outside mundane world this other/another world where simplicity, contemplation, meditation and awe, are demanded, and where man experienced those emotions in his own life. Architecture for Tadao Ando is not only an art that communicates emotions and embodies meanings, but it also an immense power that can elevate man's life and his spirit.







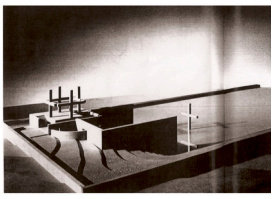




Photo 1: Chapel on the Water; Source: http://jilee23.files.wordpress.com/2009/10/churchonthewater18.jpg; Photo 2: Chapel on the Water; Source: http://architecturalmoleskine.blogspot.pt/2011/09/tadao-ando-church-on-water.html; Photo 3: Chapel on the Water; Source: http://www.pritzkerprize.com/1995/works; Photo 4 and 5: Chapel on the Water Plan and axonometry; Source: http://architecturalmoleskine.blogspot.pt/2011/09/tadao-ando-church-on-water.html; Photo 4: Church on the water; Source: http://abduzeedo.com/architect-day-tadao-ando

PLATE 55: THE CHAPEL ON THE WATER

Summary Notes: Tadao Ando

1. *Tadao Ando's architecture is in pursuit of 'Shinta': union of the body and the spirit. He aspires to create a space of emptiness and contemplation: the materialisation of 'nothingness' and 'stillness', in order to allow man understand his own spiritual dimensions.. In this vision and ideal, lies Tadao Ando's meaning and significance.*

2. *Tadao Ando creates a cosmos with each piece of architecture that echoes in the spirits of the users, like any other artistic creation; his spaces resonate as a painting or as a piece of music, and transports the user into another dimension.*

3. *Architecture embodies a philosophy of time, place, existence, of being in the world and of experiencing and understanding the spiritual dimensions that define and sustain the human being.*

4. *Architecture should strive to connect the Sacred and the Secular.*

5. *As an art, Architecture combines the dimension of Imagination and fiction, and that's where it's value lies… beyond the substance.*

6. *Architecture responds to both psychological and spiritual dimensions: it allows for a transference of the self to a spiritual dimension.*

7. *Architecture through poetry (and metaphor) conveys universal truth's, using aesthetic poverty (the idea that there is no need for excesses and decorative elements), a condensation of substances and poetical encounters, universal truths communicated through metaphor and a reduction of space to its bare essential (simple means) in order to express large ideas and complex emotions.*

8. *Architecture, as an art, allows for a deep connection between the self and it's spiritual higher self*

9. *Conceptual Diagram:*

Table 9: Tadao Ando Conceptual Chart

CREATION			CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Table 10: Tadao Ando Synthesis Chart

TADAO ANDO

1. FIELD:
- *Architecture*

2. EDUCATION/BACKGROUND:
- *No formal education.*
- *Experience as a boxer, carpenter and truck driver.*
- *Attended courses on drawing and interior design.*

3. EVOLUTION:
- *Towards a condensation of significance and substance*
- *Uncovering of an intuitive understanding.*

4. CONTEXT:
- *Critical Regionalism Movement:*
- *Combines Universalism and Local Traditions*
- *Against 'placeless monotony'*
- *Connection with the landscape*

5. INFLUENCES:
- *Modern Architecture: Louis Kahn, Frank Lloyd Wright and Le Corbusier*
- *Japanese Culture:*
  - *Tradition, Aesthetics and Philosophy*
  - *The Dual Nature of Existence*
  - *Awareness for the world*
  - *Wabi: beauty of the ordinary*
  - *Impermanence of things*
- *Both influences combined to create a new philosophy, goal and language.*

6. CREATIVE PROCESS:
- *Systematic, reasoning, using drawing to uncover intuitive understandings.*
- *Search for the substance of things*
- *Drawing is the base of the understanding, from which the character and the qualities of the architectural space emerge.*

7. PERSONAL COSMOLOGY:
- *Architecture is a spiritual order: creates a cosmos*
- *As an art, Architecture combines the dimension of Imagination*
- *Belief in a 'substantive' Architecture (substance)*
- *The value of architecture is beyond substance: in imagination and fiction*
- *Combine the fictional and the non-fictional*
- *Architecture as a stage for experiences*
- *Architecture responds to both psychological and spiritual dimensions.*
- *Transference of the self to a spiritual dimension.*
- *Poetry as a means of conveying universal truth's.*
- *The belief that architecture can create a cosmos that echoes in the spirits of the users as stillness and eternal condition of existence.*

8. EMOTIONS
- *Tranquility*
- *Stillness*
- *Silence*
- *Solitude*
- *Contemplation*
- *Meditative Feelings*
- *Awe*

9. OBJECTIVES:
- *To reflect the condition of existence*
- *To generate human understanding*
- *To create spaces of emptiness and contemplation: the materialisation of 'nothingness' and 'stillness'*
- *To create: - a metaphor for the journey of the self and the inward spaces of silence and - a sense of Isolation from the world*
- *To reflect a spiritual dimension*
- *Re-unite the Sacred and the Secular*
- *Create 'Shinta': union of the body and the spirit*
- *Provoke an 'epiphany' of the absolute void of God.*
- *Reflect a silence, a sense of tranquility and a bridge to spirituality*
- *Stimulate the human spirit and the soul by awakening the sensitivity*
- *Focuses on the human condition and it's qualities and tries to capture that and transit it through the space.*

10. CHARACTERIZATION:
- *Focus on experience: feeling and emotion*
- *Simple purified spaces*
- *Use of simple materials: both manufactured such as concrete and natural such as wood.*
- *Deep connection with the land and the landscape*
- *Incorporation of nature into the architecture through vision and sight.*
- *Use of pure forms*
- *Depuration of form to its most essential.*
- *Use of the elements: Light, Air, Water and Earth*
- *Focus of circulation and journey*
- *Aesthetic poverty: the idea that there is no need for excesses and decorative elements.*
- *Reduction of space to the bare essential: simple means to express large ideas and emotions.*
- *Interpretation and recombination of the principles of his precedents, such as te Japanese tradition and the Modern Movement legacy.*

11. CONCEPTUAL FRAMEWORK:
- *Nature*
- *Harmony*
- *Sacred*
- *Emptiness*
- *Existence*
- *Impermanence*
- *Simplicity*
- *Meaning*
- *Spirituality*
- *Feeling*

12. VALUES
- *Metaphysical, Poetical, Emotional, Spiritual, Sustainable, Metaphorical and Philosophical.*

13. MEANING/SIGNIFICANCE
- *Connection between the self and it's spiritual higher self*
- *Embody spiritual lessons through poetry and metaphors that are communicated to the viewer.*
- *To find God.*





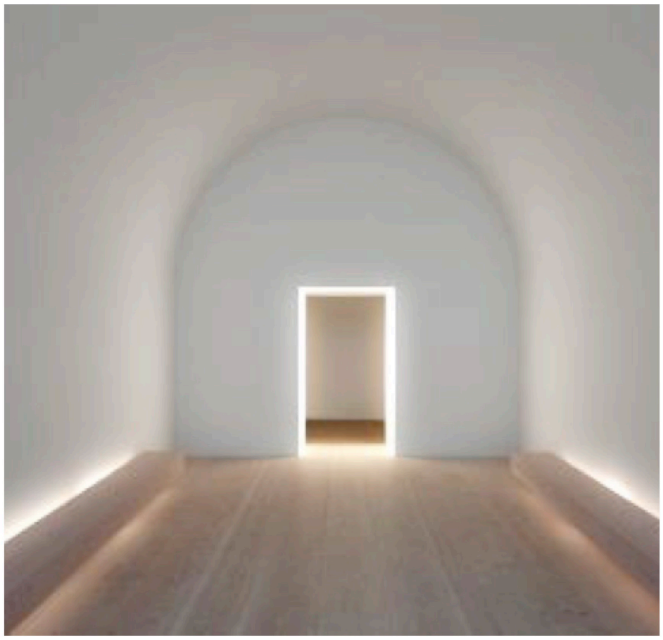


Photo 1: John Pawson Profile Picture; Source: http://www.johnpawson.com/office/john-pawson/;Photo 2: Christopher Kane Store, London, United Kingdom, 2013 – 2015; Source: http://www.johnpawson.com/works/christopher-kane-store/ Photo 3: John Pawson's installation at the Design museum exhibition in 2010. Source: http:// www.johnpawson.com/works/

PLATE 56: JOHN PAWSON

6.6. JOHN PAWSON

(1) artistic evolution, context and characterization

… Architectural/Artistic Evolution

His Architectural and Artistic evolution, has focused '' (…) on ways of approaching fundamental problems of space, proportion, light and materials, rather than on developing a set of stylistic mannerisms (…)'' (Pawson, 2015). These concepts and themes are developed in all his architectural, artistic, design creations, and his theoretical development (his book Minimum, first published in 1996). Mainly, there is an examination and a clarification of the notion of simplicity in art, architecture and design. Rowan Moore (2010) for the Guardian, writes that Pawson's evolution is 'loosening up', where as his more early work was more rigid, his architecture is becoming more involved with life rather that exclusively the aesthetic principles. Moore (2010) comments: '' His love of the orthogonal, which like 1980s dance moves once verged on the robotic, is relaxing into less pure angles. Some brighter, rougher surfaces are entering his repertoire.'' (Moore, 2010, p. 1).

… Context and Characterization

Pawson's architecture and general aesthetics is known for its minimalistic approach, and he is generally known as a master of minimalism. Minimalism as an art movement began in the decades of the 60's and 70's; it is derived from the depuration and reductive aspects of Modernism, and can be seen as the opposing art movement of abstract expressionism, in content, form and significance. In the arts, its leading artists are Donald Judd or Ives Klein. The term is generally and loosely used in architecture and design to describe the aesthetic sense of reduction to the bare minimums, or essentials; it follows the architectural vision defined by Architect Ludwig Mies van der Rohe (1886–1969), and his motto 'Less is more'. It aims to create an atmosphere of simplicity and subtle elegance or beauty.

Besides Minimalism being predominant with some architectural and artistic creators, the overall architectural in the 80's was defined by a post-modern confusion. This context, in which Pawson's work emerged, is summarized by Rowan Moore (2010) for the Guardian: '' He emerged in the 80s, in a time of postmodern gaudiness, classical revivalism and collapsed faith in the ideas of modernist architecture.'' (Moore, 2010, p. 1). As such, his minimal architecture, stripped to its bare essential, what the author defines as a 'breath of fresh air', and was generally well received. Overall, Pawson's work aims at a removal of accessories and visual confusion in order for the user to appreciate spatial qualities of '' (…) light, proportion and material.'' (Moore, 2010, p. 1).

Although private houses define the core of his work, his projects have spanned a wide range of scales and building typologies, raging from designing objects, bridges (Sackler Crossing across the lake at the Royal Botanic Gardens), shops (his most prominent being the Calvin Klein store), monasteries (Cistercian monastery in Bohemia) and even designing objects. The sites are also very varied: whether in Yorkshire, Okinawa, the Alentejo, California, the Veneto, Manhattan or the Belgian North Sea. Pawson's

work does not relate to social purpose or to sustainability principles, but instead is focused on the 'untrained and on the edge' perspective of creations, such as the work of Luis Barragán[454]. Pawson's lack of a traditional architectural education and contextualization (he never finished his studies and he never worked for another architectural practise, just for the designer in Japan)[455], may or may not, have contributed for his independent way of thinking and designing, both architecture, design and art. Whichever the case, Pawson has established a unique simplicity (and meaning) in everything he designs.

… Overall Architectural Description

John Pawson is considered a leading exponent of the simple expression and the minimalist aesthetics: in most of his architectural work there is a predominance of the white and light, defining an atmosphere that is clean, pure and reduced to its essentials. He eliminates superfluous features and reduces design and architecture to its bare minimum, in order to arrive or to create the essence of the space or of the atmosphere. The elements that are added to the space, such as furniture or flooring, use natural materials, mainly wood, that give the space a sense of a natural environment and connection to nature. Natural materials allow for the echo of time to manifest, and possess properties of tangibility and materiality that contrast and complement against the broad and vast white walls. Also, another aspect that is important of reference in Pawson's spaces is the sense of proportion and 'human' scale. The atmosphere of the space is determined by the proportions of each room that set an intimate and personal scale and a harmonious sense of order. They are further accentuated by the sharp sense of geometry, and the use of pure forms that echo throughout all the elements of each space. A further note should be said, about the scale element of Pawson's spaces: his scale seems to represent a dichotomy, in one way it is intimate and just the right proportions to make the human body feel 'at home', on the other hand, he uses a contrasting scale to provoke the viewer and force on him specific emotions such as those of confinement (going though narrow stairs) or expansion (opening up to a broad window).

John Pawson, in an interview by Sherryl Garratt (2010) for the Telegraph explains a spatial installation at the exhibition at the Design Museum: '' It will be a room in which nothing happens at all. But you'll hopefully get a feel of the things we do. Some sense of precision, light and proportion; of scale, and sensual material.'' (Garratt and Pawson, 2010, p. 1). These four elements (light, proportion, scale, and sensual material) define Pawson's architectural considerations; they are the concepts upon which his spaces are developed.

In all, his spaces combine those elements to create spaces and atmospheres that act on the senses and on the sensitivity of man. Moore (2010) emphasizes this when he claims: '' A Pawson space offers a higher form of hedonism which, like snow in a sauna, heightens the senses.'' (Moore, 2010, p. 1). He also

[454] '' There is much that doesn't concern him greatly, including social purpose and sustainability. He is not especially of the moment: for Sudjic his interest is "that he is not part of the usual architectural tribal system". He compares him to other architects who were "untrained and on the edge", like the Mexican Luis Barragán.'' (Moore, 2010, p. 1).

[455] '' Pawson arrived from outside the usual channels of architectural apprenticeship. He never completed his studies, and never worked for another architectural practice, but only for the designer Shiro Kuramata, whom Pawson discovered in his 20s when drifting through Japan.'' (Moore, 2010, p. 1).

considers that the spaces allow for man to become immersed in another sort of dimension, where simplicity of life and sensuality of material live combined in one single existence[456].

Either as a physical experience, a merely visual one or a philosophical one, Pawson's spaces echo simplicity, restraint, minimalism and harmony, portraying a world that seems to be at a perfect balance within itself and with the world around it; they act psychologically, emotionally and spiritually, on the viewer transmitting those specific emotions and meanings that only the 'minimum' and overall 'simplicity' can portray.

(2) creative process, methodology, techniques and characteristics

… Work Process

Pawson (1998), in his book *Minimum* explains that he doesn't draw much. For him the design process is led by a very strong mental image or picture of a space, and how he wants to create it and organize it. About his process, he claims: '' I make quick stabs at drawing on paper, just as I am analysing the elements, and how they flow together – ceiling, walls, stairs. I look for balance of proportion, scale, light and geometry.'' (Pawson, 1998, p. 17). This work process is oriented by the aspects that he consideres to be elements of simplicity, or the elements of architecture that can contribute to that overall quality.

On the process itself, he conveys that it is a process of reduction that goes on until the simplicity becomes something rich: '' You reduce, you simplify and at first there is less and less to look at. Then you go on reducing, attenuating and compression, you come to a point at which you go through a barrier, and pass through it into a kind of mirror world, in which you see, looked at with enough clarity, not emptiness, but richness. '' (Pawson, 1998, p. 18). The process requires patience, effort and care; to achieve simplicity requires much effort, he accentuates. He also explains that he is driven by the 'excitement' of 'empty space' because it has the potential to bring architecture alive[457]. It is emptiness, he continues, that allows us to see space as it is, offering the space up for contemplation, meditation and calm, without distractions. About his interaction with the clients, in an interview, Pawson (2010) answers: 'Early on, for me there was only one way, one vision, and I didn't have time to listen. Which was probably a good thing, then.'' (Garratt and Pawson, 2010, p. 1). He completes that he didn't listen to the client's desires or emotional necessities, but instead tried to make his vision clear, and the materialized it in the most 'perfectionist' (strict and intransigent) way. Now, his work process has subdued and softened, and he claims to enjoy the process of interaction with the client, and working between their ideas and his.

… Methodology: Being led by the elements of simplicity

Pawson is led by a strong mental image, an image is conceptualized by the reduction of elements. However, there are various aspects that characterize his methodology and accompany his creative process

[456] Reference to: '' Pawson's architecture also creates another kind of escape, into a space where it seems possible to be both mystical and material, both monk and CK sensualist. '' (Moore, 2010, p. 1).
[457] Reference to: '' What I look for is the excitement of the empty space. It has the potential to bring architecture alive, (…).'' (Pawson, 1998, p. 21).

and decision making: those are the ideas of scale and proportion, natural light, materials and the idea of substance. Following is a brief explanation of how he perceives these elements, why they are of value for simplicity and how he tries to define them. Scale and proportion are tools that the architect can bring into the all design. For him proportion is what Donald Judd defined as 'reason made visible'. And then, natural light, plays an important role in bringing these characteristics to life: '' Light and its play on architectural spaces, inside and out, has the power to transform them.'' (Pawson, 1998, p. 17). He also upholds that it is essential the consideration of a three dimensional space rather than a two dimensional one. Also, he claims that in his process, the 'view' is very important: it is a giving of 'something to look at'. Another aspect that is important in his process and his designs is the idea of mass and the importance of creating 'substance', such as thick walls to walk through. The choice of materials in another aspect that he enumerates that greatly influences his design process: he likes that the material speaks of its origins and that it grants space and a sense of volume to the room. Generally, the choice of natural materials grant the space with a sense of depth, according to him: '' To me, the quality of the individual materials from which architecture is created is of much more significance than an exhibitionist or virtuoso approach, (…).'' (Pawson, 1998, p. 19).

(3) inspiration, influences, conceptual framework and themes:

… Influences

Pawson was deeply inspired by the art works and theories of Donald Judd. Judd's understanding and perception of art, sculpture, and space, had a profound contribution on the defining and shaping of the minimalist movement. In architecture, one of the buildings that has had a profound impact on him is the 12th-century Cistercian Abbey of Le Thoronet in Provence. This building, that has also had a profound impact on Le Corbusier, is a 'sacred' building, designed for spirituality and religion, and as such, echoes the principles that Pawson sustains: an architecture that reflects principles of purity, light, clarity and depuration. Also, he lists his favourite work of art, (that has had a profound impact on him) the painting Pieter Saenredam's 'Interior of the Buurkerk', Utrecht, 1645; a painting representing the interior of a gothic cathedral. Another major influence, was the book *'Architecture of Truth',* Lucien Hervé's, a photographic essay of Le Thoronet, with a foreword by Le Corbusier.

All these influences, announced by Pawson, are composed of architecture spaces that is used for religious purposes: they are monasteries, cathedrals or convents. This defines the basis of his connection to an architecture that is sacred like, in its simplicity and elegance.

Another main influence on Pawson, was the time spent in Japan and the overall Japanese Aesthetics and Philosophy[458].

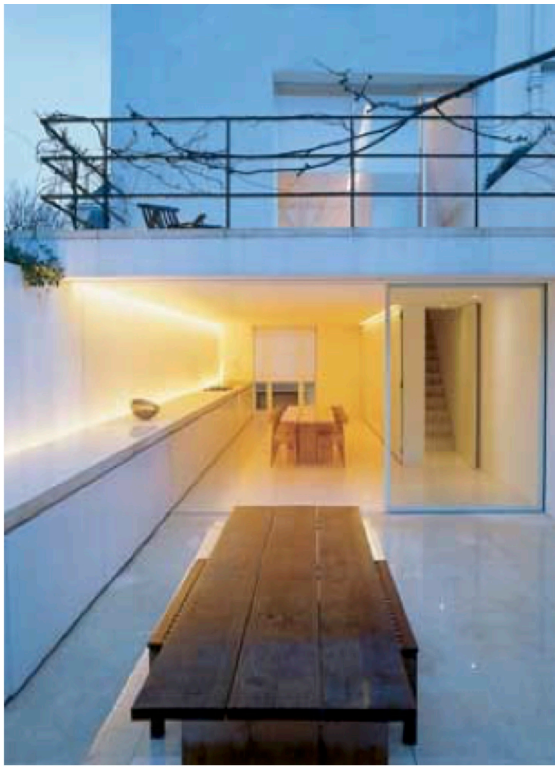
458 '' Japan does offer a distinct aesthetic sense; one that after living there for several years, has certainly coloured my views of the world, and there has always been those outside Japan who have chosen to look for what the Japanese call Wabi, the quality of voluntary poverty. '' (Pawson, 1998, p. 8).

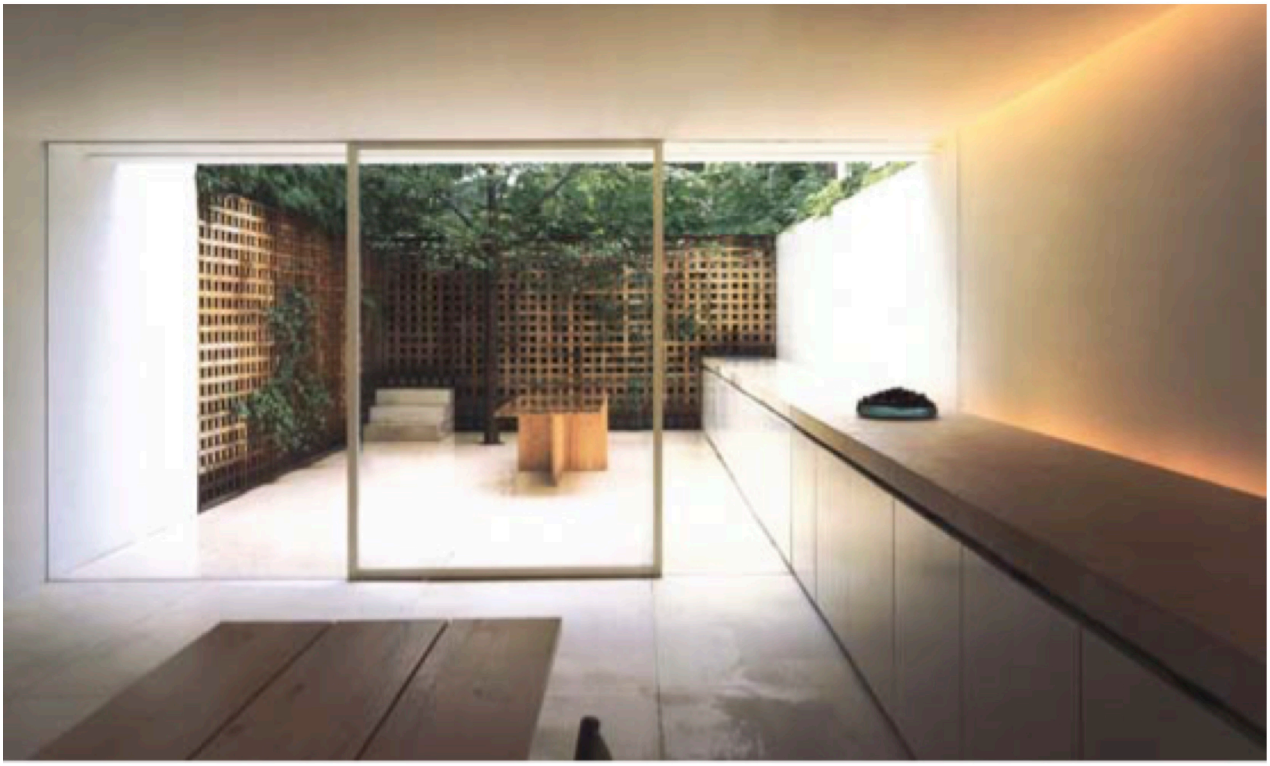






INFLUENCES





INFLUENCES: Photo 1: Donald Judd Sculture installation; Source: http://nga.gov.au/International/Catalogue/Detail.cfm?IRN=14962&ViewID=2&GalID=ALL; Photo 2 : Pieter Saenredam's 'Interior of the Buurkerk', Utrecht, 1645; Source: https://www.kimbellart.org/collection-object/interior-buurkerk-utrecht; Photo 3: 12th-century Cistercian abbey of Le Thoronet in Provence; Source: Same source as previous. PAWSON HOUSE: Photo 1: Interior space of Pawson's private house; Source: http://minimalissimo.com/john-pawsons-private-residence/; Photo 2: John Pawson House; Source: http://blog.archpaper.com/2010/07/john-pawson-crafts-new-show-museum-for-london/#.VjEXx4RLElI; Photo 3: John Pawson House in London; Source: http://www.arcspace.com/exhibitions/unsorted/john-pawson-plain-space/;

PLATE 57: JOHN PAWSON'S INFLUENCES AND HOUSE: SCALE, PROPORTIONS AND MATERIALS

The Japanese architectural aesthetics has a profound sense of space and spatial understanding as being reduced to its essentials. *Wabi*, for example, Pawson (1998) points out, is an aesthetic and moral principle that advocates a life of quietness and a withdrawal from the worldliness; it values the beauty of simplicity and austerity, the serene and the transcendence that comes with it. Simultaneously, their philosophies sustain it with the Zen philosophies and the emphasis on the 'nothing' as a means to arrive at 'everything'. Philosophically, aesthetically, architecturally, artistically, in form, in content and in ways of designing, all these influences played a crucial role in defining Pawson's creations.

… Visual Themes: Subjects

… (a) Minimalism as a way of life: Visual Clarity, Simplicity, Elegance and Grace

The idea of simplicity, John Pawson writes in his book *Minimum* (1999), is an ideal shared by many cultures and religions, and has its roots deeper than only in aesthetics ones: from the Japanese Zen, to Thoreau's quest for simplicity, from the Quakers to the Buddhists, the simple way of life has always been an aspiration and has always granted a sense of liberation. Simplicity, then, possesses a moral dimension and as such implies the notions of 'selflessness' and 'unworldliness'. For religion, simplicity is a virtue that can be purify and cleanse the spirit, offering inner and outer tranquillity.

Attached to simplicity and to this simple way of life, is the idea that things have to be reduced to their minimum conditions. Minimum, for Pawson can be formulates as '' (…) the perfection that an artefact achieves when it is no longer possible to improve it by subtraction.'' (Pawson, 1998, p. 7); he continues, it is the quality that something has or possesses, when every component, every detail and every function has been 'reduced to its essentials'. He summarizes as such; '' It is the result of the omission of the inessentials.'' (Pawson, 1998, p. 7). And is the underlying idea that defines simplicity in its core. In contextualizing simplicity in architecture, Pawson states that it has been wrongly associated with the sparseness of modernism; however, that shouldn't be the case, because simplicity is not the same as 'utilitarian' or 'pragmatic' (such as some modernist examples that possess 'blandness' rather 'simplicity'). Simplicity depends on thought, care, knowledge and patience, and is a product of careful consideration, rather than a mere reduction of elements. Pawson speaks of Architects Mies Van Der Rohe, Le Corbusier, Adolf Loos, and Peres Behrens, explaining that it is the precision of Mies Van Der Rohe that most fascinates him; however he notes: ''While high modernism certainly embraced it, simplicity in architecture cannot be equated with modernism alone.'' (Pawson, 1998, p. 11). Essencially, the minimum as way of life, that Pawson identifies and describes in all spheres of existence is as much an aesthetic quality as it is a philosophical and a religious one: it is close to a spiritual type of depuration, a cleansing of the superfluous and a focus on what really indeed matters and is meaningful.

(4) underlying theories and ideals

… Theories and Writings: Views of his own work

About his own work, Pawson (1998) (in his book *Minimum*) writes that it has little to do with '' (…) current stylistic preoccupations of architectural discourse because I have had very little in the way of

a conventional architectural training, some people may assume that I am outside of the world of architecture, that perhaps I am closer to what might be called 'art'.'' (Pawson, 1998, p. 17). However, he thinks of what he does as architecture: it is about making spaces, about proportion, scale, light, movement and about the philosophy of making spaces.

In an interview, he comments: ''Primarily, I want to provide spaces in which people feel good. Space is what makes me feel different when I go into good architecture.'' (Garratt and Pawson, 2010, p. 1). For him, Space is a general and broad concept that defines what great architecture is all about.

… Personal Cosmology

… (a) The search for the Minimum and Simplicity as a Language

John Pawson in his book *Minimum* (1999), aims to define the concept of Minimum in the various fields of art and architecture throughout history. The book is an attempt to clarify the notion of simplicity applied in the multiple fields, and as a way of life. Pawson claridies it's aims as: '' (…) to look at simplicity as a means of ordering and defining the everyday rituals and necessities of existence.'' (Pawson, 1998, p. 7).

The principle of simplicity and minimum that Pawson tries to identify, he considers, is not easy to make clear: '' It is an elusive quality, (…). However there are a number of qualities that are likely to be conducive to simplicity.'' (Pawson, 1998, p. 8). As such, the book searches through images, the themes, concepts or elements that define and compose simplicity, using examples that stretch through the various cultures of different times, in the multiple fields of creation such as ceramics, arts, architecture, sculpture, gardens, etc. These images, he finds, were chosen instinctively[459], and they do not need any theoretical basis to understand them. He tried, he explains, to go beyond the ingredients of simplicity, attempting to capture the essence of everyday life, that requires a sense of order and discipline, and finds it through simplicity. The themes identified or explored, structured as chapters in the book, are those of: Mass (The uncomplicated beauty of the unadorned wall), Light (Shadows and the power of transformation) Structure (The discipline of mathematics), Ritual (Voluntary poverty and its enduring appeal), Landscape (Marks made by man), Containment (How architecture defines space), Repetition (The elements of simplicity), Volume (The transforming power of proportion), Essence (the irreducible minimum) and Expression (Silence as language). Repetitions, for example, according to him, tend to possess the quality of simplicity, as in the case of the classical temples with their 'rhythmic facades' that instils a sense of order; as example is Stonehenge, whose visual power, Pawson (1999) claims, lies in the repetition of simple monolithic forms. Pure geometry is another quality, that makes 'simplicity likely', he enumerates: ideal forms, such as spheres, cubes, cones or pyramids, have a calm sense to them which is echoed in the space.

… (b) The Quality of Simplicity: transversal to all the arts

Simplicity as a quality, Pawson (1998) believes, can be embraced by both high and low culture (such as the anonymity of the country life). Sometimes the difference that qualifies and composes

[459] Reference to: '' They are places, or things, or sensibilities that I have responded to instinctively.'' (Pawson, 1998, p. 9).

simplicity is defined by the smallest of details. However, he claims: '' The question that inevitably arises is whether both high art and the anonymous artefacts of the countryside are based on the same root. Are there in fact some absolute values on which all great art is based, (…)?'' (Pawson, 1998, p. 16). For John Pawson, the distinction between art and non-art, in the contemporary world, is not valid. He says: '' There is nothing sacred about putting pigment on a canvas that is not with a brush that makes it inherently different from making a chair, or a pot.'' (Pawson, 1998, p. 17). A painting is just a painting, there are other qualities that make it art. About art, he thinks: '' Art is not simple, it never claims just one thing, and that is especially true with minimal art.'' (Pawson, 1998, p. 17). What can define art simply, Pawson continues, is claiming that it is a product of the 'most creative and forward-thinking intellects', and that fact makes it powerful.

… (c) The Universal Design: The language of simplicity

For Pawson, the artistic/architecture aesthetic meaning and language he developed is applied in all fields of creation, not exclusively in architecture. He has designed artistic installations such as Perspectives (2011), (analysed in point 6.), cookware and tablewares (2005) sailing boats and yachts, a bridge (also analysed in point 6.) and stages for the Opera and the Theatre (2006). What all of these designs have in common is the language and the aesthetic meaning and significance that sustain them. On this regard, explaining his aesthetic decisions in regards to his tableware (2005), he affirms: '' I seek the comfort of exactness, an absolute precision of scale and proportion. (…) Knife, fork and spoon are united by a single handle profile and each demonstrates the potential for lyricism in restraint.'' (Pawson, 2015).

(5) specific work analysis, examples and key features

To understand Pawson's aesthetics, its language, meaning and significance, unlike other case studies, a broader analysis is in order, rather than an exclusive understanding of only one of his projects. Firstly an analysis of his house, secondly an analysis of the Navy Dvur Monastery, and lastly a series of other projects that add other dimensions or aid in the clarification of his visions and the way he achieves his meaning.

6.6.1. VARIOUS PROJECTS

… (a) The John Pawson House

The house is located in Notting Hill, London, and it is John Pawson's private residence, where he lives with his family. The exterior of the house still remains the same, because of planning regulations in London – the project consists of the renovation of the interior of the house. In order to do so, it changed the interior existing design entirely, leaving only the exterior façade untouched. The layout of the house aims to expand space, so that the interior feels more amplified and spacious. Window cuts made to the back façade of the house allow for large windows, floor to ceiling, to expand the sense of space into the back courtyard and allow for natural light and atmosphere to immerse into the space.



NOVY DVUR MONASTERY

THE CHURCH OF SAINT MORITZ

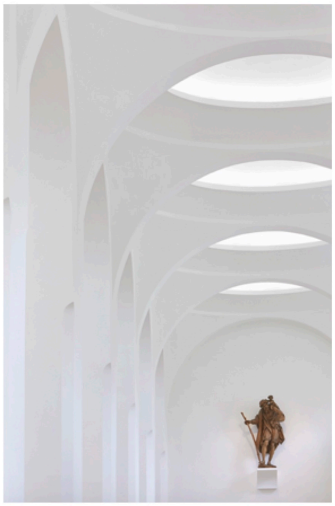




Photo 1: The Interior of the Novy Dvur Monastey; Source: http://blog.archpaper.com/2010/07/john-pawson-crafts-new-show-museum-for-london/#.Vi_PcYRLFFI; Photon 2: Church of St. Moritz Interior Renovation; Source: http://www.archdaily.com/456312/interior-remodelling-st-moritz-church-john-pawson

PLATE 58: JOHN PAWSON'S SPACES: PRINCIPLES OF SPIRITUALITY

John Pawson's website, where most of the information about the house can be found, further adds: '' In another defining gesture, the worktops in the kitchen are formed from 4.5-metre lengths of marble, with sinks cut into the thickness of the stone.'' (Pawson, 2015).

The simplicity of the overall explanation echoes the simplicity of the house. Author Luisa Cornoldi (2004), for the book 100: One Hundred Houses for One Hundred European Architects of the Twentieth Century explains that Pawson's aim for the house was '' (…) not to create a beautiful house, but a house that would be beautiful to live in.'' (Postiglione, 2004, p. 303). She continues explaining that the house creates a projected image of who the architect is, deep down, and what he wants to become in the future.

Amanda Birch (1997), for the *Encyclopaedia of interior design*, explains that this house, best exemplifies Pawson's work, his aims and his ideals. She further adds that one of the distinguishing features of his work that can be found in the house is the balance of oppositions: '' He delights in the nature of materials and in fundamental oppositions; between dense mass and the ethereal, and between the opaque and the transparent.'' (Banham, 1997, p. 940). As a whole, the project of the house is the best example to summarize all the views, values and principles analysed so far. The house applies all of Pawson's ideals, principles, philosophies and aesthetical values at all scales of design, from the overall interior layout, to the materials and to the details of the furniture or lighting.

… (b) The Novy Dvur Monastery

The Novy Dvur Monastery or The Abbey of Our Lady of Nový Dvůr (2004) occupies an estate of 100 hectares of farmland and forest, in a remote part of Bohemia in the Check Republic. It's construction begun in 1999, and the original site included a baroque manor house and various agricultural buildings around a square courtyard, that was extremely deteriorated (it was uninhabited for more than 40 years). These elements designates the plan for the existing building that used the existing construction's layout. The existing manor house was restored (forms the west wing) and new architecture defines the rest of the project, replacing the three agricultural wings with new construction built upon the old footprints. The design uses St Bernard of Clairvaux's twelfth-century Cistercian architecture as inspiration and as a guide for the new design. The Abbey now houses a variety of functions, including a church, private quarters for monks, offices, a school, workshops, guest quarters, a hospital and a farm. One of the most distinctive features of the design is the circular form of the Church. The cloister is one of the most important aspects of the monastery, and a circulation corridor with glass panels circles around it in all the wings, opening up the views to the outside. The corridor is a barrel-vaulted space recalling traditional courtyard loggias. This circular shape, a traditional feature of the old construction, is brought into the new construction in multiple spaces.

The main church space is simple in character and form, possessing a dramatic atmosphere given mainly from its scale, proportions and the use of light that comes through large glass panels (obfuscated with white screenings). Above all, the environment is clean, pure, depured and balanced, providing a harmoniously space for meditation and contemplation. Using shades of ochre and white throughout the whole project, light comes in through multiple openings creating dramatic shading effects, and accentuating the dramatic emphasis of darkness and light. Also, the materials used in all other elements of

the space are wood (dark black wood in the church and medium toned wood for the rest of the spaces), creating a balance between the flatness of man made construction and the character of natural elements - one of Pawson's most used aesthetic/architectural strategies and characteristics. The architecture respects and reflects the aesthetic values of the Cistercian monks: simple, plain shapes and materials, which are in perfect conformity with that which Pawson also represents and believes in – the minimalist austere language.

… (c) The Church of Saint Moritz: Interior Remodeling

The Church of Saint Moritz (2013), or Moritzkirche, is located in Augsburg, Germany and the project begun in 2008. It aimed to be a reconstruction of the existing church, which Pawson says, had underwent various transformations in its history such as fires and wartime bombings. The purpose of his intervention was to '' (…) retune the existing architecture, from aesthetic, functional and liturgical perspectives, with considerations of sacred atmosphere always at the heart of the project.'' (Pawson, 2015). In order to do so, the work involved the relocation of elements, in order to clarify the visual field and by drawing on existing forms that define the church, simplifying elements to create a sense of a new environment, yet still rooted in its history. The eye and the viewer are drawn through the nave to the apse, which is designed as a room of light, and possesses a sculpture of Christ, by the Baroque sculptor Georg Petel. The project placed a key focus on the windows, that functionally should allow the light to immerse into the space, but spiritually should be an expression of transcendence; in order to do so, Pawson placed a special type of glass that possesses thin slices of onyx, screening out the direct rays of the sun, and allowing for a subtle, diffused light to flood the space.

As a whole, the Church intervention summarizes Pawson's approach to designing architectural spaces: the search for proportion, a balance between history and modernity, the flooding of white and light, the use of architectural archetypes such as the arch, and the overall sense of harmony.

… (d) Perspectives

Perspectives (2011), is a art/sculpture installation designed by John Pawson. It was originally designed to be presented in occasion of the 2011 London Design Festival and inaugurated in the city's striking Saint Paul's Cathedral. After which it has been installed in the heart of the Basilica di San Giorgio Maggiore, on the occasion of the 55th International Art Exhibition, for the Venice Biennale (2013). And in 2015, was been installed at the Kunsthistorisches Museum for the Vienna Design Week. Titled Perspectives, the art piece aims to enhance the perceptual experience of space and architecture. On this issue, Pawson (2010) explains: ''The thinking behind the piece was to isolate just a small element of the building and offer a spatial experience based around this single and sharply honed perspective.'' (Didero, 2013). It is comprised a 40 cm-wide concave Swarovski crystal meniscus lens, made from optical quality glass, that sits on a much larger reflective surface a fabricated metal hemisphere (1,2 m diameter and a 0.675 m height). The piece, as an optical device, produces a composite image reflecting and capturing the ceiling and amplifying it with the lenses.

This artistic object also grants insight to Pawson's views and overall ideals: it introduces metaphorical and metaphysical dimensions, by reflecting heaven on earth, it creates an aesthetic link allowing for multiple interpretations and multiple dimensions to open up. The object reflects Pawson's ideals, of every artistic object (architectural or not) establishing transcendental and metaphysical connections.

… (e) The Baron House

Built as a summer house for Fabien Baron, the Baron House (2005), is located in rural Sweeden and begun its construction in 2003. The house is designed to blend into the landscape. It's plan is placed at exactly the same site as the previous construction, that already possessed the courtyard, defining four single-story wings of accommodation around the courtyard. The design draws significantly on local vernacular model or the agricultural design that already existed and still exists in the area, reworking both its form and its materiality. The interiors are bathed in light and views open to the vast landscape. The materials used are zinc for the roof, white walls and timber elements stained with traditional Falun black paint. As a whole, the house is another good example of Pawson's creation of simplicity, as a sort of spiritual haven from the outside life.

(6) Key principles, concepts and values

… Universal Truth Through the Principle of Minimalism and Simplicity

One other aspect of further clarification that characterizes Pawson's work is the notion that everything in an environment needs to be in concordance with the overall aesthetic and philosophical value that sustains it. Therefore, Pawson determines every aspect and every element in a room, focusing from the general aspect and idea, to the most intimate detail (furniture, accessories, artworks, lighting, etc.). He designs every component that goes into the spaces he envisions. As such, it is possible to understand his vision as a kind of universal design, that finds its roots in modernism (with for example Corbusier), in the Bauhaus school or in the De Stijl Movement, where the language and philosophy that sustains the creation needs to be in accordance at all levels and with the elements of the creation in order for a more profound meaning of the experience to emerge.

… The Focus on Meaning rather than on Form

Another key value that needs to be pointed out, is that for Pawson, designing Architecture or any other creation, is led by a strong vision, idea and values, and these then find the adequate form to come into being or into existence. As such, there is a sort of artistic type of creation that guides his architectural process: one that is focused primarily on an intuitive approach, and then lets reason guide its execution. There is a focus primarily on the meaning and then secondly and in third is the form.

…The Respect from tradition, philosophy and content

Yet another essential aspect that is found in Pawson's work is the respect for tradition, for philosophy, for history and for culture. He sees both architecture and life as a continuation of a long tradition and tries to extend those lessons and ideas through each space. Each space, therefore, embodies these spiritual, philosophical and traditional lessons through their form, their environments and their overall wholeness, which are communicated to the user at multiple levels of communication.

… Emotion, Poetry and Spirituality

An additional value that is of the essence for Pawson, although it is not described by him, are the Emotional values. The emotions of stillness, isolation, silence, harmony, depuration, emptiness and sompletion are all present in his work. He achieves these emotions not only by the guidance of the principle of the minimum as a spiritual concept but also by the innate idea of poetry. Poetry is expressed through the coordination of the materials, the proportions, the sense of light and darkness that is very controlled, the change of textures and even the flooding of white and subtle shades of ochre's. All these elements combine together as a whole, creating this idea of 'empty space', that is indeed very rich in emotional value and poetical ones. These two values combined create a different value: that of a spiritual existence.

Ending Remarks:

John Pawson's architecture, built on the philosophical and spiritual concept of simplicity and minimalism, strives to create spaces that echo eternal and universal truths and allow man to experience those intangible emotions and a depured and simple way of life. The significance of his architecture and his other creations is exactly in this communication of universal truths, through the idea of simplicity, that is deeply rooted in our traditions (both historical, architectural and spiritual) and that strives to create a bridge into man's existence in today. Creating 'empty space' is a metaphor for our own existence, one that although is pure, void and clean, has many poetical and emotional layers. As such, man is able to create a link into another dimension: one of spiritual wholeness.



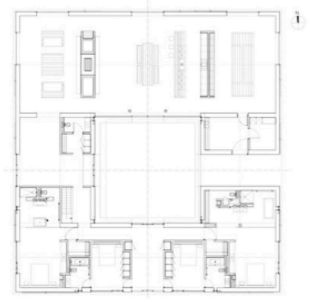






Photo 2: : Perspectives (2011) installed at St. Pauls; Source: http://www.scout.com.au/Blog/London-Design-Festival-2011;Photo 2 and 3: The Baron House, by John Pawson; Source: http://theredlist.com/wiki-2-19-879-606-712-view-pawson-john-1-profile-pawson-john-baron-house-sweden.html; ;Photos 1, 2 and 3: Baron House interior spaces; Source: http://ideasgn.com/architecture/baron-house-john-pawson/

PLATE 59: JOHN PAWSON'S SPACES: PRINCIPLES OF SOLITUDE, STILLNESS AND THOUGHT

Summary Notes: John Pawson

1. *John Pawson's architecture is a pursuit for that which creates an emotion of stillness and generates a meditative type of existence. He aspires to act on the sensitivity of spirit of man. In this idea of minimalism, as a spiritual way of life and architecture, as the means to achieve it, is Pawson's architecture significance.*

2. *Minimal Architecture can act psychologically, emotionally and spiritually, on the user transmitting those specific emotions and meanings that only the 'minimum' and overall 'simplicity' can portray.*

3. *Pawson's aesthetics, its language, meaning and significance lies in the understanding of simplicity and minimalism as a spiritual experience that can occur in architecture and define a way of life.*

4. *Architecture can create spaces that allow for man to become immersed in another sort of dimension, where simplicity of life and sensuality of material live together combined in one single existence, resulting in a sort of union and harmony.*

5. *The minimum, as way of life that Pawson identifies and describes in all spheres of existence is as much an aesthetic quality as it is a philosophical and a religious one: it is close to a spiritual type of depuration, a cleansing of the superfluous and a focus on what really indeed matters and is meaningful.*

6. *Art is the product of the 'most creative and forward-thinking intellects'.*

7. *Architecture is about a search for the fundamentals: light, space, proportions, materials and scale.*

8. *Architecture communicates principles that are universal.*

9. *Spaces can echo simplicity, restraint, minimalism and harmony, portraying a world that seems to be at a perfect balance, within itself and with the world around it.*

10. *Simplicity as a way of life means a reduction to the essential minimums (spiritual understanding); simplicity possesses a moral dimension and as such implies the notions of 'selflessness' and 'unworldliness', and is connected to the depuration of the self in order to find the universal order of God.*

11. *Conceptual Chart:*

Table 11: John Pawson Conceptual Chart

CREATION			CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Table 12: John Pawson Synthesis Chart

JOHN PAWSON

1. FIELD:
- *Architecture, Design and Art*

2. EDUCATION/BACKGROUND:
- *No formal education and training: 3 years architecture school*
- *Experience as a manager*
- *Desired to be a Monk*
- *Quit Architecture School and opened his practise.*

3. EVOLUTION:
- *Towards a more liveable minimalism*
- *Deeper ways of understanding space*
- *Increased focus on the fundamentals of architecture.*
- *Clarification of the notion of simplicity in art, architecture and design.*

4. CONTEXT:
- *Minimalism Movement:*
  - *Opposing Abstract Expressionism*
  - *Defined by Donald Judd and Ives Klein*
  - *Used in Architecture and Art*
- *Means: reduction to bare minimums*

5. INFLUENCES:
- *Modern Architecture: Mies Van Der Rohe*
- *Japanese Aesthetics and Philosophy*
- *Theories of Donald Judd*
- *Sacred Architecture of the 12th century (abbeys and monasteries)*
- *Spiritual restraint*
- *Classic ideas of architecture: proportion.*

6. CREATIVE PROCESS:
- *Rational and Methodological Process*
- *Use of Instinct*
- *Guided by a vision and strong mental image: Led by a sense of perfection*
- *Process of reduction and gradual simplification: until the simplicity becomes something rich*
- *Coordination of various principles*
- *Defined by thought, care, knowledge and patience*
- *Search for the fundamentals of architecture: proportion, scale, material and light.*
- *The choice of materials also guides the creative process.*
- *Does not use drawing.*

7. PERSONAL COSMOLOGY:
- *Understanding of simplicity as a virtue*
- *Minimalism as an aesthetic principle, as a philosophical and spiritual quality, and as a way of life.*
- *Simplicity as a way of life: reduction to the minimums as a spiritual understanding*
- *Simplicity possesses a moral dimension and as such implies the notions of 'selflessness' and 'unworldliness'.*
- *Principles are universal: belief in the universal design*
- *Transversality of ideals*
- *Art is the product of the 'most creative and forward-thinking intellects'*

8. EMOTIONS
- *Stillness*
- *Isolation*
- *Silence*
- *Harmony*
- *Depuration*
- *Completion*

9. OBJECTIVES:
- *Create spaces and atmospheres:*
  - *in which people feel good*
  - *that act on the senses and the sensitivity of man*
  - *that act psychological, emotionally and spiritually*
  - *that echo restraint, minimalism and harmony*
  - *that portray a perfect balance and a sense of perfection*
- *Provoke a sense of contemplation, meditation and calm without distractions*
- *Echo of a life of quietness, seclusion, depuration and simple.*
- *Create spaces that are about proportion, scale, light, movement and about the philosophy of making spaces.*
- *Provide a sense of empty space: space is what architecture is all about, and it is what defines good architecture.*

10. CHARACTERIZATION:
- *Reduction of space to the bare essentials*
- *Simple expression and minimalist attitude*
- *Focus on a sense of proportion*
- *Predominance of white and light*
- *Atmosphere that is clean, pure and reduced*
- *Sense of proportion and human scale: intimate and personal scale and a harmonious sense of order.*
- *Representation of dichotomy's*
- *Combination of four elements: light, proportion, scale and sensual material*
- *The elements that are added to the space, such as furniture or flooring, use natural materials, mainly wood*
- *Sharp sense of geometry, and the use of pure forms*
- *Creation of spaces and atmospheres that act on the senses.*
- *The spaces echo simplicity, restraint, minimalism and harmony, portraying a world that seems to be at a perfect balance within itself and with the world around it.*

11. CONCEPTUAL FRAMEWORK:
- *Minimal*
- *Simplicity*
- *Space*
- *Proportion*
- *Light*
- *Materials*
- *Essence*
- *Substance*
- *Empty Space*

12. VALUES
- *Philosophical, Poetical, Emotional, Spiritual and Sustainable*

13. MEANING/SIGNIFICANCE
- *In emptiness everything can be found: a space contains universal truths.*
- *Simplicity is the way to understand universal concepts and principles.*

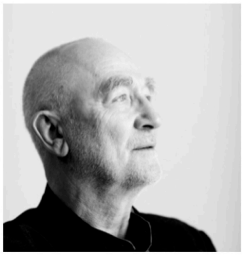






Photo 1: Peter Zumthor portrait; Source: http://zumthor.tumblr.com/post/42422401404/interview-with-royal-gold-medallist-peter
Photo 2: Peter Zumthor, Therme Vals, Switzerland (1996); Source: http://de.phaidon.com/agenda/architecture/articles/2013/february/12/peter-zumthor-reveals-the-secrets-of-therme-vals/; Photo 3: Thermal Vals Spa interior; Source: http://www.architectural-review.com/buildings/thermal-baths-in-vals-switzerland-by-peter-zumthor/8616979.article

PLATE 60: PETER ZUMTHOR

6.7. PETER ZUMTHOR

(1) artistic evolution, context and characterization

… Architectural/Artistic Evolution

Zumthor's architectural evolution, can be characterized by a steady progression of clarification of his ideals and values surrounding the concept of 'atmosphere' as the driving quality of architecture. With each project the principles he adheres to, became clearer and began to be more defined and more focused on creating an atmospheric environment (focus on phenomenological, immersive and intangible aspects that make up an enrionmenr), rather than just a 'real' experience. In this sense, there seems to be an evolution from the creation of a 'real' presence, to defining that 'real presence' and 'substance' into creating a more intense, more meaningful and more emotionally charged experience.

… Architectural Context

Zumthor, is a contemporary architect and as such his architectural context is the current one. His work begun in 80's decade, when the architectural world was mostly influenced by the end of a post-modernism stylistic context and the prominence of the so called star-system architecture with the work of Frank Ghery (the redesign his own house in Santa Monica, California concluded in 1977), Richard Rogers (the completion of the The Lloyd's Building in London in 1986), Philip Johnson (AT&T Building opens in New York City in 1984) and works by Norman Foster (such as The HSBC Headquarters Building in Hong Kong in 1985). Architecture was monumental in scale, using the new technologies, exploring forms, and focused on creating a 'new' language that could 'speak' loudly in the midst of the urban context and life. (In the art world, Richard Serra, was installing his sculptures and rising to prominence.)

… Architectural Characterization

In this context, Zumthor begun to identify a type of architecture that was rooted in human values rather than technological ones, in the midst of natural settings rather than in urban contexts, and defined by a sense of reality and tangibility rather than creating 'fictions'. He followed a more humanistic and natural approach to Architecture, continuing the legacy of some architects, such as Alavar Aalto, after the second world war. To characterize Zumthor is to understand that for him, architecture is all about creating a sense of 'reality', immersed in real life, in experience, in the senses, in memory and in culture. Zumthor's architecture is characterized as belonging to the phenomenological architecture movement, along with other architects such as Christian Norberg-Schulz (theories of architecture), Steven Holl (exploration of form and light) and Juhani Pallasmaa (theory of art and architecture). These architects are commonly connected with the theory of phenomenology *(see Glossary).* Phenomenology of architecture, in general, refers to the experience through the senses (sensory properties) in reference to building materials, forms and spaces. In this perspective and philosophy, there is a taking into account of the fourth dimension (time). Besides the dimension of time, phenomenology takes in other aspects and accentuates them through perception and experience: there is a concern for the awakening of the perceptual

experience, where emotions play a vital tool. In doing so, architecture then focuses on the specific use of materials, their qualities and properties, the use of light and shadow, the overall form and colour of the atmospheres, and other aspects that can directly create a rich an intense experience for the user. Phenomenological architecture awakens the senses and triggers memories and dreams through the creation of a space. Architecture, then, shouldn't just be a visual stimulus, but an immersive one that engages all the senses instead of just the eyes.

… (a) Overall Architectural Description: Particularities of Peter Zumthor's Spaces

Zumthor's architecture can generally be characterized by exploring the tactile and sensory qualities of materials and space. In order to do so, the building elements are 'depured' to their bare essentials, in a sort of minimal formal understanding. However, they are not minimal in their essence (at their core and objective) neither are they minimal in their values and their aims. Opposing globalization and industrialization, Zumthor searches for the individual, specific and intimate experience between the user and the architecture. As such, there is a phenomenological understanding of the world, of the human being and of the importance of the experience in the world to root the being in a specific type of existence. This phenomenological ideal, values and sensibility guides all of Zumthor's architecture both in general terms and in specific ones. First, in Zumthor's architecture, in regards to form, there is an absence of attention and focus of the overall form of the architecture. Unlike some of his contemporaries, Zumthor strives for an architecture that is free from the 'image' base criteria that has been defining some of the contemporary architecture scenario, detaching himself from symbolism and other visual emphasis and focusing on architecture as 'pure presence'. Secondly, as opposition to a focus on form, there is a focus on experience and the creation of this kind of 'pure presence': there is always an emphasises on the sensory and perceptual aspects of the architectural experience as a whole. He claims that his ultimate goal is to create an 'emotional space', and as such, the global experience, and the complex sensations and perceptions that from it derive, are a central aspect of all his architectural creations. His spaces, aim to provoke emotions, evoke perceptual experiences and allow for the emergence of a sense of reality, of self, identity and memories, by rooting the being in the physical and 'real' world in the viewer. As 'presence', architecture can generate 'intense' experiences and emotions.

Third, in order to create such immersive emotional and perceptual experiences, Zumthor focuses on creating an evocative sequence of spaces (in some projects), or spaces that are inherently rich by creating a cohesive atmosphere as a whole (in other projects). Either way, it is the inward experience as both movement and contemplation that allows for a specific encounter from the viewer, and these derive from a careful and meticulous spatial conception. This duality between movement and contemplation defines the atmospheres, the forms and the details that engage the viewer in an open way: promotes intimacy and various types of emotions.

Fourth, there is a great attention to **the materials and their properties**: their visual, tactile and other sense related qualities and attributes; he is known for designing material-led projects, where the materials are carefully selected and applied, taking into consideration every aspect of their character and the means by which they are put together in a space. Most of the materials used by Zumthor, are natural materials, that possess naturalistic qualities to them, and that are rich in properties such as stones or

woods. For him, the physicality and tactility of the materials and of the space can involve an individual with the world, create a sense of place and generate specific emotion, experiences and memories.

Fifth, there is an attention to the site and the requirements of the 'program'. Each architectural design responds very uniquely to the site in which it is located and it uses the site to derive from it an alterior program (which is to generate a unique emotional experience as we have previously seen). However, the site and the given program characterize the main type of experience that will be identified. Some projects relate openly to the outside environment, and bring them into the special experience, where as other spaces are enclosed and 'deny' the environment in order to create a richer 'inner' experience. Either way, in both cases, the environment (nature) is taken deeply into account, and each design is very 'site specific'.

Lastly, there are a series of underlying qualities that define the spatial experience and create a specific 'poetics'. There is the quality of sensuality, being that, the spaces are conductive and possess a mysterious aura that 'seduces' the user in an immersive experience. And finally, there is the general characteristic of deep contrasts, between light and darkness, expansion and contention, openness and confinement.

(The idea of atmosphere defined by Zumthor will be analysed in the following pages).

(2) creative process, methodology, techniques and characteristics

… Creative Process

Zumthor's work process is both architectural (methodological and logical) and artistic (intuitive and searching for a freedom). His architectural process follows an architectural method, focusing on the use of space and other technical requirements; however, in parallel, he lets the decision making process be an artistic one: meaning, an intuitive based decision process, guided and led by emotions, memory, feeling and instinct. Zumthor is guided by a sense of 'vision' or 'dream' of the general design. Zumthor, in an interview by James Pallister (2013), explains that he begins all designs with a mental image, a 'dream'.

On this issue, he further says that he never starts with a material, or an idea or something like that, instead, he starts with a dream, a 'vision': '' I start with the dream of the house!'' (Pallister, 2013), and then afterwards, the right method, the right material and the right construction come into being. This has a lot to do with the site, he continues, the site always informs the buildings, guiding the design process through inspiration and the desire to create something that 'fits in'.

As such, it is possible to understand that his design process uses both emotional tools and rational ones, balancing between sensitive awareness and logical reasoning. Though, it is not the logical reasoning that dictates the design at a first stage, but instead the emotional forces come first (mental images, emotions, dreams, visions), and then the logical orders judge and arrange those forces. There is also, another very important point about Zumthor's design process. And that is that he uses drawing as a fundamental tool for the development of both the mental images and the sensitive qualities.



INFLUENCES











Photo 1: The image that influenced Zumthor's views on architecture; Source: Book Atmospheres, by Peter Zumthor, Page 17; online source: https://vk.com/doc1519615_248051645?hash=13329fe2bffd9f0ffb&dl=a911f771c106072507; Photo 2, 3, 4 and 5: Images used as inspirational references in the book Atmosphere. Source: Book Atmospheres, by Peter Zumthor, Page 20, 34, 40 and 52; online source: https://vk.com/doc1519615_248051645?hash=13329fe2bffd9f0ffb&dl=a911f771c106072507; Photo 6: Therme Vals Hotel and Spa; Source: http://homeli.co.uk/therme-vals-spa-by-peter-zumthor/;

PLATE 61: ZUMTHOR'S ATMOSPHERIC INFLUENCES AND ATMOSPHERES

Furthermore, he believes architecture designing, the creative process, should not be rushed, but instead, it should be slow and patient. On this regard, Zumthor, in an interview by James Pallister (2013) explains this sense of 'slow architecture' meaning that he takes his time in designing and believes that taking time, patience and distance are fundamental for a good architecture design.

… Methodology: Being led by the elements of 'vision' and 'impressions'

About his methodology, it is important to include Zumthor's own description about his creative process in his book, *Thinking Architecture,* (2006). Zumthor (2006) where he writes that when he works on a design, he allows images and 'moods' that he remembers to guide his work. Most of these images, come from his subjective experience. The design process, then, is an uncovering of what these images really mean so that he can learn '' (…) how to create a wealth of visual forms and atmospheres.'' (Zumthor, 2006a, p. 26). It is, in the process, the object he is designing takes on the 'qualities' of the images, and furthermore, ''If I can find a meaningful way of interlocking and superimposing these qualities, the object will assume a depth and richness.'' (Zumthor, 2006a, p. 26). The qualities of the images, then, are transposed to the design (each one individually and then collectively). They must merge and blend together, with the whole form and structure, until all the parts are no longer separate, but belong together to form a 'whole', and eventually, ''Everything refers to everything.'' (Zumthor, 2006a, p. 27). At this point, Zumthor assumes, the initial images fade away, and the new design emerges with a history of itself. Therefore, Zumthor (2006) further affirms that the development of a work of architecture depends on the one side of 'objective and rational criteria' and the other side, the 'subjective and unconsidered ideas' that intervene in the work that reflect the 'significance of personal feelings'. Thus, ''The design process is based on a constant interplay of feeling and reason. The feelings, preferences, longing and desires that emerge and demand to be given a form must be controlled by critical powers of reasoning, but it is our feelings that tell us weather abstract considerations really ring true.'' (Zumthor, 2006a, p. 21). Designing is based, he accentuates, on establishing an order, however, the essential 'substance' proceeds from 'feelings and insight'. As a synthesis, he claims: ''Precious moments of intuition result from patient work.'' (Zumthor, 2006a, p. 21). His methodology then, follows a process of thinking and feeling by images: mental and emotional ones. He continues to show that thinking in 'images' directs us towards the 'whole', the image contains a whole essence of the space, and the methodology is just a process of uncovering it: '' At the beginning of the design process the image is usually incomplete. So we try repeatedly to re-articulate and clarify our theme, to add the missing parts to our imagined picture. Or to put it another way: we design.'' (Zumthor, 2006a, p. 59). For him, designing is producing and creating these images: 'inner images' that are 'associative' and 'free'.

It is this interplay of reason and emotions, of thinking and feeling that deeply characterizes Zumthor's process.

Also, in his various interviews and books, Zumthor makes it clear that if the process reaches a point where it does not 'move' him, he destroys it and starts again. That 'moving' quality, the emotional side, accompanies the whole of the design, and dictates the overall validity or dismissal of the project. It is a methodology based on emotions: on the creation of emotions.

As a synthesis note, it is clear that Zumthor's process and methodology is about making his vision a reality and finding the right means to do it. The methodology uses associations and emotional and inspirational 'photographs' as a means to show the qualities that should be present in the design. It is a process not of simplification or depuration, but instead of optimization and finding the right 'systems', 'spaces' and 'forms' to make that 'emotion' or 'vision' come to life.

(3) inspiration, influences, conceptual framework and themes:

… Influences

Peter Zumthor doesn't speak about specific influences often: neither architecturally nor philosophically, this is mainly because he sees himself more as an isolated artist than as an architect and aims to do everything without precedent, starting from 'zero'. However, in the documentary *Tadao Ando: From Emptiness to Infinity* (2014), Zumthor (2014) infers that Ando's use of bold forms and shapes, the strong use of concrete and the 'not being afraid of the shadows' deeply influenced him and allowed him to be bold about his own architecture. In his words: '' It was maybe around 25 or 30 years ago. He exerted a deep impression on me, with that incredible radical and elementary attitude, that is seen already in his early work. How they shield themselves from the outside and turn inwards, (…) and obviously without fear of darkness and shadows that immediately appealed to me, (…).'' (Frick, 2014). Besides Tadao Ando, Zumthor doesn't mention another Architect that has influenced him.

Instead, what Zumthor does describe as major influences on his architecture are specific spaces and atmospheres that he has lived in and experienced. These spaces influenced him and his architecture, for they provoked such a strong impression on him (emotionally and architecturally) that they have changed and shaped his perception of what architecture can do and create. In both his books (*Atmospheres (2006)* and *Thinking Architecture)* he describes some of these spaces in the most intense details: the noise, the sounds, the people, the forms, the shadows, the mood and the atmosphere. They have led his to understand his one driving idea for architecture: architecture, an art, as the creation of these atmospheres: spaces that are rich and that move people. One example of such a space is listed in his book *Atmospheres* (2006) as an image; Zumthor concludes that this space, that probably doesn't exist anymore, had a really profound impact on him and on what he aims to achieve in his architecture: '' How can I design something like the room in the photograph – one of my favourite icons, a building I have never seen, in fact I think it no longer exists – a building I just love looking at.'' (Zumthor, 2006b, p. 18).

Another influence on him, is music. He speaks various times of music and its ability to create an intense 'mood' instantly. Through music, Zumthor found the intensity by which he aimed to communicate, the power which he desired his architecture to possess. Music, therefore, influences him in an indirect way: establishing an aim and a goal that guides the architectural process.

As such, it is possible to understand that Zumthor's architecture is deeply influenced by both these 'anonymous' and 'random' spaces (non-specific in character, but intense in emotional and meaningful ways) and by music (powerful, strong in communicating emotion).

… (a) Phenomenology

Although Zumthor doesn't mention Phenomenology as a direct influence, it is possible to establish it as such. Phenomenology as a philosophical discipline, came into existence in the early 20th century in the works of Husserl, Heidegger, Sartre, Merleau-Ponty and others *(see Glossary)*. As a discipline, it may be defined initially as the study of structures of experience, or consciousness. Author David Smith (2013) for the The Stanford Encyclopedia of Philosophy in the article *Phenomenology* considers: '' Literally, phenomenology is the study of "phenomena": appearances of things, or things as they appear in our experience, or the ways we experience things, thus the meanings things have in our experience.'' (Smith, 2013). The author further explains that in recent philosophy the term 'phenomenology' is often used to describe the characterization of the sensory qualities of seeing, touching or hearing. As a subject it studies the structure of various types of experience: '' (…) ranging from perception, thought, memory, imagination, emotion, desire, and volition to bodily awareness, embodied action, and social activity, including linguistic activity.'' (Smith, 2013).

Therefore, phenomenology as a philosophical discipline directly influenced architecture being responsible for the movement described above, to which Zumthor is associated with: the phenomenological architecture movement. For architecture, the main propelling ideas derived from phenomenology is the notion of a complex experience. Architecture, then, as that which trigger's these experiences, started to be seen with an infinity amount of possibilities in regards to provoking these 'phenomenologically' rich encounters. In order to do so, it uses the ideas of perception, awareness, and emotion, and aims to 'awaken' them through the experience: which lead to an increased focus on matter, space, form, atmosphere (as a whole), light, darkness, smell, sense, touch and hearing (and every other tool or detail) that can provoke an intense experience and trigger those emotions, mental and imaginative connections. It is more accurate to say, instead of claiming that phenomenology was an influence, that phenomenology is the mother of this type of architecture, that strives to create meanings through experience as a whole.

… Conceptual Frameworks and References

… (a) The Search for Emotion and Sensibility through Architecture

Peter Zumthor, in an interview by James Pallister (2013) discloses his primary desire in architecture: '' I try to create emotional spaces that feel right for the purpose and the place. So I try to go into the use of the building very deeply and see what could be beautiful and comfortable.'' (Pallister, 2013). Sometimes, he continues, to achieve this kind of emotional space is not easy, and takes time, devotion, honesty and listening to intuition. It is a process where he has to judge his own work and be open and sensitive about it. He goes on saying: '' In judging what I am doing I have to be playful and serene and open and emotional because that – as we know – is how architecture is perceived, and not in abstract. I want to please people with my buildings unconsciously, emotionally. '' (Pallister, 2013). Peter Zumthor in another conversation, this time with the RIBA's Tony Chapman (2013) for RIBA, further elaborates on why he believes emotions to be the driving force for architecture. He thinks that architecture is experienced by layman's without thinking, it does not depend on intellectual arguments, but instead on an emotional one. As such, he says: '' I want an emotional reaction.'' (Riba Architecture, 2013). As a

synthesis, he sustains that this emotional connection is instinctive and common to all; it does not depend on knowledge but in experience: in feeling, sensing and immersing in the space – it is universal, transversal, primal, and prior to reason.

… Conceptual Framework and Themes

… (a) Presence and Substance as Spatial Memory

Philip Ursprung (2009) in his article *Earthworks: The Architecture of Peter Zumthor,* for the Pritzker Architecture Prize, speaks about Zumthor's architecture saying that his spaces connect to what he entitles to be 'spatial memory' of the visitor. In his words: '' For him, it is not only important how a floor, stair, wall, room or façade look, but also how they feel when one touches them with his or her finger tips, how they smell, how they resonate and sound, and what kind of associations, mental images, expectations and memories they evoke.'' (Ursprung, 2009, p. 1). It is an accentuating of all the senses. The author continues explaining that the buildings revolve around the relationship between the human body and the environment, and the way the individual experiences each specific situation. He considers that his vision of Zumthor's architecture had been of '' (…) an earthbound, quasi-romantic architect, working far from urban centres in the remoteness of an untouched landscape.'' (Ursprung, 2009, p. 1).

However, that was not the case. When he went to visit Zumthor's spaces, '' Hearing, smelling, touching and seeing were inseparably intertwined.'' (Ursprung, 2009, p. 1), and the sensations of the materials embraced him. The experience allowed him to feel the spaces rather than to perceive them as 'images'. His architecture deals with materials, and substance, and represents a shift in culture. In his words: '' It can also be traced in the work of artists such as Ana Mendieta, Joseph Beuys and Anselm Kiefer, who all dealt with the complex relationship between the human body, the ground, and the historical and political metaphors that any kind of terrain implies.'' (Ursprung, 2009, p. 2). As a synthesis, he states: '' Zumthor's skepticism toward abstraction, the diagrammatic and generalizations, as well as his interest in detail, fabric, texture, the sensual quality of materials and surfaces and the individuals who exist in these environments are part of this cultural shift.'' (Ursprung, 2009, p. 2).

As a summary, it is of value to accentuate the importance of the combination of all the senses, and the fact that abstraction, although understood sceptically by Zumthor, is indeed a driving motor of his creations. Zumthor creates forms that are simple and almost archetypal.









Photo: The Türmlihus House, by Peter Zumthor, Switzerland; Source: http://www.remodelista.com/posts/a-ski-cabin-by-peter-zumthor-world-renowned-swiss-architect;Photo 1: House Zumthor Haldenstein - Garden View from the 'Stube'; Source: http://zumthor.tumblr.com/post/66081746257/house-zumthor-haldenstein-garden-view-from-the Photo 2: Hortus Conclusus, Serpentine Pavilion, arch. Peter Zumthor, London 2011; Source: http://zumthor.tumblr.com/post/36879872758/hortus-conclusus-serpentine-pavilion-arch; Photo 2: St Benedict Chapel by Peter Zumthor, interior; Source: http://architectuul.com/architecture/view_image/saint-benedict-chapel/15684

PLATE 62: ATMOSPHERES: MATERIALS, TEXTURES, SENSES AND LIGHT

(4) underlying theories and ideals

… Theories and Writings: Views of his own work and Architecture

Zumthor (2011), in regards to architecture in general notes: "In order to design buildings with a sensuous connection to life, one must think in a way that goes far beyond form and construction." (Sveiven and Zumthor, 2011). And this is a principle that he has followed in all his designs. He strives to achiever a deeper connection with the user, one that 'moves' him and communicates at various emotional levels. In another interview, he further claims that he believes in architecture that is an art, rather than mere construction, explaining that he alone in this, and that ''There are still some people left who believe in architecture not as a money-making machine but in architecture as an art.'' (Pallister, 2013). In his book *Atmospheres* (2006) he further elaborates on architecture as an art, pointing out that it is made for our use, and that in that sense it is not a 'free art': '' I think architecture attains its highest quality as an applied art.'' (Zumthor, 2006b, p. 69). In this way, it is as its most intense and most beautiful when all the elements refer to everything else, and nothing can be added or removed without destroying the whole.

About his unique views of architecture, Peter Zumthor has published two books: *Thinking Architecture* and *Atmospheres (2006)*. In both works, the texts are a sort of narrative: evoking phenomenological experiences, memories of spaces, encounters with specific elements in the world, places that are rich in content and in meaning. It does not aim to establish a theory of architecture, but rather a personal account. Mostly, Zumthor describes aspects of architecture and how those aspects communicate to him emotionally and spiritually, calling our attention to details, materials, tactile qualities, etc. Zumthor (2013) about his purpose of architecture and his drive to create atmospheres, claims that conscious and unconscious things emerge naturally in atmospheres, in architecture, and these things stick and stay in the user as both memory and feelings[460].

… (a) Architecture as Art: poetry and truth

As previously seen in chapter 3, Peter Zumthor in his book *Thinking Architecture* (2014), claims that it is in intense memories of past architectural experiences that his idea of what architecture is and what it should do is rooted and grounded. He explains: '' Memories like these contain the deepest architectural experience that I know. They are the reservoirs of the architectural atmospheres and images that I explore in my work as an architect. '' (Zumthor, 2006, p. 8). For him, he continues, architecture is a deep experience that resonates within the user in multiple ways. But in order to do so, architecture has to possess various aspects. The first aspect that Zumthor (2014) points out is the act and art of construction itself; for Zumthor, not only is architecture an art, but the act of construction itself is also an art. He claims: '' Construction is the art of making a meaningful whole out of many parts. I believe that the real core of all architectural work lies in the act of construction. (…) I feel respect for the art of joining, the ability of craftsman and engineers. '' (Zumthor, 2006, p. 11). It is this art of joining things together, and

[460] **Atmospheres and Architecture: "**In a fragment of a second you can understand: Things you know, things you don't know, things you don't know that you don't know, conscious, unconscious, things which in a fragrant of a second you can react to: we can all imagine why this capacity was given to us as human beings - I guess to survive. Architecture to me has the same kind of capacity. It takes longer to capture, but the essence to me is the same. I call this atmosphere. When you experience a building and it gets to you. It sticks in your memory and your feelings. I guess that's what I am trying to do." (Zumthor and Merin, 2013)

creating a meaningful whole out of those many parts, that Zumthor considers to be vital in architecture. A second aspect that he announces of the utmost importance is the idea of poetry and truth; on this issue, he claims that when he was a child, he used to think of poetry as a 'coloured loud' that possessed metaphors and allusions that were illusive and diffuse, and that were not relatable to the world in any way; however, as an architect, he continues, he understand that this is not the case, but in fact the opposite of it is more correct[461]. Poetry and architecture, for Zumthor, have a very close relationship, when architecture is art. Architecture, then, is a work of art when forms and contents combine and provoke a strong mood. In his words, he writes: '' If a work of architecture consists of forms and contents that combine to create a strong fundamental mood powerful enough to affect us, it may possess the qualities of a work of art.'' (Zumthor, 2006, p. 19). This artistic aspect of architecture, however, has nothing to do originality, 'interesting configurations', innovation or novelty, but instead is connected and concerned with '' (…) insights and understanding, and above all with truth. Perhaps poetry is unexpected truth. It lives in stillness. Architecture's artistic task is to give this still expectancy a form.'' (Zumthor, 2006, p. 19).

It is possible then to summarize Zumthor's views on architecture as art as such: that architecture can be an art when it manages to provoke moods and emotions in the viewer, that that artistic quality of architecture is connected to truth and understanding, that idea of truth can be understood as poetry in itself and lastly, that it is the role of architecture to create a form of stillness for that truth. He concludes: '' The building itself is never poetic. At most, it may possess subtle qualities, which, at certain moments, permit us to understand something that we were never able to understand in quite this way before.'' (Zumthor, 2006, p. 19).

… (b) Architecture as 'Atmosphere'

Atmospheres: Architectural Environments - Surrounding Objects (2006) describes Zumthor's personal sources of inspiration. In it, Zumthor (2006) considers that 'Atmospheres' is related as a concept to quality in architecture, and quality, although a hard concept to describe can be defined as: '' Quality in architecture to me is when a building moves me.'' (Zumthor, 2006b, p. 11). One word for describing this 'moving' property that architecture possesses is 'atmospheres'. These atmospheres are connected to an immediate response, to a first impression of the space. He further continues: '' We perceive atmosphere through out emotional sensibility – a form of perception that works incredibly quickly and which we humans evidently need to help us survive.'' (Zumthor, 2006b, p. 13). These are immediate reactions, spontaneous emotional responses. These 'impressions' of 'atmospheres', Zumthor (2006) continues, are connected to the whole space, to every detail, and every element that defines the overall environment (people, noise, smell, forms, movement, etc.) and these altogether compose what the author described as 'the magic of the real'. This 'magic of the real' is precisely what he, as an architect, aims to achieve: an 'atmosphere', an emotional mood and intensity. It is important to clarify, that this idea of whole, is based strongly on reason, although Zumthor accentuates emotional sensibility as the primary motor.

[461] Reference to: '' In my youth I imagined poetry as a kind of coloured cloud made up of more or less diffuse metaphors and allusions, which, although they might be enjoyable, were difficult to associate with a reliable view of the world. As an architect, I have learned to understand that the opposite of this youthful definition of poetry is probably closer to the truth.''. (Page 19).

Qualities of Atmospheres: This quality is related to nine topics or principles enumerated by Zumthor (2006) as operating tools for his conception of architecture as 'atmosphere' – things that are important in the creation of atmospheres. The first, entitled 'The Body of Architecture' describes the material presence of things, of the materials that make up the frame of the space; these materials combine like the human anatomy. The second is 'Material Compatibility', referring to the amounts of materials and how they react with each other (their radiance, their texture, colour, endurance and even strength); all these properties of each material are important in defining the mood of the space. Third, 'The Sound of Space' where Zumthor (2006) described the importance of the echoes and sounds within the space; each room has its own sound, some have their own silence, and others have specific sounds that resonate from the materials. Fourth is 'The Temperature of a Space', where the author announces the importance of the temperature of the space, explaining that each material has its own temperature (wood for example can be warm and still cool like a forest). Fifth is 'Surrounding Objects', referring to the objects people add to a space, once it is being lived in that can be beautiful (books, furniture) and that add to the overall mood. Point Six is 'Between Composure and Seduction' relating to the way architecture is connected to movement; architecture, as a spatial art, the author explains, is a temporal art, and as such, movement needs to be understood; there are different types of movement in a space (strolling, for example, is the type of movement Zumthor most aims for). Seventh is 'Tension between Interior and Exterior' referring to the imperceptible and not so imperceptible transitions between 'inside and out' that accompany the making of architecture; this relates to the view of the space, the way the building allows the people to connect with the outdoors, with the environment. Eight is 'Levels of Intimacy', describing the considerations of proximity and distance, or the sense of scale, in traditional architecture vocabulary; Zumthor (2006) on this regard explains, that he tries to imagine the feeling of being inside the space, the dimensions and proportions; likewise, he believes in creating surprises, where for example, the proportions of the interiors are not the same as the proportions of the exteriors. The ninth topic is 'The Light on Things', where the author accentuates the importance of light and shadows, and factoring in those principles right from the very beginning of the designing stage (he claims to like to imagine a solid of darkness and then begin to allow in the light). Besides these nine qualities or properties, Zumthor (2006) further announces three other ideas: 'Architecture as Surroundings', emphasizing the importance of the surroundings of the architecture, the second is 'Coherence' where he accentuates the need for underlying consistency and the interdependence of all the elements, and lastly, 'the beautiful form' where it is important to consider architecture as whole, as an art – a form that embodies and portrays meaning.

… Personal Cosmology

… (a) An Architecture of Presence and Substance

'' How can presence be translated or achieved in architecture? This question is a key motive in Zumthor's atelier in the Swiss region of Graubünden.'' (Zumthor and Merin, 2013)

Peter Zumthor in conversation with the RIBA's Tony Chapman (2013) for RIBA, remarks that he wants to build architecture for people, not for archives or for money, and so, his architecture needs to be grounded in the real world. So, he goes on: '' What else can I do? I have to aim at this physical presence of architecture.'' (Riba Architecture, 2013). Here, Zumthor introduces one of the main driving principles of his work: the desire to create a 'presence' with architecture, an 'atmosphere', or a space that has it's own character that communicates with people in a direct and intuitive way. Another quality that is important in his work, he continues, is the quality of 'magic'. For architecture to possess magic it needs specific conditions to emerge that come from that desire to create a presence.

In the same interview, Zumthor considers his various projects and annunciates further principles that guide his architecture process and define this type of architectural 'presence and substance'. Another principle he announces is the principle of timeless, and the desire to make the architecture seem as if it has always been there; the building should create a space that doesn't contrast with the environment, but

instead seem to have belonged there since the beginning. Another principle is the quality of silence, and a desire to make the building be silent instead of being talkative; architecture should be in peace and speak of peace, rather than impose a language or a busy dialogue. This view of 'silence' and just 'presence' for architecture, was also echoed in a conference at a university, summarized by Gili Merin (2013) for the Arch Daily online magazine. Zumthor (2013) maintains: '' "The tree does not have a message; The tree does not want to sell me something. The tree won't say to me - 'look at me, I am so beautiful, I am more beautiful than the other trees.' It's just a tree - and it's beautiful." To him, a tree is a pure being of obsolete presence; in his simple terms: "Nothing special - incredibly powerful.''.'' (Zumthor and Merin, 2013). It is this kind of presence and silence that Zumthor aims for in his architecture.

It is of reference another phrase by him, in another interview, where he describes the characteristics of this type of silence. He explains: "To me, buildings can have a beautiful silence that I associate with attributes such as composure, self-evidence, durability, presence, and integrity, and with warmth and sensuousness as well; a building that is being itself, being a building, not representing anything, just being." (Sveiven and Zumthor, 2011).

In regard to the principles that drive designing sacred space, Zumthor upholds that the space should be 'elemental': in a unique, whole way. In regards to beauty, he claims: '' You can strive for beauty but you can never design it.'' (Riba Architecture, 2013). He further explains that it is a principle that can result of the process but that cannot be designed itself or conceptualized. It is an ending at best, something that happens, almost by accident. Lastly, in regards to form, he reveals: '' "We actually never talk about form in the office. we talk about construction, we can talk about science, and we talk about feelings, (…).'' (Zumthor and Merin, 2013). For Zumthor, form is nothing and should be open to interpretation of use. What matters is not function, but the 'use' of the space; the use of the space, it is understood, is associated to the idea of free use, rather than establishing a fixed use or function (ex. an open space that allows for meditation, contemplation, or reading as opposed to the fixed functions of a kitchen or reception area).

… (b) Meaningful Architecture: 'Radial System of Approach'

In regards specifically to his architectural considerations, Zumthor (2006) indicates that he has a desire to design buildings that fit 'naturally' (smoothly) into their environments, and seem to have belonged there, and that with time, form part of the history 'of the place'; the new building must ''(…) embrace qualities that enter into a meaningful dialogue with the existing situation. For if the intervention is to find its place, it must make us see what already exists in a new light.'' (Zumthor, 2006a, pp. 17, 18). Those buildings, to be accepted into their surroundings they must thereby '' (…) 'appeal' to our emotions and minds in various ways. Since our feelings and understandings are rooted in the past, our sensuous connections with a building must respect the process of remembering.'' (Zumthor, 2006a, p. 18). Various possibilities are linked to this act of remembering, thus, Zumthor notes that one must construct a ''radial system of approach'', that allows different angles of view, with the work of architecture at its centre, simultaneously responding and talking into account: « (…) historically, aesthetically, functionally, personally, passionately.» (Zumthor, 2006a, p. 18).

(5) specific work analysis, examples and key features

6.7.1. THE BRUDER CHAPEL

… Introduction

Brother Klaus Field Chapel (2007) is located in in Mechernich on the way to Rissdorfer Weg, in a low slope of the Eifel (Naturpark Nordeife) Natural Park, 55 km from Cologne, Germany. The site is on the edge of an open field next to a small village. The Chapel was commissioned by a local farmer, Hermann-Josef Scheidtweiler and his wife Trudel, whom later collaborated in the construction with his friends. The chapel was intended to be a dedication to Swiss Saint Nicholas von der Flue (1417-1487), more commonly known as Brother Klaus.

… Conceptual Idea and Project Development

Bruder Klaus Field Chapel began as a sketch: in those initial sketches, the volume and global idea of the chapel was already defined. The qualities of a cave, a form lifting itself out from the ground, and the idea of creating an interior space that echoed different ideals that those of the exterior. All these aspects were already defined in those initial sketches. From there on, it was a matter of defining specifics: such as dimensions, materials, ways of construction, details, etc. and of transmitting those ideals to the local villagers that were going to develop and oversee the construction of the chapel.

… Construction Technique and Materials

The Chapel was constructed by local farmers, who wanted to honour their patron saint, Bruder Klaus of the 15th century. It is the Chapel's method of construction, and choice of materials that allowed it, that grants it it's unique character and special atmosphere. The construction began with a wigwam made of 112 tree trunks cut from the local forest, that were carefully joined together in a cone like shape forming the interior space and the shape of the tear drop at the top. Upon completion of this structure, concrete was poured by progressive layers, around 50 cm thick, (one layer each day) until it reached the top. In total there are 24 layers, reaching up to the 12 meters high of the chapel; these numbers might be symbolic, however these symbolisms are not described by the architect. Once they were all dry, the trunks frame was set on fire. The fire lasted up to three weeks, leaving behind a kind of 'charcoal kiln'[462]. What remained was burnt concrete as a blackened void. The surface of the interior is thus a negative impression of the tree trunks, highly textured and dark. As such, the construction phase and development is still visible both on the outside form of the chapel and on the inside, allowing visitors to understand the process and granting the feeling of time. The author Ursprung (2009) associates this architectural fact to

[462] Reference to: '' To dry the wood and detach it easily from the concrete, a smouldering fire burnt for three weeks, like in a charcoal kiln. This gives the concrete surface a dark, lustrous shine and provides the entire building with a charcoal odour.'' (Ursprung, 2009, p. 3)

the Medieval Fresco, where every stage of the process is made visible in the final result[463]. The floor uses frozen molten lead. It was made or obtained by recycling and smelting 4tn cans. Besides the concrete, the lead on the floor, the metal that holds the concrete door and the chromed steel tubes that made the small holes, there are no other materials used in the chapel.

… Architectural and Spatial Description

The chapel stands as a monolith form in the midst of the open landscape, a field of green grass in the Swiss mountains. As a volume, it is a strong imposing form of a pentagonal shape (2d). On one of the sides is a large scaled triangle concrete door, ('' Its shape announced the tent-like interior.'' (Ursprung, 2009, p. 3)), and on top of it a small cross carved in low relief. After the entrance is a narrow corridor that leads to the main small confined space. Author Ursprung (2009) describes the experience: '' Because of the narrow entrance, it was almost impossible to get into the chapel without touching the rough walls with my shoulders and arms. I inevitably relied on my sense of touch during the first few minutes until my eyes adjusted to the darkness. '' (Ursprung, 2009, p. 3).

The interior tent like form does not resonate with the outside sharp linear shapes, but instead is an organic and 'shapeless' form, round like in shape, that tilts inwards as it rises to the heavens, ending in an open 'skylight', in the shape of a tear drop. It is a small interior space that barely fits three people at once. Most of the lighting inside the chapel comes from this hole above. Nonetheless there also some very small openings (that surround the whole space) that result from the connection pipes of the concrete. Theses are closed and provide a very small light, making the chapel resemble the darkness of the night and the glowing stars[464].

In total there are 350 small perfurations. The light then is provided by two systems: the perforated small holes and the oculus. Both rain and sunlight permeate the interior of the chapel, changing its experience all year round: as the atmosphere is not controlled but completely a result of the environment, it is never the same. There is no plumbing, no bathrooms, no running water, no electricity, just a confined space defined by the enclosed structure. Besides the traditional programmatic and functional elements of a space being eliminated (even the most basic such as electricity), the architectural elements that define space are also dispensed. On this issue Ursprung (2009) writes: '' The traditional emblems of spatial continuity are eliminated altogether. It is hardly possible to distinguish the "door" from the "wall." (Ursprung, 2009, p. 3). As such, there is a continuity of the elements, not only in an organic and natural way, but also visually and emotionally creating a kind of cocoon like space. In the centre of the chapel there is a bronze relief figure by the sculptor Hans Josephsohn.

… The Emotional Rich Experience

The author Ursprung (2009) in relation to the experience of the Chapel describes it at two levels. Firstly, the spatial experience, emphasizing the qualities of surprise and immersive experience: '' For the

[463] Reference to: '' On the facade, the traces of the various "day's works" remain visible and tangible, as in a medieval fresco where one can distinguish the traces of the daily work.'' (Ursprung, 2009, p. 3)
[464] Reference to: '' The connection pipes, which bracket the inner and outer casings, are closed with glass stoppers and provide light in the shape of hundreds of small dots, like a starlit sky.'' (Ursprung, 2009, p. 3)

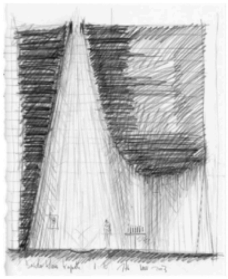
visitor, every step, every new experience, and every movement is unexpected. It is a sequence in an on-going experiment, so to speak.

There is no coherent materiality or spatiality but rather a juxtaposition of various materials and different levels of representation.'' (Ursprung, 2009, p. 3). Secondly, he describes the multiple emotions and associations (images, memory, and faith) that occur as the experience is unravelling. In his words: ''The building enables us to simultaneously experience alienation and identity, disorientation and certainty. The chapel serves as a place where mental images, spatial memory, religious faith, and sceptical reflection converge.'' (Ursprung, 2009, p. 3). The author further accentuates that the complexity of the space cannot be represented by images or by concepts, and can only be captured by experience. A rich experience that captures all the senses as it changes throughout the day: '' (…) by touching the rough surface of the walls, following the surface of the ground with their feet, smelling the charcoal odor, feeling the dampness of the concrete bench after a rainfall, and perceiving the many changes of light and shadows as the hours of the day pass. '' (Ursprung, 2009, p. 3). Author Sveiven (2011) about this emotional experience summarizes: '' The very somber and reflective feelings that become inevitable in one's encounter with the chapel make it one of the most striking pieces of religious architecture to date. '' (Sveiven and Zumthor, 2011).

… Metaphors and Symbolic references

There are multiple symbolic and metaphoric references that can be driven from the chapel. However, it is of the essence to understand that these are analysed by critics rather than explained by Zumthor, for whom the symbolic and metaphorical associations of architecture were never explained. Author Sveiven (2011) says that: '' On a sunny day, this oculus resembles the flare of a star that can be attributed to a reference of Brother Klaus's vision in the womb.'' (Sveiven and Zumthor, 2011). Besides this main idea of a womb (a protecting mass and volume sheltering the being), it is also possible to identify: first, the wholes pierced in the walls and the darkness of the space that establish a link with a dark sky night and the infinite constellations in the sky; secondly, the metaphorical idea that the chapel is a like an ancient dolman punctuating the vast landscape acting as a reference point (order and chaos) for both physical and spiritual life; third, the symbol of the triangle in the door that symbolically points to the sky, metaphorically it represents the spiritual Christian religious traditions of the trilogy Son, Father and Holy Spirit and metaphysically the triangle represents an ascension towards heaven; in the fourth place it is possible to announce another metaphorical idea related to the open oculus, that establishes a way to make the viewer look upwards to the heavens (light and heaven as the source of goodness and beauty); lastly, the chapel itself can be understood as establishing references to Plato's cave (darkness, shadows and light).



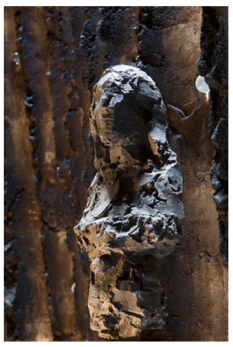




Photo: The Bruder Chapel; Source: http://www.architectsjournal.co.uk/news/interview-with-royal-gold-medallist-peter-zumthor/8642305.article;Photo 1 and 2: Development Sketches; Source: http://en.wikiarquitectura.com/index.php/File:Bruder_Klaus_boc_2.jpg:Photo 1: Construction phase; Source: http://en.wikiarquitectura.com/index.php/File:Bruder_Klaus_18_bis.jpg;Photo: 1, 2 and 3: Interiors of the Bruder Chapel; Source: http://www.archdaily.com/106352/bruder-klaus-field-chapel-peter-zumthor/

PLATE 63: THE BRUDER KLAUS CHAPEL

(6) Key principles, concepts and values

… Principle of Presence, Substance and Existence

Zumthor believes that architecture is defined by two things: its presence and its substance. Architectural 'presence and substance', then, is the main goal, aim and value that defines Zumthor's work process and his overall creation of atmospheres. For him, spaces need to embody both these attributes and communicate them through their experience. The experience of this 'presence and substance' is a rich phenomenological experience that occurs through the senses, through emotion and through perception. This type of experience, rooted in the being, mirrors Heidegger's ideas of experience and existence as ways of understanding the world.

… Principles of Silence and Tradition

Another principle that is of the essence for Zumthor is the quality of silence, which will be thus explained. He is led by a desire to make the building be silent instead of being talkative; he believes that architecture should be in peace and communicate peace, rather than impose a language or a busy dialogue. Silence is associated to other attributes such as composure, self-evidence, durability, presence, integrity, warmth and sensuousness; attributes that he tries to capture through 'silence' in his spaces. Silence, here, is metaphorical, and associates to tradition; it establishes a metaphor with a noble person, that is 'silent', honourable, composed, and has an innate strong presence.

… Principles of Timelessness

There is also the principle of timeless, and the desire to make the architecture seem as if it has always been there, seem to have belonged there since the beginning. This idea guides Zumthor in creating architectural 'atmospheres', for he searches for that deep sense of belonging. Architecture as an embodiment of that timelessness and that belonging communicates that sense of existence to the viewers allowing them to be deeply rooted in life. Timelessness, thus, is a driving goal that underlies the architectural creation.

… Principles of Tradition and Remembering

Yet another principle of value for Zumthor is the idea of tradition: architecture then should embody that tradition, in order to grant it's users with the act of 'remembering'. For Zumthor, our feelings and understandings are rooted in the past; our sensuous connections with a building must thus, then, respect that process of remembering. Architecture has to be linked to this act of remembering.

… Principle of Poetry

Something else that is equally as important is the idea of poetry. For Zumthor, in his spaces, is the idea of the 'poetics' and of mystery; the rich, textural and material spatial experience creates a specific 'poetics', creating a mysterious aura that 'seduces' the viewer in an immersive experience. He applied these principles both in residential architecture and in eclasiastical ones, sustaining that poetry is vital as all levels and moments of existence.

Ending Remarks: *Zumthor searches for the individual, specific and intimate experience between the viewer and the architecture; in doing so, in creating an atmosphere that is phenomenological, atmospheric and acts as a presence, he allows man to become involved in another dimension, that allows him to become aware of his surroundings and of himself. That awareness promotes a sense of consciousness and of belonging to a broader more universal existence. In this idea, value and mission for architecture and for the self, lies Zumthor's significance. Architectural 'presence and substance', create an atmosphere that is rich and strong in its presence and allows for a triggering of emotion, perception, movement and sensuous experience. For Zumthor, architecture, then, is all about creating this sense of 'reality', exploring the tactile and sensory qualities of materials and space, that is immersed in real life, in experience, in the senses, through a sensuous connection, in memory and in culture. Architecture should, as a summary, embrace qualities that allow it to enter into a meaningful dialogue with the viewer: qualities of mystery, of timelessness, of poetry, of silence and of sensuality. And allow the viewer to become rooted in the world, in himself and in the world (emotionally, psychologically and spiritually).*

Summary Notes: Peter Zumthor

1. *Peter Zumthor's architecture is in pursuit of a 'substance' that allows man to understand his presence and existence in the world. That awareness promotes a sense of consciousness and of belonging to a broader more universal existence. In this idea, value and mission for architecture and for the self, lies Zumthor's significance.*

2. *Phenomenological Architecture is concerned with awakening a perceptual rich and intense experience in the viewer, through the senses, emotions and perception (specific use of materials, their qualities and properties, the use of light and shadow, the overall form and colour of the atmospheres), by awakening the senses and triggering memories and dreams, creating a visual, psychological, emotional and even spiritual stimulus.*

3. *Architectural space aims to provokes emotions, evoke perceptual experiences and allow for the emergence of a sense of reality, of self, identity and memories, by rooting the being in the physical and 'real' world in the viewer. As 'pure presence', architecture can generate 'pure' experiences and pure emotions.*

4. *Architecture is all about creating a sense of 'reality', exploring the tactile and sensory qualities of materials and space, that is immersed in real life, in experience, in the senses, through a sensuous connection, in memory and in culture.*

5. *Architecture as an art, is at it's most intense and most beautiful when all the elements refer to everything else, and nothing can be added or removed without destroying the whole.*

6. *Beauty is a result of all the other components, but cannot be a goal in it itself.*

7. *Architecture should embrace qualities that allow it to enter into a meaningful dialogue with the user.*

8. *Conceptual Chart:*

Table 13: Peter Zumthor Conceptual Chart

CREATION			CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Table 14: Peter Zumthor Summary Chart

PETER ZUMTHOR

1. FIELD:
- *Architecture*

2. EDUCATION/BACKGROUND:
- *Initially trained as a cabinet maker (like his father)*
- *Begun his studies in Art in Basel.*
- *Further studies in design at the Pratt Institute in New York*
- *First job in the Department for the Preservation of Monuments in Switzerland*
- *Founded his own architectural firm in 1979.*

3. EVOLUTION:
- *Towards a more intense experience: focused on specific emotions*
- *Clarification of the concept of 'atmosphere' as the driving quality of architecture*
- *More focused on creating an atmospheric environment*

4. CONTEXT:
- *Connected with the theory of phenomenology.*
- *Phenomenological Architecture (Opposing Globalisation and Industry) Defined by and also used by Steven Holl, Juhanni Pallamaa and Christian Norberg-Schulz,*
- *Against the Star-System Architecture of his time and the values that they defended.*
- *Sustains a site-specific immersive specific experience.*

5. INFLUENCES:
- *Intense Images and Experiences:*
- *Capsulate principles and properties*
- *Phenomenology: Philosophy*
- *Tadao Ando*

6. CREATIVE PROCESS:
- *Instinctive and Emotional work methodology*
- *Guided by internal images: Led by intense experiences and emotions*
- *Process of defining a specific emotion*
- *Defined by a conciliation of those internal/external images, their principles and their properties*

7. PERSONAL COSMOLOGY:
- *Searching for emotion and an emotional experience through architecture*
- *The belief that a phenomenological experience can awaken a sense of reality on the viewer*
- *Belief in architecture as the experience through sensory properties.*
- *The triggering of emotions, memories and 'spatial memories'*
- *Space are not only visual but whole: (people, noise, smell, forms, movement, etc.) and as such entail evoking all the senses.*
- *Architecture should be an experience of presence and substance.*
- *The belief that Architecture should be rooted in human values rather than technological ones, in the midst of natural settings rather than in urban contexts, and defined by a sense of 'reality' and tangibility rather than creating 'fictions'*
- *Belief in an architecture that is free from the 'image' base criteria of contemporary arch.; free from symbolism and other visual emphasis and focusing on architecture as 'pure presence'.*
- Architecture is all about creating a sense of 'reality', immersed in real life, in experience, in the senses, in memory and in culture.

8. EMOTIONS
- *Awe*
- *Mystery*
- *Surprise*
- *Completion*

9. OBJECTIVES:
- *Create 'emotional spaces' and atmospheres:*
  - *that act on the senses and the sensitivity of man*
  - *that create a rich experience*
  - *that allow for a triggering of personal memories and experiences*
- *Provoke a sense of being rooted in the world.*
- *Create spaces and atmospheres where people can find their connection to the earth and their selves, through the experience.*
- *To define a sense of 'pure presence'*
- *Search for the individual, specific and intimate experience between the viewer and the architecture.*

10. CHARACTERIZATION:
- *Exploration of the tactile and sensory qualities of materials and space.*
- *Focus on emotion, perception, movement and experience.*
- *A focus on experience and the creation of this kind of 'pure presence'*
- *Use of natural materials: tangibility, tactility and innate material properties.*
- *Create an atmosphere that is rich and strong in its presence*
- *Absence of attention and focus of the overall form of the architecture.*
- *Emphasises on the sensory and perceptual aspects of the architectural experience as a whole*
- *Create such immersive emotional and perceptual experiences*
- *Searching for 'moving qualities' of spaces*
- *Duality between movement and contemplation defines the atmospheres*
- *Attention to the material and their properties: their visual, tactile and other sense related qualities and attributes*
- *The quality of mystery*
- *Overall characteristic of deep contrasts: between light and darkness, expansion and contention, openness and confinement.*

11. CONCEPTUAL FRAMEWORK:
- *Experience*
- *Space*
- *Environment*
- *Nature*
- *Materials*
- *Substance*
- *Presence*
- *Emotions*
- *Perception*
- *Memory*

12. VALUES
- *Philosophical, Poetical, Emotional, Sustainable.*

13. MEANING/SIGNIFICANCE
- *Allows man to understand his presence and existence in the world.*

Biographies Notes

biography: Andrea Palladio

Andrea di Pietro della Gondola (1508 – 1580) was born in Padua in 1508 and named *della Gondola* after his father. At the age of thirteen, he became an apprentice to a stone carver in Padua, (the sculpture workshop of Bartolomeo Cavazza da Sossano); due to what is believed to be hard working conditions, in 1524 he fled to Vicenza, where he settled (and where he would remain for most of his life), and worked for the following 14 years as an apprentice to the stone carvers Giovanni and Girolamo (also known as Pedemuro, a workshop responsible for most of Vicenza's monuments and decorative sculptures); in the workshop, Andrea di Pietro was collaborating as a stonemason for monuments and sculptures; at thirty, Palladio was assigned to work in an adjacent town, on a loggia in Villa Cricoli, designed by Count Giangiorgio Trissino[465] (a humanist poet and scholar), when Trissino himself took interest in him and his work, noticed his 'spirit' and 'inclination towards mathematics', and decided to 'cultivate his genius'[466] by giving him a house and educating him; in this context Trissino named him Palladio (associated to the Greek Goddess of wisdom, *Pallas Athene,* which means 'wise one', to elevate his status. Under the guidance of Trissino, Palladio's teachings were focused on architecture alone, and Trissino saw him as an apprentice and 'specialist-assistant', associated specifically to architecture, rather than aiming for a rounded *uomo universal* kind of teaching as was accustomed at the time: he taught Palladio classical architecture and introduced him to Vitruvius. In 1538, Trissino left Vicenza and spent three years in Padua; Ackerman sustains the belief that Palladio joined him and came in contact with the architecture and theories of Alvise Cornaro and the Veronese painter Falconetto. Palladio's first trip to Rome, accompanying Trissino, was in 1541; it gave him the necessary foundation and experimentation, apart from books and treatises and allowed him to start developing his own architectural style. There were various other trips to Rome that followed, 1547 and 1554, and overall, Palladio travelled in order to clarify his research and query on classic architecture. On each trip he recorded (sketched and measured) the buildings he observed, collaborated with other scholars and exchanged information in order to create a more accurate description of Classic Architecture. In 1556, Palladio contributed with drawings to the Vitruvius edition and commentary published by Daniele Barbaro (companion of the last trip to Rome and patron). In around 1550, Palladio moved to Venice, however, not with ease: he was rejected for a government post in 1554, and in 1955 lost a competition for the Scala d'Oro of the Dodges Palace. After the death of Sansovino (his main competition), he started having projects in Venice, one of the notable ones, designed in 1560 (built 1560 – 1563) is the monastery of San Giorgio Maggiore; He eventually moved his family to Venice in 1570/71; around the time when he started designing Il Redentore. In 1570, *I Quattro Libri dell' Architettura,* was published in Rome; the treatise detailed his principles in creating classical architecture and exemplified with detail his key design philosophies, vision and principles; the treatise deeply influenced the architectural world then and in the future generations to come. His last project was the Church of Villa Barbara (Tempietto Barbaro), designed in 1580 (built 1580 – 1584). Palladio died in 1580, in circumstances that are unknown, and was buried in Vicenza.

biography: Frank Lloyd Wright

Frank Lincoln Wright (1867-1959) was born in the farming town of Richland Center, Wisconsin, United States, in 1867. His father, William Carey Wright (1825–1904), was a musician, a teacher and a minister; his mother, Anna Lloyd Jones (1838/39 – 1923) was a county schoolteacher and belonged to The Lloyd Joneses family, who had migrated to Wisconsin in 1845, settling at a place called Hillside, near the Wisconsin river. They shared views of religion, as Unitarianism (sustained mainly by Anna and her family), and educated their son according to these principles. Wright was very close to his mother, whom protected him and saw him as a prodigy child since a very young age. She deeply inspired his sense of family identity, his religious and philosophical outlook. As a boy, he spent his summers working on his uncles' farms (on his mother's side), around the area on which he grew up in; they were cultured farmers, committed to education and self-improvement, and transmitted these ideals and ways of life to Wright from a very young age. His parents separated soon after Wright had turned 14 years old (Anna was unhappy with William's inability to provide for his family); after the divorce was finalized, in 1885, his father left Wisconsin and Wright claims to never have seen his father again. After this event, he changed his middle name to Lloyd (as a commitment to his mother and her family) and assumed financial responsibility for his mother and his two

[465] '' Trissino was the pre-eminent intelectual of Vicenza: distinguised for Humanistic studies, a writer of drama, poetry and philosophical scholarchip, he enjoyed sharing his learning, and accepted a number of younger nobles into his households as students.'' (Ackerman, 1966, p. 19).

[466] '' Giusseppe Gualdo, Palladio's contemporary, wrote in his reliable life of the architect that ''when Trissino noticed that Palladio was a very spirited Young man with much inclination for mathematics, he decided in order to cultivate his genius to explain Vitruvius to him, and to take him to Rome three times.'' ''(Wittkower, 1971, p. 61)

sisters. He attended Madison High School and was admitted as a special student to the University of Wisconsin Madison in 1886, where he took part time classes and worked with a professor of civil engineering, Allan D. Conover. After about a year, he left and went to Chicago to get a job, where he was hired as a draftsman in an architectural firm. While at the firm, he collaborated in some architectural projects for his family. After a couple of years, he left and joined another firm as a designer, joining Adler & Sullivan from 1888 to 1893, where he taken under Sullivan's wing and was given great design responsibility. During that time he married his first wife Catherine Tobin, and got a loan from Sullivan to build his own small house. They had two children, and Wright was constantly short on his finances, because of his 'good' and expensive tastes, which led him to accepting various projects independently (about nine houses), to supplement his income and repay his debts. Since his five year contract forbade him from developing projects independently, Sullivan discovered what he was doing and he was forced to leave the practice. Multiple stories define this 'break up', but independently of which version really happened, they did not meet or speak for many years. After leaving, he opened his own architectural practise, on the top floor of the Sullivan designed Schiller Building (1892, demolished 1961) and then to a newly completed Steinway Hall Building. He began developing projects on his own, and establishing his architectural vision. His first architectural projects that began to materialize his vision were the 'prairie houses'. Other relevant projects of his career include The Fallingwater, the Guggenheim Museum in New York City, and his Taliesin estates in Spring Green, Wisconsin, and Scottsdale, Arizona. Throughout his life, FLW was an American architect, interior designer, writer, theorist and educator. His multi-faceted career ranged over 70 years, designing more than 1,000 structures (532 of which were completed) and writing about 20 books. He was granted an honorary Doctorate of Fine Arts from the University in 1955.

Biography: Luis Barragán

Luis Ramiro Barragán Morfín (1902 - 1988), accepted the Pritzker Prize in 1980, is now generally regarded as one of the most important architects of the 20th century. Known for his mastery of space and light, Barragán's unique vision and vocabulary of architecture contrast with his peers, despite the small number of projects he left behind. Barragán was born in Guadalajara, in 1902, into a wealthy Mexican family and lived his childhood years in the family's house there and in their country estate in Jalisco. He studied engineering there, which he begun in 1919, and it was during his student years that his fascination for architecture begun; as such, he decided to take on the additional architectural studies in order to qualify as both an engineer and an architect. He received his civil engineering degree in 1925 from Guadalajara's *Escuela Libre de Ingenieros*. The school where he was attending his architecture classes, closed before granting him his degree. In 1924 and 1925 he went on a trip to Europe where he got to travel in southern Europe, mainly Spain and France, and then settling in Paris for a few months where he attended the 1925 Exposition des Arts-Décoratifs in Paris. He was deeply influenced and fascinated by the Alhambra, and the Parisian Exhibitions. During this trip he came in contact with the work of a writer, designer and artist of German and French background, Ferdinand Bac, whom he admired and respected his work and became a huge influence on his vision throughout his life. In 1926, with his return to Mexico, he worked with his architect brother, Juan José. In the 30's, after a second trip to Europe with a stay in New York, where he met Mexican muralist, José Clemente Orozco and Le Corbusier, and in Paris, he met the landscape architect, Ferdinand Bac, and visited Bac's projects and creations, he started developing his own views on modernist architecture and started departing from the traditionalist Mexican architecture style. According to the author Stephen Sennot (2004), '' Bac encouraged his interest in poetic use of vernacular architecture and nostalgia.'' (Sennott, 2004, p. 116), and these visual impressions were to deeply inspire Barragán's work in many years to come. In 1935-6 Barragán moves to Mexico City after four years in Guadalajara. His work in Guadalajara, he completed a number of villas and a project for a city park, Parque de La Revolución (1935) with his brother Juan José. His early work in Mexico City, after 1936, was mostly done in collaborations and included a number of small houses and apartment buildings, defined by glass and concrete buildings, with roof terraces and factory like windows, a clear influence of Le Corbusier. In the beginning of the 40's, most of his work in Mexico City involved garden design; he designed around seven gardens. In 1945, Barragán bought a large piece of land and designed El Pedregal: a vast complex like space, that combined gardens and individual family houses in a land of approximately 5.1 km2. Although architecturally El Pedragal, is considered a value, commercially it wasn't a success and kept Barragan in financial problems for years to come. At El Pedregal, Barragán collaborated or got inspiration from artists such as the sculptor Mathias Goeritz and the painter Diego Rivera. In 1952, Barragán returned to Guadalajara where he designed a house for a friend Dr Arriola. Two years later he was commissioned to build a convent at Tlálpan, near Mexico City, which he designed beginning in 1954, during the course of the next four years. In 1957, Barragán designed the Torri Satélite, with his artist friend Mathias Goeritz, adding artistic value to a traffic intersection in City of Mexico. In 1977, an exhibition of Barragán's work was featured at MoMA, New York. This exhibition turned a spotlight to his work, and allowed it to receive some notoriety and protagonism. In 1980, he is awarded the prestigious Pritzker Prize for Architecture. Eventually, Barragán died in 1988.

Biography: Le Corbusier

Le Corbusier (1887 – 1965) baptized as Charles-Edouard Jeanneret-Gris, was born on October 6, 1887, in a small town in the mountainous Swiss Jura region, and is widely and generally regarded as the the most important architect of the 20th century. Le Corbusier was the second son of Edouard Jeanneret (an artist related to watch painting) and Madame Jeannerct-Perrct (a musician and piano teacher). At 13, Le Corbusier left primary school to attend Arts Décoratifs at La Chaux-de-Fonds, where he would learn the art of enamelling and engraving. His Professor Charles L'Eplattenier, ('' (…) whom Le Corbusier called 'my master', (…)'' (Biography.com Editors, 2013)) taught him art history, drawing and the naturalist aesthetics of art nouveau. He initially intended to follow his father's footsteps in regards to watch painting, but soon decided he wanted to become a painter. After three years of studies, his Professor insisted that he studied architecture too and arranged him his first commissions. He designed his first house, in 1907, at age 20, and then decided to take trips through Europe (Italy, Vienna, Munich and Paris where he would also do apprenticeships with various architects, such as Auguste Perret and later architect Peter Behrens in Germany (October 1910 to March 1911). Besides these apprenticeships, Le Corbusier was a self-taught architect. In 1912, Le Corbusier returned to La Chaux-de-Fonds, where he would teach with his Professor L'Eplattenier; he also opened his architectural practice and begun designing villas. In 1917, (30 years old at the time), Le Corbusier moved to Paris, where he worked as an architect (designing concrete structures for government contracts) and as a painter. In the following year, Le Corbusier met Amédée Ozenfant, cubist painter and designer, with whom he began collaborations for the following two years: their shared visions allowed them to publish books and create a purist journal entitled L'Esprit Nouveau (The New Spirit). It was in the first publication of this journal that Charles-Edouard Jeanneret adopted the name Le Corbusier. The collection of Le Corbusier's writings for the journal was gathered and published in a book entitled Vers une Architecture (Toward a New Architecture), in 1923; overall, the book proclaimed a desire for a 'new architecture' (functional and pure) that could accommodate the new technological changes and the new modern world. In 1922, Le Corbusier opened his architectural studio with his cousin Pierre Jeanneret that lasted until 1940. Essentially, this details the first period of Corbusier's architecture. Separated by World War II, the second period covers the years from 1944 to the architect's death in 1965. On both periods Le Corbusier worked on architecture and city planning projects. (see both periods in part 2.2). During his architectural practise Le Corbusier also worked as an painter and published multiple books on architecture, urbanism and proportions. Among the most well known of his books are: *Urbanisme* (1925; The City of Tomorrow, 1929), *Quand les cathédrales étaient blanches* (1937; When the Cathedrals Were White, 1947), La Charte d'Athènes (1943), *Propos d'urbanisme* (1946), *Les Trois Établissements humains* (1945), and *Le Modular I* (1948; The Modular, 1954). Some of his most notable projects include the Villa Savoye (1929–31), at Poissy, The Marseille project (unité d'habitation) (1952) and the chapel Notre-Dame-du-Haut at Ronchamp (1950–55) to name a few. Le Corbusier's reputation and exposure greatly increased with two large expositions of his work in Paris in 1953 and then a decade later, in 1962. Le Corbusier died on August 27, 1965, Cap Martin, France. Choay (2015) claims: '' The man who had thought himself so misunderstood in his own time was given a national funeral, and in 1968 the Le Corbusier Foundation was created. .'' (Choay, 2015).

Biography: Tadao Ando

Tadao Ando was born in Osaka, Japan in 1941. He is a couple of minutes older than his twin brother, from whom he was separated from the age of two (Tadao went to live with his grandmother). From the age of 10 to 17, he worked as a carpenter, working with wood in the Japanese tradition. While he was attending high school he also worked as a boxer and a truck driver. In the years, as a high school student he became fascinated by Frank Lloyd Wright's Imperial Hotel that he got to experience on a trip to Tokyo. A couple of years after graduating he decided to pursue architecture, as attended night classes to learn drawing and courses on interior design. But as for his architectural training, it was exclusively self-taught. Tadao Ando was greatly influenced by the works of Le Corbusier, Mies Van der Rohe, Alvar Aalto, Loius Kahn and Frank Lloyd Wright, and visited some of their buildings as part of his training. He then returned to Osaka, in 1969, and founded the firm "Tadao Ando Architect & Associates." In 1976, Ando receives the Japanese Architectural Association Prize for his Azuma House in Sumiyoshi and won the Pritzker Prize in 1995.

Biography: John Pawson

John Pawson was born in 1949 in Halifax, Yorkshire, United Kingdom, where he spent his childhood years. His family is wealthy, cultured and he was educated on a Methodist Religion background, as the youngest of five brothers and sisters; he sent John to Eton College Boarding School, at the age of 13 (the school is attended by most of Britain's Prime Ministers, such as David Cameron and is considered one of the most expensive schools in the United Kingdom). He worked for a period at his family's textile industry. In his mid twenties, (when he was 24) Pawson left for Japan, because he had decided to become a monk, and went to the remote Eihei monastery. The experience didn't go well, and instead, he ended up spending several

years teaching English at the business university of Nagoya. He moved to Tokyo during the final year of his stay, where he visited the studio of Japanese architect and designer Shiro Kuramata. Following his return to England, he enrolled at the Architecture Association in London where he studied for three years before dropping out. He was 30 years at the time, and then decided to establish his own practice in 1981. Pawson has established himself since the 80's as a leading exponent of the simple expression, of the minimalist aesthetics. An exhibition of Pawson's work was held at the Design Museum in September 2010, entitled Plain Space. He has also received multiple architecture awards such as the Blueprint Architect of the Year (2005), the RIBA National Award (2008), the RIBA Arts & Leisure Regional Award (2008), the RIBA London Special Award (2008) and the German Design Council Interior Designer of the Year (2014).

Biography: Peter Zumthor

Peter Zumthor (April 26, 1943 -) is generally considered by his peers one most revered and distinct architects of the 21st century. He was born in Basel, Switzerland, and is the son of Oscar Zumthor, a cabinet maker. Peter Zumthor, at a young age trained as a cabinet maker too, from 1958 to 1962. From 1963-67, he studied Art in Basel, and then further studies in design at the Pratt Institute in New York, 1969. After which he returned to Switzerland and started his first job in the Department for the Preservation of Monuments by the Canton of Grubunden. Zumthor then founded his own architectural firm in 1979, where he still works with a team of fifteen people. The studio is located adjacent to his house, in the area where he has lived most of his life, in the valley of the Rhein. This area is also where many of his projects have been built. His practice grew quickly and he accepted more international projects and quickly gained great recognition world wide. His projects range from small-scale projects, such as homes, renovations and chapels, to large-scale ones, museums or spas. Zumthor is married to Annalisa Zumthor-Cuorad, they have three children and two grandchildren. He has been a visiting professor (University of Southern California Institute of Architecture and SCI-ARC in Los Angeles in 1988 and at the Graduate School of Design, Harvard University in 1999) and since 1996, he has also been lecturing as a professor of architecture: at the Academy of Architecture, Universitá della Svizzera Italiana, Mendrisio. He has published two books: Thinking Architecture, first published by Birkhauser in 1998, and Atmospheres. He won the RIBA Gold Medal in 2013. Previous to that, he won the Pritzker Prize in 2009, The Praemium Imperiale in 2008 and the Thomas Jefferson Foundation Medal in Architecture and the Mies van der Rohe Award for European Architecture in 1999. Some of his most known projects are: the cave-like thermal baths in Vals, Switzerland (1999), the Swiss Pavilion for Expo (2000), the Kunsthaus Bregenz (1997), the Kolumba Diocesan Museum (2007), in Cologne; and the Bruder Klaus Field Chapel.

Summary Chapter 6:

6.1. Palladio (1508 – 1580) and La Rotunda *presented us with an understanding of universal principles and a classical comprehension of architecture and beauty. Andrea Palladio's architecture is a pursuit for that which is harmonious, true, universal and spiritual: using proportions and forms to create an ideal of life, virtue and spirit. In this ideal and ability to unify man with those ideals lies it's meaning and significance. Overall, he believed that the arts rest on universal principles that are discovered through experience and relate to wisdom. Thus, architecture can be defined by universal principles that sustain its meaning and significance. For Palladio, Architecture is a union between the intangible world of virtue, forms, and heavenly manifestations of the spirit and the pragmatic sensorial world of the body: union of both Platonic ideals (virtue and spirit) and Aristotelian principles (experience and the senses); Architecture as a 'manifestation of virtue' can inspire man and make man's spirit rise towards the 'virtues' materialized through architecture. He considered the practice of good architecture is a 'moral obligation', and sustained that proportions are the system that sustains the 'universal design' and the 'divine harmony'. The relationship between the parts and to the whole, the sense of order and harmony, and the proportions that define every part of the design are fuelled by symbolic/mathematical/musical harmonies – nature's creation methods. This proportional harmony, defined throughout the whole structure, is a reflexion of sacred principles and of a sacred life, and echoes the beauty of 'wholeness', conveys the 'universal design' and communicates the 'divine harmony'.*

6.2. Frank Lloyd Wright (1867 – 1959) and Falling Water *established a connection to nature (as a spirit) and to a deeper sense of spirituality (derived from the self and from a harmony with the world), sustaining a unifying architecture: that achieved a harmony between Nature, Man and Spirit. It was seen that Frank Lloyd Wright's architecture was in pursuit of this 'whole' unifying architecture and aspired to understand the universal spirit and to create a vision for it, so that the work of art and architecture could serve as a microcosm for the 'beauty of the whole' and convey the universal order. He sustained that aarchitecture can create a deeper connection between man, place, Nature and the universe and can manifest through beauty God's presence in the world; Architecture can capture the inner meaning of outward forms to reveal the cosmic unity of nature and spirit. Thus, understanding universal principles allows one to become closer to God: man should strive to define these principles, understand them and convey them through his creations. In short, the purpose of art and architecture is to understand the inner nature, and express universal spirit. All creations, Art and Architecture, are part of the 'universal order', as such, should be based on the same principles, in order to amplify it's purpose and it's meaning. Nature is spiritual, as such, the artist should always turn to nature for inspiration. Also, nature acquires its meaning in relation to the human soul and the divine spirit, so architecture has a great power to manifest it: reuniting nature with man's soul.*

6.3. Barragán (1902 – 1988) and the Barragán house defined a different perception *of architecture; for him, architecture spaces express an interiority and a hidden meaning, through the creation of emotions ('magic', 'serenity', 'enchantment' and 'mystery'), and through the use of his colour, symbology, and art; thus, architecture should create tranquility and serenity at a spiritual level, allowing man to find peace within its spaces. Barragán's work is in pursuit of an emotional architecture: that allows for tranquility,*

serenity, poetry, stillness, magic and enchantment qualities to emerge, creating an 'isolated' utopia and allowing man to find his own place in the world an in himself. An emotional architecture moves people through it's beauty and can act poetically on the spirit of man. It is in beauty and emotion that mere architecture is elevated into an art; understanding the causes of emotions, the root of what makes man be moved by a space, allows for the creation of those emotions in both art and architecture. He further believed that Architecture can convey the most poetic and beautiful idea possible of the passing of time, creating a 'depth' in life and art. This idea of 'beautification by time' is associated with 'Interiority' as 'lived time' and 'Leisure' as 'enchanted time'. Architecture should, then, create tranquility and serenity at a spiritual level, allowing man to find peace within its spaces. He believed that the use of colour and light creates a mystical and spiritual architecture and atmosphere. Essentially, for Barragán, Architecture is a reconciliation of the past with the present, of tradition with the modern, of the arts (embracing all the arts), of nature and construction, of colour and white, of darkness and light. In this reconciliation lies it's ability to move people and communicate poetic emotions.

6.4. Le Corbusier (1887- 1965) *and La Ronchamp as the space that best summarizes Corbusier's vision and artistic beliefs determined the importance of the expressive values of art and the importance of a deep connection between the arts as synthesis and as all the arts echoing the same significance. Le Corbusier's architecture is a pursuit for that which is universal and can speak to the spirit of man. It is in this belief, that lies his architectural significance: Art is a creation of the spirit, and Architecture is an Art. For Corbusier, the architect, just like the artist, is a 'creator of emotion, beauty and order'. Creations, as art, create from the spirit emotions that convey order and communicate consciousness (universal principles). Architecture, as an art, is an artistic fact that deals with the stirring of emotions; space, then creates an Architectural Emotion, a poetic instance that acts emotionally and powerfully on the senses of man. Architecture is a 'thing of plastic emotion' that should use elements that 'strike our senses' and 'satisfy our visual desires'; plastic architectural elements 'affect us' by specific emotions (such as fineness, serenity or interest); they act on our senses psychologically. It is this capacity to stir our emotions and communicate psychologically and the ability to create relations that act on our consciousness (putting us in accordance with the laws of the universe) that makes Architecture be Architecture… an Art. For Corbusier architecture and art are indeed co-existent, co-dependent and co sharing in meaning, for they can become at their most intense when they are placed together, working as one. This is what can be defined as his belief in the Synthesis and Synthesis of the Arts.*

6.5. Tadao Ando (1941 -) and the *Chapel on the water and the Chapel of light represented both a universal and a spiritual understanding of space: it was understood that architecture could indeed create a union of the body and the spirit, through the creation of a space of emptiness and contemplation: the materialization of 'nothingness' and 'stillness'. Connecting the sacred and the secular, architecture embodies a philosophy of time, place, existence, of being in the world and communicates those spiritual dimensions to the human being. It was further seen that Tadao Ando's architecture is in pursuit of the 'Shinta': union of the body and the spirit. He aspires to create a space of emptiness and contemplation: the materialization of 'nothingness' and 'stillness', in order to allow man understand his own spiritual dimensions.. In this vision and ideal, lies Tadao Ando's meaning and significance. And that his aim was to create a cosmos with each piece of architecture that echoes in the spirits of the users, like any other artistic creation. Overall, for Ando, as an art, Architecture combines the dimension of Imagination and fiction, and that's where it's value lies… beyond the*

substance. It is Architecture that responds to both psychological and spiritual dimensions: it allows for a transference of the self to a spiritual dimension; it does so through poetry (and metaphor) conveying universal truth's and using aesthetic poverty (the idea that there is no need for excesses and decorative elements). As a synthesis, Architecture, as an art, allows for a deep connection between the self and it's spiritual higher self.

6.6. John Pawson and the John Pawson House *(as well as the other projects) formulated a minimalist approach with a focus on proportion, simplicity and light, and the belief that through the knowledge of the primordial essences of architecture, architecture could communicate principles that are universal. Creation thus, was understood as being both an intuitive and rational endeavour, and portrayed complex thoughts in simple ways, acting psychologically, emotionally and spiritually, on the viewer transmitting those specific emotions and meanings. It was seen that John Pawson' architecture is a pursuit for that which creates an emotion of stillness and generates a meditative type of existence. He aspires to act on the sensitivity of spirit of man. In this idea of minimalism as a spiritual way of life and architecture as the means to achieve it, is Pawson's architectures significance. Pawson's aesthetics, its language, meaning and significance lies in the understanding of simplicity and minimalism as a spiritual experience that can occur in architecture and define a way of life. Minimal Architecture can act psychologically, emotionally and spiritually, on the viewer transmitting those specific emotions and meanings that only the 'minimum' and overall 'simplicity' can portray. He sustained the belief that Architecture can create spaces that allow for man to become immersed in another sort of dimension, where simplicity of life and sensuality of material live together combined in one single existence, echoing a sort of union and harmony. For Pawson, Architecture is about a search for the fundamentals: light, space, proportions, materials and scale and the communication of principles that are universal.*

6.7. Peter Zumthor (1943 -) and the Bruder Chapel, *created an awareness of architecture that is atmospheric in it's essence, communicating through incompletion and through emotion through a phenomenological understanding (material, light and essence), to the emotional and spiritual dimensions of the human being. Architectural space thus, aims to provokes emotions, evoke perceptual experiences and allow for the emergence of a sense of reality, of self, identity and memories, by rooting the being in the physical and 'real' world in the viewer. As 'pure presence', architecture can generate 'pure' experiences and pure emotions. Above all, Peter Zumthor's architecture is in pursuit a 'substance' that allows man to understand his presence and existence in the world; that awareness promotes a sense of consciousness and of belonging to a broader more universal existence. In this idea, value and mission for architecture and for the self, lies Zumthor's significance. For Zumthor, Architecture is all about creating a sense of 'reality', exploring the tactile and sensory qualities of materials and space, that is immersed in real life, in experience, in the senses, through a sensuous connection, in memory and in culture.*

BIBLIOGRAPHIC REFERENCES – Chapter 6:

Ackerman, J.S. (1966). *Palladio*. The architect and society. London: Penguin Books.

Ando, T. (1995). Acceptance Speech: Tadao Ando [online]. Available at: http://www.pritzkerprize.com/1995/ceremony_speech1 [Accessed 16 Jul. 2014].

Ando, T. (1989). *Tadao Ando: The Yale Studio & Current Works*. New York: Rizzoli Publishers.

Banham, J. (1997). *Encyclopedia of Interior Design.* New York: Routledge Publishers.

Barragan, L., Riggen, A. (2000). *Luis Barragán: Escritos y Conversacions.* Spain: El Croquis.

Barragán, L., Vedia, J.M., Schere, R. (2001). *Luis Barragán: paraísos*. Madrid: A. Asppan S.L.

Benevolo, L. (1977). *History of Modern Architecture*. Cambridge, Massachusetts: MIT Press.

Biography (2013). *Le Corbusier Biography* [online]. The Biography.com website. Available at: http://www.biography.com/people/le-corbusier-9376609 [Accessed 11 Dec. 2015].

Canizaro, V.B. (2012). *Architectural Regionalism: Collected Writings on Place, Identity, Modernity, and Tradition*. San Francisco: Chronicle Books.

Casini, L. (2014). Renaissance Philosophy, in: Internet Encyclopedia of Philosophy [online]. Available at: http://www.iep.utm.edu/renaissa/ [Accessed 25 Jan. 2016].

Choay, F. (2015). *Le Corbusier, Swiss architect,* in: Encyclopedia Britannica [online]. Available at: http://www.britannica.com/biography/Le-Corbusier [Accessed 25 Oct. 2015].

Cleary, R. (2000). Fallingwater Was Only the Beginning: TheVisionsof Frank Lloyd Wright and the Edgar J. Kaufmann Family for Bear Run, in: *Proceedings 85th Annual Meeting and Technology Conference*. Presented at the 85th Annual Meeting and Technology Conference, pp. 391 – 395.

Cohen, J.L. (2004). *Le Corbusier, 1887-1965: The Lyricism of Architecture in the Machine Age.* London and New York: Taschen.

Constant, C. (1993). *The Palladio Guide.* New York: Princeton Architectural Press.

Corbusier, L. (2000). *The Modulor: A Harmonious Measure to the Human Scale, Universally Applicable to Architecture and Mechanic*s. New York: Springer Science & Business Media.

Corbusier, L. (1999). *Le Corbusier Talks with Students.* New York: Princeton Architectural Press.

Corbusier, L., Cohen, J.L. (2007). *Toward an Architecture.* Los Angeles: Getty Publications.

Corbusier, L., Žaknić, I. (1997). *The Final Testament of Perè Corbu: a Translation and Interpretation of Mise au point by Ivan Zaknic*. New Haven and London: Yale University Press.

Cronon, W. (1994). Inconstant Unity: The Passion of Frank Lloyd Wright, in: *Frank Lloyd Wright Architect*. New York: The museum of modern art. Available at: http://www.williamcronon.net/writing/cronon_inconstant_unity_passion_of_frank_lloyd_wright_1994.pdf [Accessed 1 Nov. 2015].

Didero, M.C. (2013). *John Pawson: Perspectives* [online]. Available at: http://www.domusweb.it/en/art/2013/05/29/john_pawson_perspectives.html [Accessed 27 Oct. 2015].

Drew, P. (1996). *Church on the Water, Church of the Light: Tadao Ando.* London and New York: Phaidon Publishers.

Durão, M.J. (2012). Colour as Pathway of Light: Searching the Shadow in Luis Barragán, in: J*AIC - Journal of the International Colour Association*, 5.

Frick, M. (2014). *Tadao Ando: From Emptiness to Infinity.* Documentary. Available at: http://www.rtp.pt/play/p2088/tadao-ando [Accessed 14 Nov. 2015].

Furnari, M. (1995). *Formal Design in Renaissance Architecture: from Brunelleschi to Palladio*. New York: Rizzoli Publishers.

Furze, R.C. (2010). *Mysticism in the Experience of Architecture*. PhD Thesis. University of Exeter, United Kingdom. Available at: https://ore.exeter.ac.uk/repository/handle/10036/3141 [Accessed 14 Nov. 2015].

Gans, D. (1987). Chapelle Notre-Dame-du-Haut 1954, in: *The Le Corbusier Guide*. New York: Princeton Architectural Press.

García-Salgado, T. (2008). A Perspective Analysis of the Proportions of Palladio's Villa Rotonda: Making the Invisible Visible, in: *Nexus Network Journal,* 10, pp. 269 – 282. Available at: http://perspectivegeometry.com/sitebuildercontent/sitebuilderfiles/06nnjv10n2salgado269282pg.pdf [Accessed 25 Jan. 2016]. DOI:10.1007/ S00004-007-0069-3

Garratt, S., Pawson, J. (2010). John Pawson interview: Plain speaking, in: *The Telegraph* [online]. Available at: http://www.telegraph.co.uk/culture/art/architecture/7975043/John-Pawson-interview-Plain-speaking.html [Accessed 27 Oct. 2015].

Grendler, P.F. (2016). Renaissance: Europe, 1450 to 1789, in: *Encyclopedia of the Early Modern World* [online]. Available at: http://www.encyclopedia.com/topic/Renaissance.aspx [Accessed 25 Nov. 2016].

Hursthouse, R. (2013). Virtue Ethics, in: *The Stanford Encyclopedia of Philosophy*, Zalta, E.N. (Ed.). Available in: http://plato.stanford.edu/archives/fall2013/entries/ethics-virtue/ [Accessed 25 Jan. 2016].

Iyer, P. (2011). Museum peace: Japan's Naoshima island, in: *The Guardian* [online]. Available at: http://www.theguardian.com/travel/2011/jul/10/japan-travel-art-island-naoshima [Accessed 15 Jul. 2014].

Kai, G. (2006). *Concrete Resistance: Ando in the context of critical regionalism*. Available at: http://www.andrew.cmu.edu/user/gutschow/theory_course/Xiang%20Hua%20Ando%20Paper.pdf [Accessed 15 Jul. 2014].

Klinkhammer, B. (2011). After Purism: Le Corbusier and Colour, in: *Preservation Education & Research,* 4, pp. 115 – 130. Available at: http://www.ncpe.us/wp-content/uploads/2013/01/Klinkhamer_OffprintPERvol4.pdf [Accessed 15 Apr. 2015].

Luis Barragán House and Studio (2004). *UNESCO World Heritage Centre* [online]. Available at: http://whc.unesco.org/en/list/1136. [Accessed 11 Oct. 2014].

Moore, R. (2010). John Pawson: Plain Space, in: *The Guardian* [online]. Available at: http://www.theguardian.com/artanddesign/2010/sep/19/john-pawson-plain-space [Accessed 27 Oct. 2015].

Muller, L. (2004). *The symbiosis between art and architecture as evidenced in Le Corbusier's Ronchamp.* PhD thesis. University of British Columbia, Vancouver, Canada. Available at: https://circle.ubc.ca/bitstream/2429/15781/1/ubc_2004-0570.pdf [Accessed 18 May 2015].

Padovan, R. (2002). *Towards Universality: Le Corbusier, Mies, and De Stijl*. Hove, United Kingdom: Psychology Press.

Palladio, A. (1965). *The Four Books of Architecture.* New York: Dover Publications.

Palladio, A. (1987). *Los Cuatro Libros de Arquitectura*. Barcelona: Editorial Alta Fulla.

Pallister, J. (2013). *Interview with Royal Gold Medallist Peter Zumthor* [online]. Available at: http://www.architectsjournal.co.uk/news/interview-with-royal-gold-medallist-peter-zumthor/8642305.article [Accessed 14 Oct. 2015].

Parkes, G. (2011). Japanese Aesthetics, in: *The Stanford Encyclopedia of Philosophy* [online], Zalta, E.N. (Ed.). Available in: http://plato.stanford.edu/archives/win2011/entries/japanese-aesthetics/ [Accessed 15 Jul. 2015].

Pauly, D. (1997). *Le Corbusier: La Chapelle de Ronchamp, The Chapel at Ronchamp*. New York: Springer Science & Business Media.

Pawson, J. (2015). *John Pawson* [online]. Available at: http://www.johnpawson.com/office/john-pawson/ [Accessed 15 Jul. 2015].

Pawson, J. (1998). *Minimum*. London: Phaidon Press.

Perez, A. (2010). AD Classics: Fallingwater House, Frank Lloyd Wright, in: *ArchDaily* [online]. Avaialable at: http://www.archdaily.com/60022/ad-classics-fallingwater-frank-lloyd-wright/ [Accessed 11 Dec. 2015].

Pfeiffer, B.B. (2007). *Frank Lloyd Wright.* London and New York: Taschen, Hohenzollernring and Koln.

Polyzoides, S. (2012). Introduction to "The Mexican Patio House.", in: Moule and Polyzoides Architects and Urbanists [online]. Avaialable at: http://www.mparchitects.com/site/thoughts/introduction-mexican-patio-house [Accessed 26 Jan. 2016].

Postiglione, G. (2004). *100: One Hundred Houses for One Hundred European Architects of the Twentieth Century.* London and New York: Taschen.

Riba Architecture (2013). *RIBA Royal Gold Medal Winner Peter Zumthor in conversation with the RIBA's Tony Chapman*. Chapman, T. (Prod.). Available at: https://www.youtube.com/watch?v=UuhB6OGXNcY [Accessed 15 Jan. 2016].

Richardson, M.A. (2014). Andrea Palladio: Italian architect, in: *Encyclopedia Britannica* [online]. Available at: http://www.britannica.com/biography/Andrea-Palladio [Accessed 25 Jan. 2016].

Scavuzzo, G. (2010). *Compositions For Chromatic Keyboards: Colour and composition in Le Corbusier's works.* Presented at the Colour and Light in Architecture - First International Conference 2010. Available at: https://www.academia.edu/3383554/Compositions_For_Chromatic_Keyboards_Colour_and_composition_in_Le_Corbusiers_works [Accessed 9 Dec. 2014].

Sennott, S. (2004). *Encyclopedia of Twentieth Century Architecture.* London: Taylor & Francis.

Shields, J.A.E. (2014). Luis Barragán, in: *Collage and Architecture*, pp. 218 – 229. New York: Routledge Publications.

Siza, A., Fernandez, A.T., Barragan, L., Júlbez, J.M.B. (1995). *Barragán: Obra Completa*. Madrid: Tanais Ediciones.

Smienk, G., Niemeijer, J. (2011). *Palladio, The Villa and the Landscape.* Basel: Birkhauser.

Smith, D.W., 2013. Phenomenology, in: Zalta, E.N. (Ed.), The Stanford Encyclopedia of Philosophy.

Sveiven, M. (2010). AD Classics: Church on the Water by Tadao Ando, in: *ArchDaily* [online]. Available at: http://www.archdaily.com/97455/ad-classics-church-on-the-water-tadao-ando/ [Accessed 14 May 2016]

Sveiven, M., Zumthor, P. (2011). Bruder Klaus Field Chapel by Peter Zumthor, in: *ArchDaily* [online]. Available at: http://www.archdaily.com/106352/bruder-klaus-field-chapel-peter-zumthor/ [Accessed 14 Oct. 2015]

Ursprung, P. (2009). *Earthworks: The Architecture of Peter Zumthor*. Essay for the Pritzker Prize. Available at: http://www.pritzkerprize.com/sites/default/files/file_fields/field_files_inline/2009_essay_0.pdf [Accessed 14 Nov. 2015]

Weston, R. (2004). *Plans, Sections and Elevations: Key Buildings of the Twentieth Century.* New York: Laurence King Publishing.

Williams, K., Giaconi, G., Palladio, A. (2003). *The Villas of Palladio.* New York: Princeton Architectural Press.

Wittkower, R. (1971). *Architectural Principles in the Age of Humanism,* 3rd edition. London: Academy Editions.

Wright, F.L. (1970). *The Natural House.* United States of America: Plume Books.

Zumthor, P. (2006). *Thinking architecture.* Basel, Swizterland: Birkhäuser.

Zumthor, P. (2006b). *Atmospheres: Architectural Environments - Surrounding Objects*. Basel and Boston: Birkhäuser,

Zumthor, P., Merin, G. (2013). Peter Zumthor: Seven Personal Observations on Presence In Architecture, in: *ArchDaily* [online]. Available at: http://www.archdaily.com/452513/peter-zumthor-seven-personal-observations-on-presence-in-architecture/ [Accessed 14 Nov. 2015]

CHAPTER 7

PAINTING AND SCULPTURE CASE STUDIES

Introduction:

In the present chapter seven painting and sculpture case studies are analysed: 7.1. analyses William Turner's (1789 – 1862) and his emotional landscapes, 7.2. analyses Edward Hopper (1882 – 1967) and his atmospheric emotionally charged spaces, 7.3. analyses Joseph Albers (1888 -1978) and his ordered colour uses, 7.4. analyses Mark Rothko (1903 – 1970) and his emotional creations, 7.5. analyses Anselm Kiefer's (1945 -) and his painting as essence, 7.6. analyses Donald Judd (1928 – 1994) and his three dimensionality objects and lastly 7.7. analyses James Turrell (1943 -) and his artistic architectural (and sculptural) spaces.





Photo 1: William Turner self portrait, 1799, Oil on canvas, 743 x 584 mm; Source: https:// en.wikipedia.org/wiki/J._M._W._Turner#/media/File:Turner_selfportrait.jpg; Pjoto 2: Norham Castle, Sunrise, about 1845, J. M. W. Turner, oil on canvas; Source: http://www.getty.edu/art/exhibitions/turner/;

PLATE 64: WILLIAM TURNER

6.1. WILLIAM TURNER

(1) artistic evolution, context and characterization

… Artistic Evolution

J. M. W. Turner's (1775–1851) artistic evolution is characterized by a growing journey towards abstraction. His first stage of work began with 'pure representation', be it in drawings or in paintings (realistic depictions of landscapes and architecture elements), but over the years he developed his own style and his style matured into abstraction. It is this abstraction that established Turner as a great influence to the future artistic movements to come, such as the impressionists. It is during the 1880's that his paintings suffer this transformation, so it is commonly stated that he produced his most important work after the age of sixty, in the last fifteen years of his life. The common theme of the landscape is prevailing throughout his artistic journey, however the means of understanding it and expressing it differ greatly. In Turner's early paintings he painted Romantic subjects, with a precision and attention to detail of both architectural and natural subjects that varied in theme (historical, marine, mountains or architectural settings). When compared to his later years, the subjects and the means of expression become more abstract and there is a growing attention to light and to colour, becoming more luminous and atmospheric. In his later years, besides the atmospheric qualities of the landscape and the emotions that it granted he also became interested in movement, and in trying to capture that movement in motion. The author Eric Shanes (2004) in his book Turner, summarizes: '' (…) if anything his meanings became more complex and his handling looser as time went by.'' (Shanes, 2004, p. 27).

… Artistic Context

J.M.W. Turner (1775 - 1851) is considered to belong to art movement Romanticism (attention to the landscape and to nature with a focus on emotion and imagination). Although Turner might be categorized as a Romantic painter, he went beyond Romanticism in his personal quest as an artist, exploring themes and subjects that he believed in and bringing in the way for artistic movements that followed (such as the tendency towards abstraction and the love for light and impressions of the impressionists). As the author Baker (2014) writes: '' Turner was an innovator who has been hailed as a forerunner of modernist abstraction. '' (Baker, 2004).

> **Romanticism Evolution:** Romanticism was first defined as an aesthetic discipline in literary criticism around 1800, expanding as an artistic movement in Britain and France in the beginning of the nineteenth century. Author Kathryn Calley Galitz, in her article *Romanticism* (2014) for the Heilbrunn Timeline of Art History, explains that it had an emphasis on imagination and emotion, and '' (…) emerged as a response to the disillusionment with the Enlightenment values of reason and order in the aftermath of the French Revolution of 1789.'' (Galitz, 2000). As such, Romanticism turned to nature and to the landscape, '' (…) with its uncontrollable power, unpredictability, and potential for cataclysmic extremes.'' (Galitz, 2000), as an 'escape' to the rigidity of the enlightenment thought and reason led methodologies. Thus, there is a parallelism with the Sublime theories and aesthetics of the eighteenth century. Another central theme to Romanticism, is the assertion of the originality of the artist. The author further explains: '' Along with plumbing emotional and behavioural extremes, Romantic artists expanded the repertoire of subject matter, rejecting the didacticism of Neoclassical history painting in favour of imaginary and exotic subjects.'' (Galitz, 2000), The main artists of the Romantic movement are considered to be Théodore Gericault, John Constable and J.M.W. Turner.

… Artistic Characterization

His work can be generally characterised by broadly applied 'atmospheric' washes of paint, a distinct vision for 'abstracted atmospheres' (a unique portrayal of the 'natural' world), a unique use of colour, a focus of light as a quality and the underlying search for a timeless landscape as created by God. In order to do so, Turner's work also relies in the inherent harmony and balance, through the use of composition, abstract forms and colour. This connection to spirituality deeply characterised his work: he portrayed the natural world unaltered by man, untainted, full of its own individual force, energy and vitality; this as an 'evidence of the power of God' was pursued in all his creations.

Also, his fascination by light, is a 'reflexion' or signifies the 'emanation of God's spirit'. This is the reason why his later works led towards abstraction, concentrating exclusively on the 'light' and the 'radiance' of the skies. Turner's landscapes strived for an expression of this 'spirituality' in the world: rather than expressing an 'optical phenomena'[467] there was a basic spiritual and metaphorical motive and force. At the time, his works were both highly criticized and also well acknowledged. This led John Ruskin to be the first defender of Turner's paintings, (when he was being criticized by his contemporary peers). Ruskin defended his 'innocence of the eye' and his 'childlike' manner of understanding the world, that preceded an understanding of reason and that lie in an intuitive and harmonious contemplation, guided by a spiritual vision[468]. It is this 'innocence of the eye' guided by a spiritual vision that deeply distinguishes Turner's work from other creations of his time and the years that followed and it is this unique quality that characterizes his work that Ruskin rose to defend. The author Bockemuhl (1994) claims: '' (…) it is this power to change our vision that renders Turner's paintings a puzzle even today.'' (Bockemuhl, 1994, p. 6).

(2) creative process, methodology, techniques and characteristics

… Creative Process and Methodology

Turner's creative process was led by his vision, imagination and instinct. Although his work initially relied on a careful apprehension of reality (focusing on perspective, order, and geometry principles) these systems became instinctive to him, and sustained his work in the background allowing for a more free means of expression to emerge. On a first instance, Turner's work was always dependent on understanding and synthesizing reality to its most primal conditions, using drawing as vital of this initial process. Turner sketched on location in his small notebook with a pencil, aiming to capture the overall feel and atmosphere of the landscape he was living and experiencing.

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[467] Furthermore: '' (…) Turner was striving for expression of spirituality in the world, rather than responding primarily to optical phenomena.'' ("J. M. W. Turner," 2014).

[468] **On Turner's defence:** Ruskin claimed: '' '' The whole effect of painting from the technical viewpoint is based on our ability to acquire once again that state which one could call the innocence of the eye, in other words a way of looking at things in a childlike manner, through which one perceives spots of colour as such without knowledge of their meaning (…) ''. '' (Bockemuhl, 1994, p. 6). Author Baker (2004) explains that '' Ruskin's argument for Turner's genius ultimately grew into the five-volume Modern Painters (published 1843–60). **''** (Baker, 2004), where he further emphasized his tribute to Turner: '' 'We have had, living amongst us and working for us, the greatest painter of all time.'.'' (Shanes, 2004, p. 28). In the same way, on the importance of Turner's work, Birren (1986) claims: "To me there is little doubt that Joseph Mallory Turner (1775 -1851) was one of the greatest colourists of all time ". (Birren, 1986, p. 8).







WATERCOLOURS



SKETCHES



REALISM



NARRATIVE

Photo 1: The Palais de la Nation, Brussels 1824, Pencil on white wove paper, 78 x 118 mm; Source: http://www.tate.org.uk/art/research-publications/jmw-turner/joseph-mallord-william-turner-the-palais-de-la-nation-brussels-r1174867; Photo 2: St George's Church in Right Distance c.1805–6; Source: http://www.tate.org.uk/art/artworks/turner-shipping-off-gravesend-st-georges-church-in-right-distance-d05794; Photo 3: Venice: Looking across the Lagoon at Sunset 1840; Source: http://www.tate.org.uk/art/research-publications/jmw-turner/essays-g2010028; 4: Monastery and Tomb at Palazzola 1819 from the Albano, Nemi, Rome sketchbook; Source: http://www.tate.org.uk/art/images/research/2021_10.jpg; Photo 5: A Street in Margate, Looking Down to the Harbour, 1784; Source: http://www.tate.org.uk/art/artworks/turner-a-street-in-margate-looking-down-to-the-harbour-tw1392; Photo 6: Burning of the Houses of Lords and Commons, October 16, 1834, exhibited 1835, J. M. W. Turner, oil on canvas; Source: http://www.getty.edu/art/exhibitions/turner/;

PLATE 65: WILLIAM TURNER: CREATIVE PROCESS AND EVOLUTION

The author Bakes (2004) notes that: '' Although Turner would later develop an extensive visual vocabulary that ranged far beyond precise renderings, first-hand observations remained crucial to his working method.'' (Baker, 2004). This visual, in the field, exploration and synthesizing, was the basis of all of Turner's work. After that initial stage of sketching in location, when Turner returned to the studio, he would then use these drawings and sketches as a basis for the work, and convert them into watercolours or oil paintings. Even if a long time had gone by, Turner would return to his drawings for inspiration, even for the most abstract and 'imaginative works'[469]. The work would then evolve in a complex way, in search for the emotion and composition Turner was looking for. For one work, there could be lots of different stages, and Turner was known for working on more than one creation simultaneously, going from one to the other to avoid waiting for paint to dry or to avoid waiting for inspiration.

In regards to colour, his creative process was also led by instinct and by an emotional drive. Colour was a central theme that led the work development; as Brown (2012) points out: '' (…) he was fascinated by the interplay of aerial colour (created by the operation of light) and material colour (made by pigments). (…) .'' (Brown, 2012). As such, he experimented with colours freely, and was interested in the contrasting emotive powers of each of the end of the spectrum, and used high contrasts in an intuitive way. He used new colours that became available in the market, and liked using them profoundly in his creations. In general, his methodology was inconsistent, complex, experimental, multi-layered and intuitive. It was the cornerstone for Turner's creations, and the methodology itself echoes in the final work.

… Techniques

Turner didn't rely on existing techniques but instead invented new techniques to make vision come alive. Turner's watercolour paintings deeply influenced his techniques in oil painting. Baker (2004) explains: '' Turner adapted his watercolour methods to oil paintings, which he built up from foundations of colour to create uniquely evocative shapes and glowing forms. '' (Baker, 2004). The fluidity of the watercolours, their colours and their transparency were all attributes that Turner brought into his oil paintings: he started to use oil paint in a translucent and almost transparent way. This technique was a great characteristic of his style; a new technique that allowed him to create the atmospheres he envisioned. He began using broad-brush strokes, both thin and thick, to make the skies and clouds look luminous and expressive. This is considered to be a radicalism of technique, on both watercolour's and oils paintings. Further, Turner's watercolour technique for example, wasn't restricted to one specific type, but used multiple techniques at once to achieve an 'expressionist' feel and atmospheric glow. Baker (2004) explains that '' To create details, Turner scraped, blotted, and wiped the paint while it was still wet, and scratched into or drew on dry surfaces.'' (Baker, 2004); these systems were also used in his oil paintings Another technique used by Turner in his watercolours that was transposed to his oils paintings, was the

[469] '' Turner relied on these on-site sketches to inform even his most highly imaginative paintings. '' (Baker, 2004).

use of the colour white of the paper (applying thin layers so that that whiteness can come through, and using it for highlights) and in the oil paintings, the use of the white background[470].

Author Shanes (2004) believes that he was equally sure on both medias and '' (…) that certainty was acquired from the practice of watercolour in the 1790's when he spent so many hours tinting and colouring architectural elevations and views. '' (Shanes, 2004, p. 8). As such, both techniques in both media had their advantages and characteristics and Turner sometimes used to explore the same subject on both medias simultaneously[471].

Besides inventing techniques, Turner also found that combining multiple techniques in one single creation allowed for a richer and deeper creation in emotion and meaning. His techniques (just liked his choices of colour and form) were in constant flux and change, responding instinctively and emotionally to the creative work, but rooted in his 'practical experience' as is summarized by author Brown (2012)[472]. As such, his technique can be characterized by two opposing extremes of restraint and recklessness, however Brown (2012) further accentuates: '' If the gulf between them seems unbridgeable, Ruskin's perceptive comment that Turner painted in colour but thought in light and shade suggests a common denominator. (Brown, 2012).

… The Use of Colour Principles and Harmony Principles

According to Faber Birren (1986), it was this free approach to colour that allowed for a luminosity, never before attained, to emerge in his work; this free independent thinker approach, guided by 'foresight', memory and imagination, allowed his advances in colour to be greater that than the movements that followed (such as impressionism, *(see Glossary)*). Turner's artworks, Birren affirms, meant something and portrayed something, through the use of colour, setting the path for an 'abstractionist' understanding, whilst being fuelled by storytelling and mythology[473]. This unique way of using colour is also described by John Gage (1999), for him Turner's intentions with colour were 'coloristic', using colour to discriminate between objects[474].

Gage also considers that by 1820, Turner started to organize his work through colour (an example is his watercolour 'colour-beginning'), creating a system that divided the surface into large areas

[470] Reference to: '' Just as he laid watercolour thinly, leaving the paper bare or exposing it to give highlights or reflections, so he brushed oils over an off-white preparation on canvas or board. The results show a new feeling for naturalism and the cool and luminous tonality that earned him the description of 'white painter'.'' '' (Brown, 2012).

[471] Reference to: '' No sooner, however, had he brought watercolour to a level of equality with oil than Turner returned to exploring its own distinctive qualities, transparency and capacity for intimacy and freshness. Working in both media on the same subjects at the same time. '' (Brown, 2012).

[472] Reference to: '' If Turner's media and techniques were in constant flux, in response to the task in hand or to actual or emotional experience, his choice of colour was no less various. It was instinctive and emotional, learned and theoretical, but above all pragmatic and rooted in practical experience.'' (Brown, 2012)

[473] **Birren on Turner's use of colour:** Faber Birren (1986) in his book *Colour Perception in Art,* explains that Turner's art and achievements influenced greatly most 'colour and art forms' that followed to the present day. Turner possessed, what Birren describes as, 'foresight into a new perceptionism'; this vision of 'foresight' for Birren was much greater than that of the other art movements that followed (such as impressionism, neo-impressionism, post-impressionism, expressionism or op art). For Birren, Turner is an independent thinker in 'colour in art', granted with a ''fantastic memory and imagination.'' (Birren, 1986, p. 8). By mixing colours freely, he "(…) anticipated the fascination of the impressionists and the neo-impressionists with additive and optical colour mixtures." (Birren, 1986, p. 9). Furthermore, Birren asks and answers: "How? By letting pure clean tints blend with subtle greys, a device that went over and beyond impressionism into modern concepts of perceptionism in art." (Birren, 1986, p. 9).

[474] John Gage, in his book *Colour and Meaning* (1999), further explains Turner's uniqueness in his colour approach and his methods and considerations for colour harmonies. ''Turner handled colour in quite a different way.'' (Gage, 1999, p. 163), he claims; moreover, Turner used colour in a broad and fluid way, to 'discriminate' between the different objects, and not to unify them as the impressionists; as such, Turner's intentions were in fact 'essentially colouristic', but not in an abstract way, the author summarizes.

of distinct colour, both pure and bright; by the 1830's the system had become his procedure in both oil paintings and watercolours. These colours were mostly the three 'subtractive' primaries colours (yellow, red and blue), ''(…) which Turner felt were an epitome of the whole visible creation.'' (Gage, 1999, p. 165); and they were associated to their innate meanings (yellow represented the medium (light), red represented the material objects, and blue the distance (air) of the landscape); these associations could echo also the natural time of day: morning, evening and dawn, respectively. According to the author, this is associated, just like other artists of his time, with the continuous search for the ''(…) irreducible number of elements in nature and art.'' (Gage, 1999, p. 165). Furthermore, this interest in the primaries and harmonies of colour as the 'beginning' is also echoed by his belief in the 'underlying geometrical simplicity of forms'. For Turner, colours were to be united, associated and understood according to their traditional functions of value, namely their attributes of lightness and darkness, and specific representation of day and night – contrasts and values. Turner's association of colour to the symbolic qualities they possess is a result of his view of colour and light as substances.

Also, Gage (1999) continues, Turner's use of colour can be understood not only as an 'objective' understanding (such as symbolic nature associations) but also as a 'relative' value and medium, associated with the relativity of vision, and with the notion ''(…) that contrasts and juxtapositions may work miracles with perception.'' (Gage, 1999, p. 168). With his painting progression and technique development, Turner grew more and more attentive to the subjective aspects of colour and also to the ways by which his paintings and his artworks could be viewed, perceived, assimilated and understood, both physically and intellectually. Gage explains that in his studio, he possessed a dark ante-room, and invited the guests to dwell there for a few minutes before coming into contact with the paintings in the exhibition room, for ''(…) 'the bright light outside would have spoilt their eyes for properly appreciating the pictures and that to see them to advantage an interval of darkness was necessary.'' (Gage, 1999, p. 168). Colour thus, in Turner's work is understood for its polarizing and symbolic qualities, expressing contrast of darkness and light in a balancing composition and complex array combination of colours. But also, as a vital key that directly influences perception in its complex combination of sensitive apprehensions and intellectual comprehensions.

(4) inspiration, influences, conceptual framework and themes:

… Influences

Turner was deeply influenced by various sources that shaped his way of both understanding and of creating art. These sources can be organized by the (a) Romantic Artists and other Art Masters (that influenced his creation and the making process), the (b) Art Theory that defines the influences on his conception of art, and lastly (c) Nature itself as a result of his travels and quest for the properties of the landscape – his greatest influence.

… (a) Romantic Artists and Art Masters

Turner was deeply influenced by the master painters that came before him, specially the by landscapists and history painters of the sixteenth and seventeenth centuries and the English Romantic

landscape artists such as John Robert Cozens and Richard Wilson (1714-1782). When John Robert Cozens died and Turner was hired to do reproductions of his work, his work had an even deeper influence on him. Cozens's influence on Turner was mainly by his use of watercolours to create his luminous atmospheres and the dramatic effects of light of his oil paintings. Among some other artists who influenced his early works author Eric Shanes in his book Turner (2004) says that these were multiple: Thomas Gainsborough (Dutch-inspired landscapes that influenced Turner with mood) , Henry Fuseli, Philippe Jacques de Loutherbourg (influenced the way that Turner painted his figures) and Michael Angelo Rooker (water-colourist with a careful control of tone that deeply influenced him), Henry Fuseli (and his heroic style of representing the human form) and Richard Wilson. Likewise, he was deeply influenced as a young man by Piranesi's architectural 'fantasies' and '' (…) and copying works by Renaissance and Baroque masters.'' (Baker, 2004). Around 1799, Turner was again deeply influenced by Claude Lorrain and studied his paintings and books carefully. He used visual metaphor (something standing in for something else) and this was something that Turner greatly admired; in this way, Lorrain was probably, (according to the author Shanes (2014)) the greatest visual influence on Turner, and '' (…) had a very profound effect upon his expression of meaning, just as it determined the development of his mature style and imagery.'' (Shanes, 2004, p. 4). Turner, as a lover of art, was greatly influenced by all the master artists that came before him and spent time studying at the Louvre, viewing and studying the those artists whom he admired and respected. Baker (2004) further lists some of these other influences: '' The legacies of Poussin, Raphael, Titian, and others are evident throughout his oeuvre. Turner specifically claimed Raphael and Rome as his inspirations in Rome, from the Vatican. Raffaelle, Accompanied by La Fornarina, Preparing His Pictures for the Decoration of the Loggia (1820; Tate, London).'' (Baker, 2004).

… (b) Art Theory Influences and Colour Theory

From Turner's mid-teens onwards, he was greatly influenced by Sir Joshua Reynolds (related to the Royal Academy) in his thinking about art; Reynolds sustained an idealizing tradition of painting as a 'poetics' (thus should be associated with the universals) that should be related to the human condition (the main aim of all high art); so, the artist should both use his imagination in creating 'ideals', and learn from studying the classics[475]. Although Turner disagreed with Reynolds in the use of human form, they agreed in the purpose of art as one thing: the creation of beauty for humanity.

Besides Reynold's influence, Turner, as his life progressed, became increasingly interested in other art theories. Shanes (2004) notes that around the 1800's he became interested in the notions of the Sublime, the production of '' (…) sensations of grandeur, mystery and even horror through the reduction

[475] **Reynold's views:** Reynolds, the author Shanes (2014) explains, had an idealizing tradition of academic art as it had evolved since the Italian Renaissance, as a doctrine of 'poetic painting' '' (…) which held that painting is a humanistic discipline akin to poetry, and that it should concern itself not with the arbitrariness of experience but with universals of behaviour and form. '' (Shanes, 2004, p. 3). Reynolds also believed that landscape painting was a 'simple-minded genre' because it didn't portray the human condition, which was the main aim of all high art. However, he believed that the artist, instead of leaving the scenery to be captured to chance (depending on weather and circumstances) should create his own fiction like narrative of an ideal scenario, like Claude Lorrain. Shanes (2014) explains that Lorrain: '' (…) had synthesized into fictive and ideal scenes the most attractive features of several places as viewed in the best weather and lighting conditions, thus transcending the arbitrary. '' (Shanes, 2004, p. 4). This synthesizing view sustained by Reynolds was adopted by Turner. Reynolds also influenced Turner in yet another way; he believed that studying the classics and the master artists of the past was a good way of absorbing the qualities that should belong to fine art, and Turner did in fact 'emulate' the great masters of the past, from the most varied genres and traditions: '' Throughout his life he emulated the pictorial formulations of a vast range of past (and present) masters, from Titian, Raphael and Salvator Rosa in the Italian school, to Claude, Nicholas Poussin and Watteau in the French school, to Rembrandt, Cuyp, van de Velde and Backhuizen in the Dutch school, to any number of his contemporaries in England.'' (Shanes, 2004, p. 5).

of the spectator to physical insignificance.'' (Shanes, 2004, p. 13). This fascination led to creating landscapes that place the observer at a low viewpoint (to create a sense of being over-whelmed by the scale and grandeur) and an increase in darkness and tones to create drama. With time this drama was toned down in contrast and accentuated by colour, creating grandeur and mysteriousness in another way. Sublimity was a vehicle that should be used by being combined with poetry, in order to arrive at a more powerful creation. But overall, it is the 'poetic painting' that prevails, in a humanistic way. These theories of art were greatly expanded on, when Turner became a Professor of Perspective at the Royal Academy in 1807, studying art theories broadly[476], and getting involved with the study and theories of colour (specially the colour theories of Goethe (1840)). In Goethe (1840) he found explanations of colour as it related to the environment and to the generation of sensations[477]. As a result of this colour theory, a few changes occurred in Turner's application of colour, specifically the more intense application of primary colours and a brighter sense of luminosity. Turner's atmospheres reflect the conditions emphasized by Goethe, and his 'free' use of colour derives partly or greatly, by this understanding; also, his free-formed forms reflect the perceptual condition of a hazy atmosphere that diffuses edges and blends the atmosphere with the elements there represented.

… (c) Travels and Natural Landscapes

It was the natural setting of the English landscape that firstly had a major influence on Turner. He travelled through England, Wales and Scotland in search of subject themes that inspired him. These early tours within Britain were during the 1790s. He was also very motivated by the landscapes of Europe, travelling to Switzerland and Germany to find inspiration in the naturally dramatic settings of the Alps. Venice, too, shaped his views. Visiting Italy when he was forty-four for the very first time, in 1819; this visit resulted in twenty-three sketchbooks with drawings and notes. His visit to Venice had been attracted by the Venetian artists such as Titian, Tintoretto and Canaletto and the poet Byron that was living there since 1816. He re-visited Venice again in 1833, (fifty eight years old at the time), and then again in 1840. His visit to Switzerland and France resulted in over 400 drawings that he later used for his watercolours and oil paintings. The author Bakes (2004) notes: '' Over the course of five decades, he filled hundreds of sketchbooks with visual records of scores of tours through England, Scotland, and Wales, and around the Continent to Belgium, France, Holland, Italy, the Rhineland, Switzerland, and elsewhere.'' (Baker, 2004).

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[476] **Turner as a Professor:** In 1807 when Turner accepted the position of Royal Academy Professor of Perspective, until 1811 (when he delivered his first lecture) he embarked upon a rigorous study programme, reading over 70 books on art and aesthetics. He taught until 1828. As a result, author Shanes (2004) explains that Turner became increasingly more sensitive, or, a sense of 'heightened sensitivity' that deeply influenced his art. It was due to these classes that Turner also became involved with the study of colour theory, and in around 1818, he introduced the subject to his class. Shanes (2004) explains: '' Turner's interest in the theory of colour had been stimulated by his investigation of the science of optics undertaken in connection with the perspective lectures.'' (Shanes, 2004, p. 23).

[477] **Goethe's influence:** One of the author's Turner was greatly influenced by in regards to colour theory was Goethe (1840) and his studies on colour and its correlation with the atmosphere were a great influence on Turner, even naming one of his paintings as 'Light and Colour: Goethe's Theory' (1843). Goethe (1840) claims that "A single colour excites, by a specific sensation, the tendency to universality." (Von Goethe, 1840, p. 174). Goethe (1840) also emphasized the importance of the atmosphere and its influence on colour; space, for him, is perceived as an empty space, filled with a kind of transparent medium that exists in it (either air, gas, water, or another element); these elements, being pure, light transmitting, and semi-transparent transform and empower different ways of perception; the sun for example, says Goethe, varies in colour according to the atmosphere it finds itself in, according the atmospheric vapours that fill it.

… Conceptual Framework and Themes

Besides the originality of techniques, it is Turner's original subject matter that deeply qualifies his work. The author Baker (2014) on his variety of themes conveys: '' Demonstrating mastery of watercolour, oil painting, and etching, his voluminous output ranges from depictions of local topography to atmospheric renderings of fearsome storms and awe-inspiring terrain.'' (Baker, 2004).

Although the themes were varied in nature, it was the atmospheric quality of the natural setting across those different scenarios, that profoundly inspired him and guided his quest and focus: to capture the changing light, to define the shades of colours and to apprehend the mood of both the landscape being defined and the emotions that it granted him. Bakes (2004) concludes: '' Turner believed that landscapes could convey a full range of artistic, historical, and emotional meanings, and presented himself as an heir to the great history painters of the past.'' (Baker, 2004). Turner was attracted to multiple themes that defined his view of the landscape: the subjects of shipwrecks, fires (such as the Burning of Parliament in 1834), natural catastrophes, natural phenomena (sunlight, sunsets, rainbows, storm, rain, and fog), natural landscape topography (lakes and mountains), the immense power of the sea (as seen in The Slave Ship (1840)), architecture elements (cathedrals or cities at a distance). Therefore, Turner wasn't interested in painting the natural landscape in an 'ordinary' moment, but instead was deeply interested in capturing dramatic moments, intense moments and even rare moments, that were unique, extraordinary and exquisite in intensity, content and meaning. In general Turner was also profoundly fascinated with themes derived from History, Narratives, Mythology or Biblical, and these themes found expression with the themes of the landscape. Besides these recurring themes, Turner was also stimulated by some specific locations; the city of Venice, for example, became a recurring theme of his late work, in both oils and watercolours.

… (a) Atmospheric Landscapes

Turner's representations of nature, landscapes, his atmospheric representations are intense modes of expressions/ emotions: the landscape is intense in the sense that it possesses a life of its own. He uses the atmospheres and the landscapes in order to achieve a balance between idealistic nature and imagination and reality. Turner's landscapes are endowed with a series of properties that prevail throughout all of his creations. Firstly, his works portray landscapes in the sense that they portray nature: the ocean, the mountains, boats at sea, sunsets, skies, horizons and seascapes in general. Secondly, although rooted in reality (with those specific themes), he leads towards abstraction, trying to define an intangible atmosphere, or an atmospheric impression that interprets the essence of the 'subject' he portrays. This balance between the physical aspects of the represented reality and the apprehended perceived abstraction (emotional and psychological) characterize all landscapes. To achieve or create that ''intangible'' spirit of the moment, or that 'aura', Turner relies on the use of colour and the use of specific abstract forms (composition).

… (b) The Presence of Man

One theme or conceptual framework that is always present is 'Man', in an abstracted way: the beauty of the landscape – representation of nature – is found always with the balance of the presence of

man. In almost all of his works, he represents the ‘’humanized’’ landscape, where ‘man’ and ‘nature’ are either at balance or in conflict (a prevalence of nature over man, or the opposite, man’s force imposing over nature). In order to portray this balance and harmony between man and nature the paintings possess references that are repeatedly used: the presence of architectural elements in the horizon, the presence of boats in the endless ocean, the presence of footsteps on the sand of the sea shore and even in paintings, where ‘man’ and his creations are absent, there is always a reference to man, in a more subdued way (such as man being the observer). This defines the most basic kind of ‘harmony’, both symbolically and metaphorically: man living in tune and at peace with nature, and man interacting with nature in its most intense modes of expression. In some cases the presence of man is subdued into nature, and by nature; nature’s forces are stronger and more brilliant and more powerful than the ‘infinitely’ little representation of man (sublime). Man, here, is a witness to the marvels of nature, a small participator to the forces of the universe.

The architectural elements constructed by man are brilliant and beautiful, because they are echoes of the geometries and the harmonies of the skies, the heavens and the solidities of the earth. By this means, the presence of the architectural elements (are metaphorically, symbolically, and existentially) places in the ‘’horizon line’’, at a distance, sitting between heaven and earth, between the celestial bodies of the heavens, and the bodies of matter of the earth.

… (c) Capturing Emotion and Movement

Baker (2004) writes: ‘’ In addition to narrating tales from the distant past, Turner also found subjects in the world around him. Interested in expressing grand emotions, he was particularly attracted to sublime or awesome aspects of contemporary life. ’’ (Baker, 2004). Turner, towards the later stage of his work, became interested in capturing movement along with emotion. For this he turned to the subject of modern technology: an example is the passing age of sail ships that were soon to be replaced by steam-powered vessels or the emphases on the railway i*n Rain, Steam, and Speed-the Great Western Railway* (1844)..

(4) underlying theories and ideals

… Personal cosmology and art beliefs

… (a) Selective Analysis and Imagination: Idealism

Following the influences of both Claude Lorrain and Sir Joshua Reynolds, Turner adopted a selective approach to the landscape: choosing what to omit and what to represent, and how best to portray what he was observing; more, he combined elements from different places into one single painting or creation, optimizing and shaping whatever it was he wished to portray freely. On this issue, Turner himself claimed: ‘’ 'To select, combine and concentrate that which is beautiful in nature and admirable in art is as much the business of the landscape painter in his line as in the other departments of art.'.’’ (Shanes, 2004, p. 4).

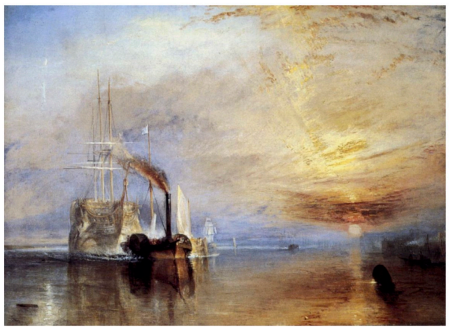








Photo 1: The Fighting Temeraire, 1839, Joseph Mallord William Turner; Source: http://www.wga.hu/html_m/t/turner/2/201turne.html; Photo 2: Rain, Steam and Speed (1844), by Turner; Source: http://www.artble.com/imgs/c/9/3/58154/rain_steam_and_speed_the_great_western_railway.jpg; Photo 3: Snow Storm—Steam-Boat off a Harbour's Mouth, exhibited 1842, J. M. W. Turner, oil on canvas; Source: http://www.getty.edu/art/exhibitions/turner/; Photo 4: William Turner, Yacht Approaching the Coast; Source:http://artuk.org/discover/artworks/yacht-approaching-the-coast-202443

PLATE 66: BETWEEN REALITY, IMAGINATION AND ABSTRACTION (NOTORIOUS WORKS)

Turner believed in the power of the imagination, to select, analyse and combine, in order to define an artistic creation that could speak to the imagination and not only to the eye, as he himself claimed: ‘’ ' it is necessary to mark the greater from the lesser truth: namely the larger and more liberal idea of nature from the comparatively narrow and confined; namely that which addresses itself to the imagination from that which is solely addressed to the eye.'.’’ (Shanes, 2004, p. 4). In this process, memory was an important aspect for Turner, for memory was selective and could synthesize correctly. In order to explore what his memory remembered, Shanes (2014) says that he often drew the same subject over and over again, selecting the essential from the unimportant. Turner’s art then, his belief, was a balance between understanding appearances and natural sceneries and imaginative worlds.

His drawings are a good example of this type of selection in practise; through the drawing he aimed to capture only the rough expression of the forms. Later, in his studio, he would then paint a watercolour or an oil painting filling in the rest of the information from both memory and imagination. The author Baker (2004) gives another example: ‘’ The Grand Canal, Venice, exhibited at the RA in 1835, combines multiple viewpoints to present an impossible view of several Venetian landmarks.’’ (Baker, 2004). Above all, Turner was led by his imagination, his vision and an idealistic (platonic) understanding of the world.

… (b) Poetic Painting and the Search for Metaphysical Fundamentals

Turner, as a result of the traditional ‘poetic painting’, inspiration defined by Reynolds as a major influence, searched for the fundamentals of life and nature. Painters, (in the Reynolds traditions and in Turner’s) needed to express these ‘fundamentals’, and ‘’ (…) attempt to apprehend 'the qualities and causes of things', as well as to synthesize forms so as to make them approximate to 'imagined species' of archetypal form or 'Ideal beauties' (the three foregoing quotations are from Turner himself).’’ (Shanes, 2004, p. 3). From very early on his life, Turner then had an underlying understanding that forms possessed a metaphysical existence that could be captured and expressed. His ‘abstractions’ then, where merely an attempt ‘’ (…) to represent the metaphysical power embodied in light, if not even the divinity itself.’’ (Shanes, 2004, p. 4). From late 1790's onwards, Turner frequently expressed himself with drawings from literature and poetry his subjects and themes: ‘’ (…) he filled many of his pictures with all kinds of 'poetic' devices such as visual metaphors or allegories, allusions, puns and similies.’’ (Shanes, 2004, p. 3).

… (c) Creating Pictorial Meanings: Poetry

Author Shanes (2014) remarks that in 1798 the Royal Academy Exhibitions changed their rules and allowed artists to include quotations from poetry along with the titles of their works. Turner deeply loved this idea, and begun to analyse the interdependent roles of painting and poetry, and how both disciplines could influence and complement one another. Besides his painting, in that same year, he featured poems and quotations from writers John Milton and James Thompson. These had various aims and functions, the author continues: ‘’ (….) in some to test the ways that painting can realize and/or heighten the imagery of poetry, in others to explore the way that poetic imagery can extend the associations of what we see, and thus move us into realms of imaginative response that we cannot reach

unaided.'' (Shanes, 2004, p. 9). In the following year, Turner selected poems that were metaphorical, rich in metaphors, in order to expand the depth of the pictures with the aim of the poem and the metaphor. By: '' (…) integrating painting and poetry whilst greatly expanding the ability of visual images to convey meanings.'' (Shanes, 2004, p. 9); he used poetry as a complement to painting, in order to create a deeper meaning and reach the emotional side of people with words, expanding the visual into other realms. As a summary note, the author defends: '' This exploration of the respective powers of painting and poetry was to be of inestimable value to Turner, for he continued to benefit from his discoveries throughout the rest of his career. (Shanes, 2004, p. 9).

His general beliefs of art, Shanes (2014) explains, was fuelled by a close reading of poetry, specifically the '' (…) verse of Mark Akenside, whose long poem 'The Pleasures of the Imagination' states a Platonic idealism with which Turner completely identified, with momentous results for his art.'' (Shanes, 2004, p. 6).

(5) specific work analysis, examples and key features

… (a) Sketchbooks and Drawings

Turner used up around 282 bound sketchbooks that he used throughout his career. They vary greatly in format and materials and in the way he used them: he drew in them in pencil, chalks or ink, painted in them in watercolour and other media, and wrote in them, indoors and out. Author Brown (2012), in his article about Turner's Sketchbooks, states: '' John Ruskin observed that, 'About half, or rather more, of the entire number consisted of pencil sketches in flat, oblong pocket-books, dropping to pieces'.'' (Brown, 2012). His sketchbooks range from the most luxurious of materials and covers to the most simple and plain: sometimes they were soft-bound, other times rigid covers were preferred. Often they were made out of thick paper that allowed for the use of paints such as watercolours. Sometimes he even used proper artist paper, other times he used random stationary paper. Turner used his sketchbooks for drawing, for painting and for note taking. Some of them were devoted to one single topic, where as others were varied in content and subject. Dates and other referential information was usually only assigned in the beginning of the notebook. Brown (2012) explains: '' Often he jotted first impressions, but he also made careful studies of compositions and pictures, real, imagined or by other artists. In their substance and content the sketchbooks reflect advances in artists' materials and changes in his own working practice.'' (Brown, 2012). The drawings ranged from small annotations, to more complete drawings or watercolours. When planning to sketch outdoors, the author continues, Turner had the pages tinted with various solutions such as India ink and tobacco-water, or other mid tone washes. '' Often, however, he used the natural colour of the paper as an integral part of his design, especially when working in watercolour in the later years of his life. '' (Brown, 2012). All these drawings were terribly important for Turner, and they composed a sort of 'reference library'[478] to which he would go back to, time and time again as inspiration, reference, ideas or triggers to the imagination.

… (b) Watercolours: 'Colour Beginnings'

[478] Reference to: '' For Turner, his sketchbooks constituted a reference library of images, to source a subject or spark his imagination.'' (Brown, 2012), and to '' Turner kept all his sketchbooks as a reference library, and sometimes he would return to them as much as forty years later in order to obtain factual information for an image.'' (Shanes, 2004, p. 5).

Turner was a prolific watercolour painter. In most of them he evokes the same subjects that define his broad work: the atmospheric and emotional landscape with man made references such as boats or architecture elements. Some of his watercolours were finished works in themselves, but others (most of them) were what he defined as 'colour beginnings'; this meant that they were studies and explorations, not only for future works but valid as themselves. These works are generally characterised by broad watercolour washes on white wove paper. Turner worked on groups of watercolours at the same time, sometimes within the same sheet of paper. Author Imms (2013) writes: '' These colour studies often relate fundamentally to the highly detailed finished compositions, albeit sometimes at first sight in seemingly rather indirect or tangential ways.'' (Imms, 2013). The link between them lies not on visual connections and associations, but deeper connections such as emotional ones.

… (c) Oil Paintings

The Fighting Temeraire (1839) painted when Turner was in his sixties is considered by his peers to be one of his great paintings. It features a glowing bright sunset over a broken ship that had fought the Battle of Trafalgar being towed away. It represents the ship 'Temeraire' that played a distinguished role in Nelson's victory at the Battle of Trafalgar in 1805. Turner's main concern was to evoke a sense of loss, rather than to give an exact recording of the event. The painting is a sort of accumulation of his life's journey and knowledge, exemplifying his mastery of painting techniques (sea and sky) and his overall idealistic and metaphorical values and principles.

Rain, Steam and Speed (1844) is another painting that characterizes Turner's artistic journey towards abstraction and his overall goals and idealistic nature: the shapes on most of the canvas are more abstract and can only be vaguely recognised and there is almost no reference at all to the landscape around the 'train', creating an almost metaphysical abstract scenario. It uses strong diagonals, bold contrasts of light and dark, and expressive brushwork. This painting would influence the Impressionists 30 years later.

Author Shanes (2004) about the painting, claims: '' Five years later after painting 'The Fighting 'Temeraire' ' he again made evident his excitement over the machine-age, in 'Rain, Steam and Speed - the Great Western Railway' of 1844.'' (Shanes, 2004, p. 27). However besides his enthusiasm for the 'machine-age' it is the underlying universal and idealistic principles that make the painting such a memorable example of Turner's work.

Slave Ship (Slavers Throwing Overboard the Dead and Dying, Typhoon Coming On), 1840, is another unique work. It was exhibited at the Royal Academy in 1840 and accompanied with an extract from an unfinished and unpublished poem "Fallacies of Hope" (1812)[479]. The poem, '' (…) indicates Turner's view that all hopes of successfully defying the forces of external nature, of overcoming the contradictions of human nature, and of religious redemption, are fallacious.'' (Shanes, 2004, p. 15). It is one of Turner's most celebrated works, and is an example of Turner's fascination with movement and violence both natural and human. The painting was based on the true story of the slave ship Zong of 1781. The critic John Ruskin, was the first owner of Slave Ship.

[479] The unfinished poem "Fallacies of Hope" (1812): "Aloft all hands, strike the top-masts and belay; Yon angry setting sun and fierce-edged clouds, Declare the Typhon's coming. Before it sweeps your decks, throw overboard, The dead and dying - ne'er heed their chains Hope, Hope, fallacious Hope! Where is thy market now?" (Shanes, 2004, p. 15).

Another two paintings of reference are the pair '*Shade and Darkness - the Evening of the Deluge' and* '*Light and Colour (Goethe's Theory): The Morning after the Deluge - Moses writing the Book of Genesis'* (1843). In these companion pictures, Turner opposes cool and warm colours, as well as their opposing emotional associations. They are both inspired by Goethe's *Theory of Colours*, where he describes the emotional conditions associated to each colour spectrum. Turner also chooses the biblical passage of the Deluge (the night of the Deluge and the morning after with Moses celebrating God's Covenant with Man after the Flood.) as the subject for these ideas opposing ideas: darkness, night, drama on the one hand (the cold side of the spectrum) and colour, brightness and lightness on the other (the light side of the spectrum).

Lastly, in the painting 'Snow Storm: Hannibal and his Army crossing the Alps' (1812), which was at the Royal Academy, in that same year. The subject had intrigued the painter since the late 1790's. It is said, that Turner tied himself to the mast of a ship in order to experience the drama and the motion of the storm in the sea, to have a better visual impression of the actual event. Metaphorically, the ship in the midst of the snow storm represents mankind's hopelessness in the midst of the forces of nature.

… The Aesthetic Experience: Experiencing Turner

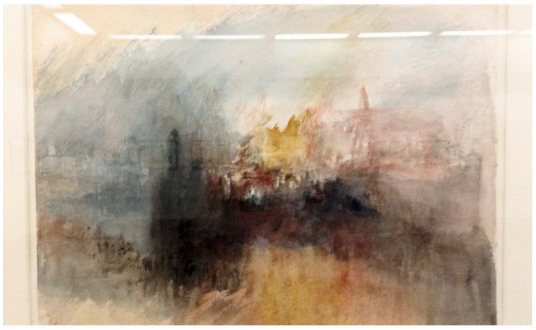
Having visited a retrospective exhibition of William Turner's life at the Tate Britain in July 2013, the following is a brief description of the overall experience.

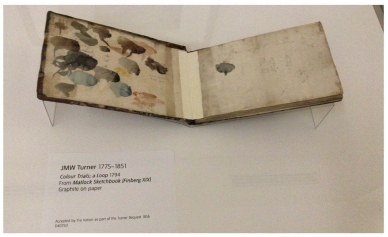
Overall, the exhibition possesses over a hundred of Turner's works, from his various stages, different themes and sizes, both in oil and in watercolor. One of the first things that called my attention (and that has made such a strong impression on ever since) was the notebooks that were scattered around the exhibition space in between the large paintings in glass vitrines. These notebooks, small in size, were either filled with drawings in pencil of landscapes, seascapes and figures, or filled with watercolor sketches and studies: colour studies, compositional studies, landscape studies and many other. The notebooks are personal, and the infinitely tiny details reflect the personality of a man that takes great care and time to execute even the smallest sketch. Each page is a record of an impression, an idea or an experiment, captured forever in a small page; some more rough and fast, others executed in a more detailed and careful manner, but in all of them, the overall idea, emotion and impression is there, to later be revised by Turner himself (as the notes on the wall of the exhibition tell me). One gets an immediate idea of the underlying quest of personal and artistic development that underlines all of Turners work.

The large body of works are mesmerizing and captivating. Some of the large paintings are representative of the earlier stages of Turner's work, whereas others, belong to his later more abstract phase. Each work, independently of it's size, tells it's specific story, capturing it's own world and immersing us in what appear to be a timeless conditions: places that have no time and no specific location, but that capture the abstract nature of the human condition and of the natural world through archetypes: shadows, light, colors, abstracted forms, boats in the horizon, rock formations, caves, rainbows and architecture elements. Whereas some works represent specific places, t is the more abstract works that completely captivate me.

















Source: Sarah Frances Dias Photography, photos taken by the Author

PLATE 67: AESTHETIC EXPERIENCE

Harmonious colors, soft pastels, clouds of pinks and shades of purple; these atmospheric scenarios have no edges, no surfaces, no solids, no volumes, nothing that is tangible and palpable: all they have is these hazy cloud like forms that diffuse into one another creating a sort of atmospheric spaceless space. One cannot help but get lost in its magnetizing pull, and imagine what it is like to live there: in between those shades of perfect colors. They represent a sort of ideal, a kind of lost paradise, that pulls us away from our own world and draws us into it's own dimension.

All throughout the exhibition, one is immersed completely in Turner's world: world where colour and soft atmospheres create emotional conditions, that are alive in their essence. Freezing movement, history, myths and stories, one can't help but realize that it is a telling of tales and moments of a paradise that we all used to belong to, sometime in a distant past, but that is still very much alive even today.

(6) Key principles, concepts and values

… Principles of Harmony: Invisible Order, Values and Geometry

Turner's works are an example, with the use of his landscapes and atmospheric impressions, of the invisible hidden geometric orders that define the artistic imagery and language. Be it as an overall image (the general aspects) or in the detail (the minutia and the specifics) every work embodies an ''aura'' and that aura is studied and understood through the use of the geometrical patterns inherent to it. A flower, a work of nature, with its own form patterns and inherent structure, we can identify a series of geometrical elements, harmonies and codes that define its 'formal' and 'intangible' essence and existence. So too, with Turner, this research aims at uncovering. Understanding the natural relations of balance and harmony and the intuitive geometric relations that define Turner's work is key to grasping his paintings and his principles. Although particular, they echo universal principles from the overall whole painting to the most infinite detail. This relation of macro and micro is another characteristic of the 'work's' of nature and are echoed by Turner. In general terms, the intrinsic geometrical order, balance and harmony that defines Turner's work is similar, the means by which he uses geometry to detail those harmonies and inherent balance are the same. Relying in what seems to be the ''principles of nature'' and ''principles of timelessness'' to characterize his whole volume of work. As a consequence, a harmonious balance is prevalent in all his work, and as previously stated, it echoed the principles of nature and the universe, and finds 'man's' place within it.

… (a) The Double Horizon

One of the properties found in the geometric studies is the prevalent condition of what appears to be a ''double horizon'' This means, that there is not one prevalent line that defines the horizon line, but a multiple set of 'lines' that define the area of placement where the horizon is. This his area seems to reflect the visual perception itself, that does not apprehend the natural world in one ''focused'' line but in a multiple array of ''impressions''. This perceptual quality finds echo in Turner's work, where in most of his paintings, no form is defined by a clear single line, but by a complex system of 'blurred' lines that

creates a 'mass' or a shape. Furthermore, the horizon for example, is never located in the midpoint of the vertical dimension, but slightly sliding downwards, almost like a mirror of vision itself.

… (b) Fields of Contrast: 'darkest' and 'lightest' areas of relations

Another property found in Turner's works is that the areas of most contrast, where the **darker and lighter areas are found are defined by the areas outlined by the geometrical inherent forces** of the form of the painting itself: its subdivision in mid points, diagonal, etc. By these means, areas of highest contrast are usually placed closer to the mid points of the painting; the darkest areas are closer to the edges, and the lighter areas are usually placed in a center point or in the intersections of the lines. As a further continuation, it is possible to clarify that in all the paintings, there is a harmonious balance between the amount of dark areas and light areas. These two, intertwine between each other, forming a complex pattern; also, for most contrast sometimes they are placed alongside each other, and other times, they are isolated areas.

… (c) The Mirrored Existence

The ''as above, so below'' alchemical saying, is reproduced in Turner's work. The ''mirrored existence'' is a harmony and an inherent structure that reproduces the geometries in a ''mirrored'' way: the mirror planes can be both vertical, horizontal or diagonal, but in all of them, the ''masses'' of forms and of colour inserted in a ''geometrical grid'', it is possible to understand that they are mirrored to the ''below'' plane in some way. This is found in various paintings, with masses of greater tone and contrast: for example, the darker tones of the skies are mirrored back to reflect darker tones on the ground, in exactly the same area as the ''mirror'' reflects it in.

… (d) Focal Points

The focal points of the paintings always fall on the **areas of intersection between geometrical lines** that exist in the underlying structure of the work. In these points of intersection, either more detail, or more elements of more contrast are found.

… (e) Golden Means and Invisible Forms

Although the golden ratio and the golden section is not completely clear in the organization of the paintings, neither do the dimensions of Turner's work correspond to the ratio, it is possible to identify a number of examples where the harmonious relationships of the golden sections can be found. This is prevalent by the placement of forms in the points that define the golden section, in areas of 'focal points' or by changes of values or contrast in color patterns. Another component that defines the intuitive geometric patterns in each painting, is that it is possible to identify ''interior invisible forms'' that define the center area of the paintings, where elements are placed in geometric forms: either a circle, a pentagram, or a rectangle, define central ''invisible forms'' that compose the overall ''focus area''.

… (f) Overlaying Harmonies

Each painting is a complex array of intuitive harmonies, where not one geometrical property or pattern defines one painting, but where a complex use of a series of geometric harmonies can be found working together, overlapping each other to define one single ‘’harmonious’’ atmospheric landscape abstraction. In this way, a balance between all the elements is achieved in a subtle and ‘’simplistic’’ and ‘’invisible’’ way. The inherent structures work together to define the whole, and each mirror can complement each other (like a body of ‘’nature’’, where all the parts co-operate towards the whole), the details echo the whole and the whole echoes the parts.

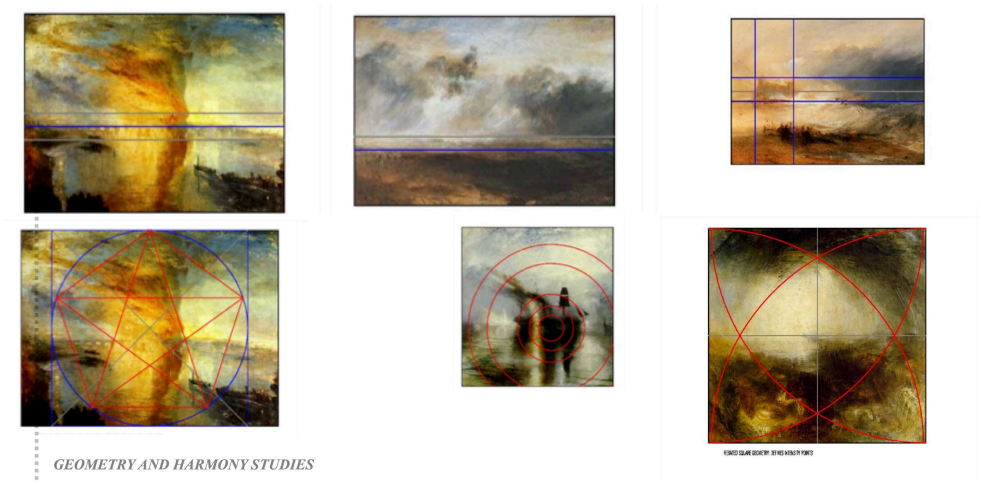
… Principles of Spirituality

Turner was striving for expression of spirituality in the world, rather than responding primarily to optical phenomena. For him, the significance of light was the emanation of God's spirit on earth, and it is this desire for expression of spirituality that guided his later works where he begins to abandon solid objects, people and details, concentrating exclusively on the light and the radiance of the heavens. He wished to re-create the power of God on earth through his art, and he found that power to be most manifest in intense/rare natural manifestations (such as rainbows, snowstorms, sunsets). Painting, thus, was a means of capturing and conveying God and the ‘spirituality’ emanation that came through nature.

(these principles announced were published in the authors article: see Appendix X)

Ending Remarks:

Turner was the greatest recognized influence on the Impressionist, Post-Impressionist and Abstraction movements that followed (see Glossary), for his clear idea that abstraction was indeed a more accurate and more precise way of capturing atmospheres. These atmospheres charged with emotional and metaphorical ideas, not only manifested the power of nature and the uniqueness of the landscape, but also, were a direct manifestation of God’s forces on earth. Turner saw in his ‘abstract’ art (using colour, light and harmony as his ‘foundation systems’) the means by which spirituality and God could be made manifest. For Turner, art was not simply a capturing of a specific emotion through a landscape, but a multi-layered complex meaningful and significant creation (using metaphor, harmony, mythology, history, nature, architecture, poetry, and other sources) that could and should re-create the power of God. Meaning, thus, is already considered in the first mental and spiritual vision of the work and is carried out through its different stages to achieve a more intense manifestation; in doing so, Turner achieves a universal spiritual language that portrays its significance across time and cultures.



GEOMETRY AND HARMONY STUDIES

THE LIGHT OF GOD: SPIRITUALITY

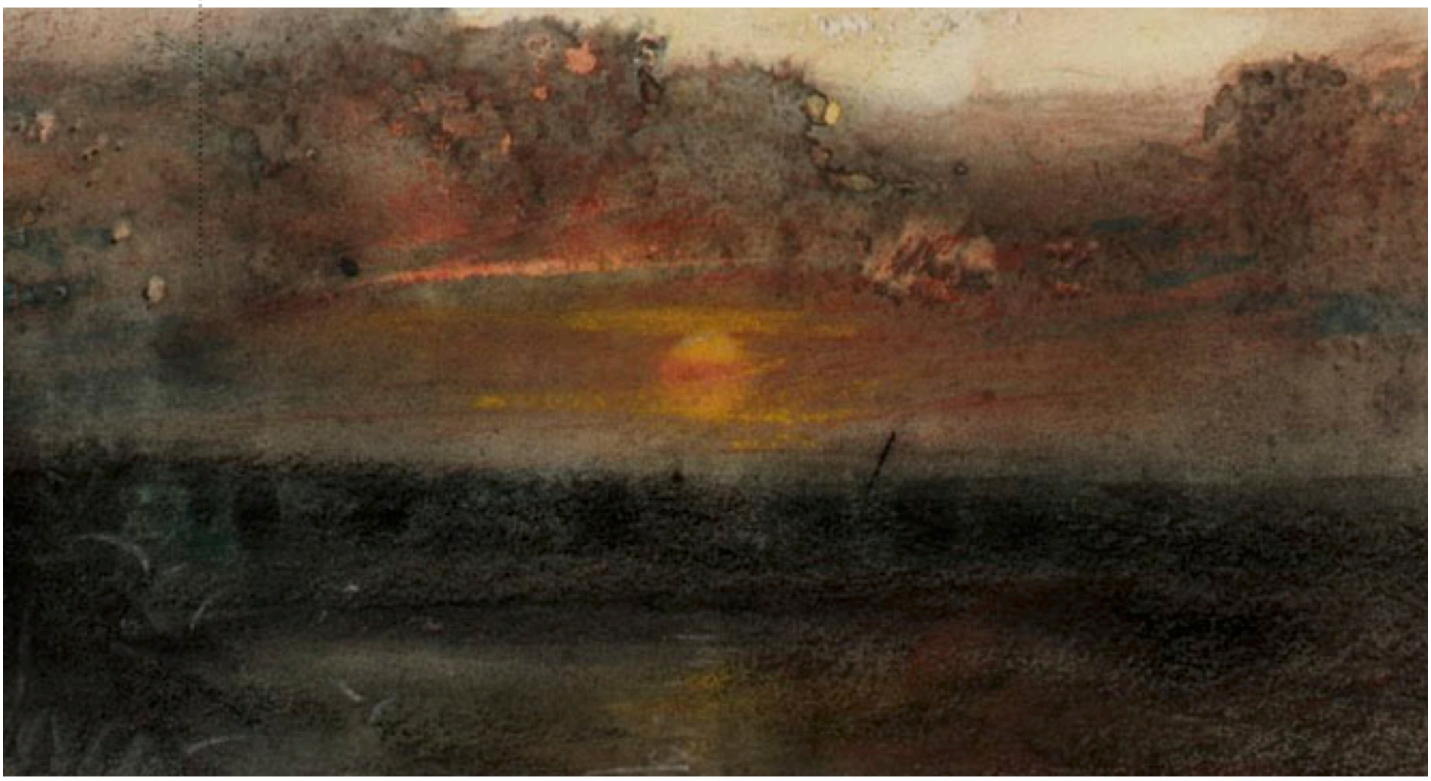


Photo 1 to 7: Geometrical studies of harmonies /conducted by the author); Photo 8: Sunset amid Dark Clouds over the Sea c.1845 (from The Whalers sketchbook); Source: http://www.tate.org.uk/art/research-publications/jmw-turner/1836-47-modern-painter-r1130133

PLATE 68: PRINCIPLES: HARMONY AND SPIRITUALITY

Summary Notes: William Turner

1. *Turner's landscape atmospheres, through abstraction and the use of colour, light, harmony, emotion and imagination portray multiple layers of meaning and significance.*

2. *For Turner, landscapes could convey a full range of artistic, historical, emotional and spiritual meanings.*

3. *Abstracted atmospheres, in their intense and rare forms (rainbows, snowstorms) capture a sublime quality that allows man to apprehend and understand the power of God.*

4. *It is through the power of the imagination, and its ability to select, analyze and combine, that an artistic creation can speak to the imagination and the emotional and intellectual spheres of human beings.*

5. *Art has the power, to be an expression of the 'spirituality' forces of the world and to apprehend 'the qualities and causes of things'*

6. *The expression of contrast of darkness and light in a balancing composition, its inherent harmony through the use of composition, abstract forms and colour, can create an atmosphere that captures the emotion and the feeling that sustains the landscape and define an expression of 'spirituality'.*

7. *Creation should be led by vision, imagination, emotional drive, instinct, 'innocence of the eye' and guided by a spiritual vision.*

8. *Art should be a balance between the physical aspects of the represented reality and the apprehended perceived abstraction (emotional and psychological) catered by the imagination and the intuition.*

9. *Conceptual Chart:*

Table 15: William Turner Conceptual Chart

CREATION			CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Table 16: William Turner Summary Chart

WILLIAM TURNER

1. FIELD:
- *Painting, Drawing, Watercolours*

2. EDUCATION/BACKGROUND:
- *12 years old, started exhibiting and selling his drawings in his father's shop window in London and working with various architects or architectural topographers*
- *Entered the Royal Academy of Art school in 1789, when he was 14 years old.*

3. EVOLUTION:
- *Towards abstraction: from 'pure representation' to complete abstraction: preface to Impressionism and first type of 'Abstract Art'*
- *Growing attention to light and to colour, becoming more luminous and atmospheric*

4. CONTEXT:
- *Art Movement: Romanticism*
- *emphasis on imagination and emotion*
- *return to nature and to the landscape*
- *Defined a new way of understanding art and influenced the future artistic movements: Abstraction and Impressionism.*

5. INFLUENCES:
- *Romantic Artists and Art Masters: Robert Cozens, Richard Wilson and Claude Lorraine*
- *Art Theory and Colour Theory: Sir Joshua Reynolds, The Sublime theories and Goethe.*
- *Travels and Natural landscapes*
- *Architecture, Storytelling and mythology: shipwrecks, historical events, cities and skylines.*
- *Natural phenomena such as sunsets or rainbows.*

6. CREATIVE PROCESS:
- *Characterised by an 'innocence of the eye' guided by a spiritual vision*
- *Led by his vision, imagination, emotional drive and instinct*
- *Sketching on location to capture the emotion of the landscape*
- *The methodology was selective, inconsistent, complex, experimental, multi-layered and intuitive.*

7. PERSONAL COSMOLOGY:
- *Art as an 'evidence of the power of God' was pursued in all creations*
- *Believed art influences perception in its complex combination of sensitive apprehensions and intellectual comprehensions.*
- *Believed that landscapes could convey a full range of artistic, historical, and emotional meanings*
- *Believed in the power of the imagination, to select, analyse and combine, in order to define an artistic creation that could speak to the imagination.*

8. EMOTIONS
- *Power*
- *Sublimity*
- *Strengh vs. Harmony*

9. OBJECTIVES:
- *To capture the emotion and the feeling that sustains the landscape.*
- *To define an expression of the 'spirituality' forces of the world*
- *The underlying search for a timeless landscape created by God.*
- *Attempt to apprehend 'the qualities and causes of things'*

10. CHARACTERIZATION:
- *'Romantic' Landscape Painter: "the painter of light"*
- *Captured 'abstracted atmospheres' (a unique portrayal of the 'natural' world)*
- *Unique use of colour and focus of light as a quality.*
- *Inherent harmony and balance, through the use of composition, abstract forms and colour.*
- *Invention of new techniques and combination of multiple technique to make vision come alive.*
- *Interdependence between all creation forms: watercolour paintings influenced his techniques in oil painting*
- *Fascination with colour, colour theory and sustained a free mixture of colours and their symbolic qualities*
- *interest in the primaries and harmonies of colour as the 'beginning'*
- *Explored the expression of contrast of darkness and light in a balancing composition*
- *Balance between the physical aspects of the represented reality and the apprehended perceived abstraction (emotional and psychological)*

11. CONCEPTUAL FRAMEWORK:
- *Atmospheres*
- *Landscapes*
- *Harmony*
- *Spirituality and God*
- *Light*
- *Colour*
- *Man and Nature*

12. VALUES
- *Poetical, Symbolical, Metaphorical, Spiritual.*

13. MEANING/SIGNIFICANCE
- *God's manifestation on earth.*
- *The infinitely small condition of mankind vs. God's creations*
- *Divine understanding of the order of the universe.*





Photo: Self portrait by Edward Hopper; Source: http://en.wikipedia.org/wiki/File:Self_portrait_by_edward_hopper.jpg; Photo 2: Rooms by the Sea, 1951, 101.98 x 73.66 cm; Source: http://www.edwardhopper.net/rooms-by-the-sea.jsp

PLATE 69: EDWARD HOPPER

6.2. EDWARD HOPPER

(1) artistic evolution, context and characterization

… Artistic Evolution

Hopper's training and teaching at the Arts University, provided him with a classical background and a traditional way of understanding art and composition. The composition of the work (forms, balance, harmony, light and shadow) were all aspects Hopper possessed knowledge of and took careful consideration of, considering them precisely and accurately in his early drawings, etchings and in paintings. These early works can be understood as a form of compositional and value studies, where Hopper explored this traditional understanding of art. His first oil painting to start to define his more personal and individual approach to art, was a portrayal of an interior space, *Solitary Figure in a Theater* (c.1904) and also, a few years later, *Summer Interior* (1909). In both these paintings Hopper begins to determine his personal views of life through painting, allowing the atmospheres to portray multiple emotions and a deep sense of an inner life through space. According to Levin (1998), it was Hopper's interest in the 'intimate interiors' that allowed him to achieve his 'mature style'; the painting *'House in the Railroad*' (1925) is considered to be the painting where Hopper arrived at his artistic maturity. His mature style, then, can be loosely characterized by communication of intimate human emotions, through the use of space and American culture (the subject he had always been interested in).

> **Hopper's evolution:** In 1915 Hopper focused on etchings, producing about seventy works, most of them urban scenes. In the early 20's his etchings begun to receive validation from the public, receiving a few awards for his works. This was also the time when Hopper's art started shifting focus from Parisian architecture to American urban and architectural spaces and landscapes. Where as his first paintings of his trips to Paris used soft tones and a lighter palette, as his artistic maturity evolved, so too his colors, themes and style became more intense in both manner and character. The painting *'Le Bistro or The Wine Shop'*, 1909, is an example of the years Hopper spent in Paris. Hopper's Paris was almost completely devoid of people, with the feelings of loneliness and isolation, the sense of detachment and emptiness already portrayed in his paintings at this early stage. *'House in the Railroad*' (1925) is considered to be the painting where Hopper arrived at his artistic maturity; the painting depicts a Victorian house, freestanding, with a railroad track cutting through the foreground. Both paintings side by side allow for a clear understanding of the unified vision over time that drove Hopper's creative works, and the emotions that sustained them. Levin (1998) explains that it was Hopper's interest in the 'intimate interiors' that allowed him to achieve his 'mature style': '' Hopper's imagination thrived on these dramas of women surprised in intimate interiors, and through them he forged the breakthrough to painting in what became his mature style.'' (Levin, 1998, p. 139). It was his depictions of American architecture and atmosphere that allowed him to gain notoriety: specifically with his paintings: *'House in the Railroad*' (1925) and '*Early Sunday Morning'*.

Hopper's style maintained a cohesive tone, character, theme, subjects, emotions, intentions and ideals, always 'drawing' from reality, from the world around, and from his imagination, from his interior world, a desire to understand and represent the inner world. While his themes and subjects remain the same throughout his whole career as a painter, the meanings and messages they carry and convey seem to become clearer and sharper as his life progressed. The isolated figure in different atmospheres and the

introspective mood the paintings accentuate, the desolated landscape and the intimate scenes of women in their bedrooms, all clarify images of the same meaning: a deep existential loneliness and melancholy.

… Artistic Context and Characterization

Hopper developed a style that was very characteristic and unique for his time. He is known as a 'realist', however his art is more about memory and personal emotions than it is about capturing 'reality'. Realism aimed to give an accurate 'objective and impartial' representation of the real world[480]; However, Hopper's 'realism' was different from all these other approaches. His realism: '' (…) is a twentieth-century joining of nineteenth-century transcendentalist beliefs with nineteenth-century Realism's tendency to document and interpret city scenes in a relentless quest for a hidden 'truth'.'' (Slater, 2002, p. 145).

Known for his mystery and subtlety, Hopper's 'realism' addresses the issue of modernization and the ageing of architecture in a modern world, by capturing the archetypal power of everyday American life and architecture. Through an appreciation and an exaltation of light and colour, using dark contrasts and vibrant tones, Hopper's art is flooded with emotional characters and atmospheric environments. Moods are added to 'ordinary' spaces, echoing melancholic feelings and deep emotions. As such, each painting allows for a projection and an immersion from the viewer, into the spaces represented in the art. While Hopper's nostalgia led to a perpetuation of architectural spaces and environments that were in verge of transformation because of technological changes, his art aimed not only to capture that architectural essence forever, but also to create an intimate emotional and existential condition. His paintings are a very particular representation of the 'spirit' of his time through his own views and beliefs; they are 'crafted' and created in order to best portray and capture the essence he wishes to describe: spaces and atmospheres that are half real and half imagined. In such a manner, Hopper's paintings not only describe an intimate and particular architecture, but also are a form of criticisms of architecture and the 'modern' society that was beginning to grow at the time. Simultaneously to this desire for an 'unchanged' world, is the portrayal of human loneliness and solitude, that portrays not only Hopper's inner mood but also the main condition of man he liked to observe. Levi (1998) summarizes, explaining that Hopper's work is composed by 'many layers of meaning': '' In his painting, this visual communication took on a subtlety: details, shapes, colors, postures, scale and specific juxtapositions join to convey many levels of meaning.'' (Levin, 1998, p. 282). In Hopper's art, the painting acts as one complex element, filled with opposing references, vibrant characters and intimate images, that although capture the day to day life, seem to create a 'window' into a more deeper portrayal of life: the intimacies of the human soul that find stage in the empty room. It is this sense of human emotion, the baring of the deepest emotional conditions of the spirit and of the soul that define Hopper's unique artistic language and aesthetic.

[480] **Realism:** Tom Slater (2002), in his article, '*Fear of the city 1882–1967: Edward Hopper and the discourse of anti-urbanism'* explains that realism in general has consistently escaped a 'tidy and simple definition': '' On one hand, this is due to the many different forms of Realism within arts and literature (…), and on the other, the agonizingly complex history and nature of the philosophy, theories, methodology and practice of realism in Western scientific thought.'' (Slater, 2002, p. 136). The aim of realism, realistic painting, the author continues, was to give an accurate 'objective and impartial' representation of the real world; realist painters focus on representing the real world and the contemporary life that surrounds them. This type of painting defined the nineteenth-century American artistic scenario, however in the beginning of the twentieth century, they took a different approach and form: an example is the works of the Ash Can painters that emerged in Philadelphia, or the works of Social Realists such as Reginald Marsh and Philip Evergood.

(2) creative process, methodology, techniques and characteristics

… Creative Process and Methodology

Hopper's creative process is deeply inspired by the environments he lives in and by the atmospheres that capture his attention in the world around him. On describing his working process, Hopper claims: '' ''The picture was planned very carefully in my mind before starting it, but except for a small black and white sketched made from the fact, I had no other concrete data, but relied on refreshing my memory by looking often at the subject.'' (Levin, 1998, p. 215). From the statement it is possible to understand that Hopper started each painting with a direct idea/vision in his mind; where as in some paintings memory allowed him to revive the scene and recreate it freely, in others he relied in careful studies of pen or pencil, either from location or from the studio, that had the essential composition defined, with adequate notes on the colour for each section.

Author Lloyd Goodrich (1964) in his book '*Edward Hopper'* explains that Hopper's methods and techniques can be understood as a process of '' (…) imaginative reconstruction in which both observation and memory have a part.'' (Goodrich, 1964, p. 45). His subjects are selected with extreme care, and elements are selected from multiple scenes and then combined and transformed into the overall image to be materialized in the canvas. In the painting *Gas,* for example, he searched for the ideal gas station he had in his mind, and then, not finding one, created one from an agglomeration of various elements of multiple gas stations. This defines what the author calls 'composite' methods: a creative and imagined process. In the authors words: '' (…) his method is no mere transcription of nature, but a creative process by which reality is shaped into the pictorial image.'' (Goodrich, 1964, p. 46). This process is as much an inner process as it is an outward one, relying more on imagination than it does on reality; it is this process of mixing reality with imagination, that allows Hopper's works to gain their 'deep' meaning, as the author summarizes. In his words: '' (…) through this inner process his subject transcends the specific and takes on a broader and deeper meaning.'' (Goodrich, 1964, p. 46). In regards to the time each work takes, Goodrich (1964) says that while his early works used to take approximately a week to complete, his later works would take much longer: he painted approximately three paintings a year.

Hopper sometimes found it hard to find subjects to paint and his creativity didn't always run deep, but fluctuated. On this issue Levin (1998) notes: '' Surrounded though he was by the picturesque beauty of the south-western landscape with it's intense light, saturated colours, and ''gaudy mountains'', Hopper had trouble finding subject matter that appealed to his sensibility, as he later admitted to Alfred Barr.'' (Levin, 1998, p. 191). Most of his drawings and sketches are studies defined with pen, brush, ink, graphite pencil or charcoals on paper (he used a diverse set of materials); they were drawn *in situ*, apprehending the landscape, urbanscape, or people, directly from the location or in studio, and they accompanied all stages of creative Hopper's career. Through the drawings Hopper explored many subject matters: figure drawing, architecture, environments, landscapes and self-portraits. Where as some studies were rough and schematic representations, others were more detailed and served as a finished 'art' piece in itself.

These were either discarded completely or some were selected and were used for later oil reproduction; usually, the final end result of the painting does not vary much from the atmospheric impression of the initial sketches, maintaining values, forms and compositions. The relationship between the drawings and the paintings is vivid; it is in the latter that Hopper applied colour through imagination and skill turning the compositions into vibrant creations; where as his drawings remain more descriptive and represent his desire to capture the world. The drawing was Hopper's most valuable tool for his creative process and unified the various artistic fields. However it is through the painting process and creative development that the work gains in terms of artistic value, psychological and emotional depths. The painting Nighthawks (1942), one of Hopper's most known painting, for example, had a series of nineteen preparatory drawings before the beginning of its execution. Where as the drawing is rooted in reality, the painting gains a freedom that is new, a more abstracted sense, where an emotional charge can occur.

There was a coherence and an interdependence between all forms of creation and all influenced each other. On this issue, Levin (1998) considers that there was an increased continuity between his etchings and his paintings, where a transference of ideals, ideas, studies and concepts occurs. Hopper used the notebook to capture and document and catalogue all his work. Hopper's wife contributed to this systematic organization and documentation of every artwork: writing down on notebooks, when and to whom it was sold, the price, the location, the techniques, the materials, the models, and many other information, accompanied by a small diagrammatic reference of the painting (drawn by Hopper). His artistic methodology is that of a continuous practice: that uses drawings as the foundation for the multiple art forms. Although he is most known for his oil paintings, his watercolours and his etchings also received a lot of recognition at the time.

Gaby Wood (2004) for the Guardian, says that for two thirds of Hopper's life, he lived in his studio that overlooked Washington Square in New York; the studio was bare and possessed neither a 'fridge or a toilet', but it was a very bright space. She explains: '' On the far wall, between the windows and beside his easel, he placed a mirror; when he looked at it he could see into the studio behind his, which was occupied by his wife, Josephine Nivison Hopper.'' (Wood, 2004). Which clearly shows that even during his creative process, he was interested in seeing 'private' moments, and probably used those 'images' to fuel his creative work.

His methodology, then, as well as his creative process was characterized by a deep search for subjects that allowed him to express the inner world he wished to portray. The subject didn't dictate the mood, but instead his imagination and emotions led the way and then he searched for the right atmosphere that could capture what he had envisioned. This process was not instantaneous or free, but followed a rigorous process of form finding through numerous sketches and explorations of the same image, until one final image was chosen and transposed into the canvas. It was a methodology led by imagination and emotion, but dictated by reason and analysis, and this duality allowed his works to become unique in both character and meaning. In regards to Hopper's technique, in painting, it is not a developed and perfected technique but a broader and freer approach: although based in strict compositional effect carefully studied and defined in drawing, they find an intuitive and freer approach in the painting, through the use of broad brush strokes and intuitive colour selection.

… Techniques

… (a) The Artistic Composition

The composition of each of the artworks was a key feature and main consideration for Hopper. The studies for the compositions began in the drawing stages, where Hopper explores and clarifies the global design. On his own compositional choices, Hopper claimed '' '' The very long horizontal shape of this picture…. Is an effort to give a sensation of great lateral extent. Carrying the main horizontal lines of the design with little interruption to the edges of the picture, is to enforce this idea and to make one conscious of the spaces and elements beyond the limits of the scene itself.'' (Levin, 1998, p. 215). In the statement Hopper describes the importance of the horizontality predominance in his work. In fact, in each composition, the main two directions are always predominant: the verticality of the architecture and the horizontality of the environment (the land). These, as Hopper explained above, give a sense of extension beyond the scene itself. Metaphorically and symbolically they represent the basic forms of ordering and organizing the world, the two main directions that define humanity: the verticality of man towards the heavens and the horizontality of nature spreading towards infinity. In Hopper's compositions, there is also a complete absence of secondary objects in the surroundings of his subjects. The articulation of the buildings or the people with the foregrounds and backgrounds are defined abruptly and carefully, devoid of any subtle shifts.

Author Shadwick Lewis (2011) finds that there is a great connection Hopper's own construction of pictorial perspective in relation to the concept of the 'canvas window', which he considers to be a means of escape for the intangible creative 'mind' (beyond the physical body) and finds roots in classical painting traditions

> **The canvas-window concept:** The concept, the suggestion that a canvas was like a window, was initially described by Leon Battista Alberti (1404-1472) in his 1435 treatise *Della Pittura.* It possesses both a practical approach in the definition of perspective and a more philosophical notion or metaphysical one, evoking the idea that the canvas is like a window to the world. As such, the author claims there is a strong connection between Hopper's use of perspective and the Renaissance tradition of portraying space[481]. However, Hopper subverts the Renaissance's notions of linear perspective, by pushing the vanishing points to areas of the picture that are further out and away of the overall construction frame. Simultaneously, he places the observer in the center of the painting, making it an ambiguous and mysterious composition. As such, '' The viewer is therefore 'asked to be in two places at one time'. Gillies further explains that if 'the viewer cannot orient himself to the painting in terms of space or time...the result is the perceptual experience of "timelessness".'' (Loius, 2011, p. 31). This is one of the ways that Hopper conveys the sense of unreality and mystery that surrounds his paintings. As such, the author summarizes: '' The 'canvas window' is thus a vehicle that essentially facilitates a means of escape for the intangible creative 'mind', beyond the confines of the physical body, the window becoming symbolically representative of a complex mind-body dualism; a philosophical conflict that I believe Hopper consistently attempts to address through his art.'' (Loius, 2011, pp. 34, 37).

Another main aspect of his work emphasized by the author Goodrich (1964) is the use of strong compositional lines of verticality and horizontality: '' This interaction of horizontals and verticals is an essential element in his design, one of its vital principles.

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[481] In her words: '' I believe that his compositions were strongly influenced by these Renaissance constructions, especially in the divisions of interior and exterior space using strong geometrical shapes that we see throughout the work of artists such as Piero Della Francesca (1415-1492) and Filippino Lippi (1475-1504).'' (Loius, 2011, p. 31).



STUDIES FOR NIGHTHAWK









DRAWING STUDIRS AND TECHNIQUES







Photo 1: Hopper's drawings; Source: http://timesflowstemmed.com/2013/09/05/edward-hopper-sketches/; Photo 2: Edward Hopper (1882–1967), Self-Portrait and Hand Studies, c. 1900. Pen and ink and graphite pencil on paper, 7 7/8 × 4 15/16 in. (20 × 12.5 cm). Whitney Museum of American Art, New York ; Source: http://whitney.org/Events/DrawnFromHopper; Photo 3: Edward Hopper, page 61 from Artist's ledger (Book III, 1924–67), Ink, graphite, and coloured pencil on paper, 31 × 19.4 cm, Whitney Museum of American Art, New York; Source: http://whitney.org/Collection/EdwardHopper/96210ahhhh; Photo 4 and 5: Edward Hopper, Study for Nighthawks, 1941 or 1942; Fabricated chalk on paper, 8 7/16 x 10 15/16 in. (21.4 x 27.8 cm); Whitney Museum of American Art, New York; Source: http://www.newcriterion.com/posts.cfm/-Hopper-Drawing--at-the-Whitney-7233; Photo 7: Saltillo Mansion, 1943, Watercolor on paper, 54 x 68.9 cm; Source: http://www.metmuseum.org/toah/works-of-art/45.157.2; Photo 6: Etching of a couple on a train, 1918; Source: https://en.wikipedia.org/wiki/File:Night_on_the_El_Train,_1918.jpg; Photo 7: Edward Hopper, Le Bistro or The Wine Shop, 1909; Source: http://whitney.org/WatchAndListen?play_id=195;

PLATE 70: HOPPER'S WORK PROCESS, METHODOLOGY, EVOLUTION AND THEMES

It accounts for the pronounced angularity that is an outstanding characteristic of his style. '' (Goodrich, 1964, p. 52). Usually, the author continues, the horizontal lines are broken up by vertical lines, creating a combination of angles that capture the viewer's eye, and create a sense of completeness and wholeness to the overall composition. Geometry (angles and lines) is a fundamental aspect that defines Hopper's compositions.

… (b) Considerations of Light and Colour

Colour is a dominant strength in Hopper's paintings and atmospheres. It is through colour that Hopper creates forms, volumes and spaces, captures the atmosphere and allows for an emotional charge to come through. Hopper's paintings changed in colour tones with time, as his artistic vision evolved. The paintings from Paris, his trip in 1906, were warm and deep, and possessed a sketch like quality that resembled the impressionists works. This stage of his work is characterized by the use of a lighter colour palette, broader and wider approaches to understanding the atmosphere of the place. He uses employed pastels: soft pinks, pale blues, and lavenders; lavenders are used to create shadows. After the second trip to Paris, Hopper begun to paint with intense blues and warmer colour schemes in paintings about America. *'East Side Interior'*, 1922, an etching, represents a kind of bridge between the two phases, a woman stares out the window, in style and in colour.

The later paintings of his, use colours that are more vibrant, strong and rich, in tone, intensity and character. This shift of tones allow for a more intense mood and character to emerge. Another key issue of Hopper's is the light and darkness polarity. Hopper creates intense mood by the use of intense lights and shadows contrasting one next to the other, creating a mysterious and rich atmosphere. Contrasts of light and darkness are also used to create the figure ground relationship, to accentuate the architectural elements, to create 'volumes' and to accentuate the difference between the inside and the outside of the architectural spaces. His unique use of light and colour characterizes his paintings and are a special component transversal to all his works. It is this use of intense light and vibrant colours and shadows that bring the emotional conditions and sense of nostalgia to emerge in his paintings.

(3) inspiration, influences, conceptual framework and themes:

… Influences

In his early studies and researches, Hopper held Emerson in a very high esteem and was deeply influenced by his writings and thoughts on the world of nature and a romantic approach and distrust to urban life: '' Crucial to the development of Hopper's attitude towards the city were the writings of Ralph Waldo Emerson and Henry David Thoreau, two individuals who were known for their dislike and distrust of city life in favor of romantic notions of the entwinement of humans with nature, (…).'' (Slater, 2002, p. 140). In his trips to understand contemporary European Art, he wasn't impressed by Picasso and cubism but was deeply influenced by Rembrandt, specifically his 'Night Watch'. He was fascinated and interested in a kind of 'realist art', full of emotion and intuitive understanding. Another inspiration from his trips to Europe, was the ongoing fascination with the French Architecture, that grew in strength early and later

turned into his growing fascination with American Architecture. Another main influence was the transformation by modernized life; one of Hopper's fascination was the gas station or the train (a result of his travels in his youth by train in America), portraying scenes from the train station or the inside of the train. Throughout his career, according to Levin (1998) another one of Hopper's greatest inspiration was from his wife's painting techniques and creative spirit: ''Hopper's new freedom drew stimulus from Nivison, whose accomplishments in the same medium piqued his competitive spirit.'' (Levin, 1998, p. 169). In terms of artistic influences, there are several: firstly, Hopper was greatly influenced by the impressionists, specifically by the work of Gustave Caillebotte and his treatment of the window, as explained by author '' Caillebotte depicts a similar idea, yet the window evokes confinement within a claustrophobic domestic space.'' (Loius, 2011, p. 20). The author further accentuates that this type of evocation has similarities with the German romanticism, a connection initially defined by author Kirk Varnedoe. She refers: '' This reference to Romanticism points almost explicitly to the work of Caspar David Friedrich (1774-1840).'' (Loius, 2011, p. 20). Although there are no known references to Romanticism and the works of Friedrich, the connections between the two can be very easily defined.

Hopper also considers that he shaped by the Italian Renaissance and the writings of Goethe.

… Conceptual Framework and Themes

… (a) Architectural theme

Hopper had a profound fascination with architecture, it was the subject of almost all of his paintings: most of them are dominated by building forms from the outside or interior atmospheres in an intimate perspective. However, an accurate study of Hopper's Architecture has not been found or accounted for: Hopper's paintings analysis usually consists of a study of his general art forms. His architectural subjects are various: the twenty-four-hour diner, the motel, the house in the landscape, the waiting room of the hospital, the urban street or a window with the sun; either global atmospheres or specific details, these architectural spaces are rich environments flooded by either light or darkness and filled with rich colours. One of the architecture features that Hopper was fascinated with was the Mansard roof, a character of the buildings in America and then accentuated by the predominance of Mansard roofs in Paris. These architectural elements are sometimes presented on their own, and other times are 'populated' with people, characters and presences. Hopper was interested in the 'real' character of architecture: he didn't stylize or try to turn something more elegant, but instead tried to capture the mood and the character of architecture itself, either rustic, decaying, vibrant, or empty. The architecture is reduced to its most basic elements, and each space is understood by its own atmosphere.

(4) underlying theories and ideals

… Personal cosmology and art beliefs

Hopper's art is supported by two driving inner theories or notions: firstly the nostalgia for the lost time of a pre-modern America, and secondly the sense of isolation and loneliness that characterizes the people in the paintings.

… (a) Hopper's Emotions: Existential Melancholia and Isolation of Being

Hopper's characters are projected away from the safety and security of 'home' into the public spaces of anonymity and loneliness. Capturing the introspective mood of characters, often in transition modes, either travelling or being, Hopper allows these anonymous figures and geometric forms to create an inescapable sense of loneliness. Those characters are projected onto the viewer as always being in an introspective mood, a contemplative state of existence, that contrasts the urban life of the buildings in which they find themselves in. It is in a deep sense, an evocation of the emotions of Loveliness and Solitude. The landscapes and architectures also portray a sense of loneliness and anonymity. In some paintings the people are missing from the architectural scenes, but Hopper always leaves traces of life, hints that the spaces are in fact part of the 'ordinary life'. The sense of isolation (of contemplative being and nostalgia) is further accentuated by the contraposition between the modern technological world and the 'small town' intimate way of life. It is possible to establish a connection between this emotional content of Hopper's works and Heidegger's existential theories, as emphasized by author Araujo (2002); for the author, it is an existential melancholy and solitude, pronounced by a distancing between the subjects and the self, that echoes Heidegger's ideas about art, and from which Hopper's artistic meaning emerges[482].

… (b) The love for Common Life in America, Nostalgia for the Undamaged Past and Anti-Modernism and Anti-Urbanism

A deep influence (and personal 'belief') on Hopper's life and artistic practice was the development of modern life and the transformations the city was undergoing as it evolved from traditional America into a more 'modernized' type of life. Levin (1998) writes: ''Hopper was not alone among his contemporaries in his nostalgia for ''the virtuous goodness of the American past''.'' (Levin, 1998, p. 195). It is this 'nostalgia' towards past places and spaces of 'pre-urban' America that shaped Hopper's unique approach to Architecture. This view is defended and sustained by numerous authors such as the academic article written by Peter Clericuzio (2011) entitled 'Edward Hopper's Architecture, Antimodernism, and Nostalgia', where he describes Hopper as an 'Anti-Modernist'. The author cites Steven T. Ostovich in defining 'Nostalgia': '' (…) nostalgia arises from an awareness of distance between the past and the present, an awareness that something has been 'shattered' and is in danger of being lost. Living among the debris of the past, the [nostalgic person]'s challenge is to construct a world and an identity out of this debris.'' (Clericuzio, 2011, p. 2)[483]. According to Clericuzio (2011), Hopper's paintings expressed a nostalgia for the 'french inspired architecture' he had experienced 'in his youth', ''

[482] **Hopper and Heidegger:** Author Paulo Roberto Monteiro de Araujo (2002), in his article '*Edward Hopper and Heidegger: The Unveiling of Solitude',* emphasizes a link between the works of Hopper, their emotions of solitude and the theories of art defined by Heidegger. Explaining that Hopper's aesthetic is based on the empty existential life of the urban man, he claims '' The everyday scenes in Hopper's paintings lose all their objective character of buildings, houses, bars, suitcases or roads to reveal the pain and solitude shown in the being's dimension in its artistic uniqueness.'' (Araujo, 2012, p. 2). It is through gestures, movements, and instant scenes captured in their isolated silence that Hopper captures the melancholy and the solitude that in innate to his own condition and to the modern man's condition. Modern man, surrounded by emptiness and distance from people things can only console himself by observing the sunlight in an endless gaze: '' (…) what is left for Hopper's men and women is to contemplate the horizons of the open windows that get sunlight.'' (Araujo, 2012, p. 2).

[483] Quote Reference: Steven T. Ostovich, "Epilogue: Dangerous Memories," in The Work of Memory: New Directions in the Study of German Society and Culture, ed. A. Confino and P. Fritzsche (Urbana: University of Illinois Press, 2002), 240; quoted in J. Wilson, Nostalgia: Sanctuary of Meaning (Lewisburg: Bucknell University Press, 2005), 46.

(…) and his paintings reflect a hope to preserve the imagery of these forms and the cultural values expressed by them.'' (Clericuzio, 2011, p. 2).

At the time that Hopper was painting his artworks, the American City of New York (Manhattan) was being transformed by demolition of XIX century buildings, in favor of skyscrapers, concrete and steel, business and technology. This led Hopper to wanting to capture the architecture of the commonplaces of urban life and the moments of the day-to-day American culture and life that somehow would be gone forever, striving to portray the atmospheres in their essence through his artworks. Through his paintings he found the ability to understand and perpetuate an essence that would be gone forever. Direct example of this is the painting '*The City'* (1933) that depicts a skyscraper and row houses, showing the traditional architecture being removed and destroyed in favor of technology. Tom Slater (2002), in his article, '*Fear of the city 1882–1967: Edward Hopper and the discourse of anti-urbanism'* also argues that Hopper's art possesses an 'anti-urbanism' discourse that follows a long tradition. Some of the thinkers that compose this tradition are: Thomas Jefferson, Ralph Waldo Emerson, Henry David Thoreau, Edgar Allan Poe, Henry James, Frank Lloyd Wright and Lewis Mumford; as such, '' The writings of these individuals were seen to have left America with a 'powerful tradition of anti-urbanism', a legacy of distrust, suspicion and prejudice towards urban areas which was installed and strengthened by frequent references to the joys of nature and the moral superiority of rural life.'' (Slater, 2002, p. 135). This legacy of 'anti-urbanism' was perpetuated by Hopper through his artworks.

… (c) The Ideal Lost City: The place for being

Hopper represents a kind of 'ideal' city: devoid of trash, devoid of noise and chaos; empty of confusion and uproar; it is a quiet city, where people find comfort in their own loneliness and solitude, bathed by light and intensity, calmness and soothing energies brought about by the depuration of the classical architecture as opposed to the roughness and industrialized architecture of the skyscrapers that was to come. People find comfort within themselves for peace, be it in an intimate space at home, in the train or in the coffee shop, the self finds echo in its surroundings. The people remain half abstract, half concrete; always a little elusive and faint. They exist within the architecture alone.

… (d) The Window

Hopper's fascination with the 'window' is observed and analyzed by the author Shadwick Louis (2011) in her thesis 'The window and the void' in the work of Edward Hopper'. She finds that this recurrent theme in Hopper's works can be connected to the famous phrase 'the eye is the window of the soul', where '' The window thus becomes the vehicle by which 'the individual's reason reaches for cosmic reason.'.'' (Loius, 2011, p. 25). She further comments, that Hopper's portrayal of the window is linked, as a legacy of Durer and Leonardo da Vinci, to the expression of the soul and of the spirit: the window is like a mirror of the eye. Both Durer and da Vinci painted the eye, and the window and a metaphor for the eye, and used them as a means to represent 'inner worlds'. In order to represent these 'windows' Hopper uses interior spaces, chambers, that act as a sort of engagement or imprisonment, just like the body does to the soul. Louis (2011) summarizes: '' I feel that these rooms are therefore Hopper's expression of his own inner experience, not that of anybody else's, and hence wish to argue that Hopper's interiors represent this inner space of the soul, his window motif being the eye that connects this inner space to external reality. '' (Loius, 2011, p. 28). As such, the author thus accentuates that Hopper's spaces

and representations were merely a vehicle for the representations of the inner worlds of the soul and the spirit, using space and 'windows' to convey those dualities between spirit and matter, between the free spirit and the outer world in which it finds itself. The author concludes: '' Hopper's windows should be looked at, then, as symbolic eyes, through which lie the internal spaces of the soul.'' (Loius, 2011, p. 30).

… (e) Hopper's Voids: Emptiness

Hopper portrays in numerous of his paintings the void, or the black void. This is painted in numerous times as black windows, that magnetize the eye into an endless darkness. In doing so, he creates a sort of juxtaposition of two opposing ideas: alive space and darkened devoid of light space, symbolizing light and darkness, life and death. They are not always associated to windows, author Shadwick Louis explains that they also appear in the midst of nature. It is through this void and the representation of nature that Hopper explores 'departure and death' and simultaneously a 'sense of freedom', '' (…) evoking metaphysical qualities in its sublime beauty that artists like Friedrich had explored before him.'' (Loius, 2011, p. 53). This void in nature appears in his early works and continues until Hopper's last works. Whether in nature or in urban spaces, this void always appears as a juxtaposition for colour and atmosphere, conferring the presence of the polar opposite and portraying a sense of the depth of both life and death. Loius (2011) concluding, says that: '' The fundamental symbols (…) of the void, encompassing a range of dualities including mind – body, interior – exterior, entrapment – escape, dark – light, reality – illusion, yield a wealth of potential meaning. '' (Loius, 2011, p. 65).

(5) specific work analysis, examples and key features

… (a) Oil paintings

In '*Early Sunday Morning'*, Hopper paints a row of 'ordinary houses', storefronts at ground level and apartments at second level; Hopper later stated it was a representation of Seventh Avenue, and that now, those buildings were gone. On this painting, Clericuzio (2011) claims: '' This is Hopper's nostalgia in its most intoxicating form, evoking a scene that is both specifically somewhere and yet everywhere in America, and as one that is disappearing and desperately needs preservation.'' (Clericuzio, 2011, p. 10). *'A woman in the Sun'*, 1961, is a painting of a nude woman looking out the window as the sun gleams into the room, and she leaves behind the used up bed and smokes a cigarette as she gazes out of the window into a ' hidden landscape'. A strong vertical presence, half way to the left of the center of the composition, the woman is surrounded by an interior empty space. Outside the window there is only two dunes, that increase the feeling of alienation and loneliness that Hopper transmits through the woman.

In the painting '*Automat' (1927)*, 71.4 cm × 91.4 cm, a woman sits alone drinking a cup of coffee, in a public space that seems to be an American Dinner. In a cold atmosphere (judging by her clothes) and in night time (the darkness coming from the outside). The space is large, bright and empty. It is an anonymous dinner, devoid of accessories or superfluous decoration. Hopper's wife served as a model for the woman in the painting, however her features, expression and mood derived from Hopper's imagination; the woman has an air of ambiguity and contemplation.









Photo 1: 'Early Sunday Morning'; Source: http://www.etsavega.net/dibex/Rusk_EHopper.htm; Photo 2: House in the Railroad, 1925; Source: http://www.etsavega.net/dibex/Rusk_EHopper.htm; Photo 3: Automat, 1927, 71.4 cm × 91.4 cm; Source: https://en.wikipedia.org/wiki/Automat_(painting); Photo 4: Nighthawk painting, 1943; Source: https://en.wikipedia.org/wiki/File:Nighthawks_by_Edward_Hopper_1942.jpg;

PLATE 71: HOPPER'S EMOTIONS (NOTORIOUS WORKS)

Levin (1999) recalls the similarities between 'Automat' and Vermeer's paintings, specifically 'A girl asleep; '' (…) which Hopper saw in the Metropolitan Museum, depicting a lone woman across the table from an empty chair. Like Vermeer, Hopper employed background architectural elements and a bowl of fruit to help organize the space.'' (Levin, 1998, p. 201). The great big window behind her represents a great black void of darkness, emphasizing the woman's inner state of life. Author Shadwick Loius (2011) explains that in the midst of the great void is a small detail of a green light that represents hope and life itself, and a reflection of Great Gatsby's novel where the main character's 'green light' is a general symbol of man's dreams and illusions: '' Hopper's inclusion of this green light upon the window-void then, seems to me to be a direct response to this text, symbolizing the separation of this woman's reality from her dreams, those intangible ideals that one must chase to preserve the illusion of their own progress.'' (Loius, 2011, p. 47).

The author further explains that this is perhaps why the woman is represented as an 'illusion' that has no reflexion in the window behind her: she becomes a form of illusion herself, and Hopper portrays a 'literal space of the mind' through the painting. The painting thus explores a connection between reality and illusion, reflexions and voids, mind and spirits, physical spaces and mental ones.

(6) Key principles, concepts and values

… The Search For Universals: The Inner Life

In his paintings, Hopper always tried to draw out the universal instead of the particulars. Hidden between the representations of American culture, lie a deep interest in universal human emotions and universal themes that concern all humanity. Through his atmospheres he aims to arrive at the generalities of the human condition and the universals that define all of our existence: atmospheres that portray the dualities between light and darkness, the life and death, movement and stillness, confinement and expansion and even void and fullness. Empty rooms, the reflexion of light, the movement of the air, the gaze of lonely eyes and captured shadows in the faces of unknown people, present themselves as mirrors for our own inner world; 'windows' to our own inner psyche and to our own metaphysical and existential experiences in the day to day setting of life. What characterizes Hopper's art is this vital search for the universality of the inner life.

… Emotions: The Self, The Soul and The World

Hopper always leaves aspects unknown to the viewer: curtains closed, doors semi-open, mysterious hints of life that are never completely revealed. In doing so he allows for a sense of mystery to exist through every scene. But besides this innate mystery and dream like quality that fill his spaces and atmospheres, the bare, pure and empty scenes capture honesty, vulnerability and intimacy. They capture the soul's longing in life: surrounded by nothingness and emptiness, and yet with an ability to create a 'window' to another world. Emotions are found from the most small detail of each painting with the use of colour contrasts, to the expressions of the unknown people's faces that define inner depths of mixed feelings to the overall emotions derived from the whole composition. It is this rich composite layer of

emotions and feelings that grant Hopper's work his unique depth and that allow for the viewer to empathize and generate similar emotions within himself.

… Transcendence of the Mind and The Spirit

Loius (2011) writes: '' His painted spaces not only represent the vast and varied realm of his 'inner life', they also question the nature of art, and of life and death in their relationships to 'reality' and 'unreality'.'' (Loius, 2011, p. 65). It is in creating these dualities (represented by both the 'window' and the 'void'), between real and illusion, day and night, light and darkness, life and death, that Hopper creates a metaphysical and cosmological dimension through his artworks. His paintings become metaphorical 'windows' themselves, into the inner lives of our being; and these 'windows' create a means for the mind and the soul to transcend the 'body', or the day-to-day life and become immersed in a 'new reality', a 'dream like' world that allows for this freedom of the spirit.

For some this might represent a reflexion of Hopper's inner world, however this analysis concludes that what Hopper was aiming at defining and representing, the 'window' that was indeed important to describe and capture, was not a personal condition but a universal one: it is the condition of human life in its most pure and truthful way of existence. Human life defined by a dream-like condition, trying to escape the reality in which it finds itself in, however always alone and with feelings of loneliness; this condition leads to melancholic feelings and emotions, for no matter how strong that dream like world is, the darkness (the 'void') is always close, waiting to come back in. This 'window' describes all human life, and comes into existence with the understanding of the 'mind', the 'soul' and the 'spirit'. These complex natures and metaphysical understanding of life are deeply portrayed in Hopper's paintings. Through his works he creates an understanding into our own inner worlds, and into our own souls.

Ending Remarks:

Although Hopper's art is known for his unique portrayal of architecture and rich atmosphere, the research has shown that there are many more layers of meaning and significance that underlie his work. First, the romantic view of the world that desires it to be forever unchanged and free from technological and mainstream contaminations; second, the desire to create and recreate specific emotions of loneliness, desolation and melancholy, as well as the desire to portray an inner world of imagination, expression, feelings, spirit and soul; third, another layer of meaning and significance that has been found is the search for a universal existentialism that uses the world around to serve as a 'window' into the metaphysical, emotional and spiritual conditions of life. These layers all co-exist and create a level of depth, meaning and significance that allow Hopper's work to be timeless and indeed 'universal' in its particular nature.



Photo: Morning Sun, 1952; Source: http://www.etsavega.net/dibex/Rusk_EHopper.htm

PLATE 72: SOLITUDE AND MELANCHOLY

Summary Notes: Edward Hopper

1. *Hopper's atmospheres, through the use of colour, form, geometry, memory, emotion, imagination and reality, portray multiple layers of meaning and significance.*

2. *Atmospheres and architecture are a background for life and can possess the qualities and emotions one wishes to emphasize or re-create through creation.*

3. *The landscapes of the natural world and the urban landscapes of the architecture world should be preserved rather than allowing for changes to overcome and destroy the essence of what has been.*

4. *In using the 'window' (a connection to another world) and the 'void' (the emptiness/darkness of life), it is possible to expose our deepest 'inner worlds'.*

5. *Art portrays not what is shown in the 'canvas' but a 'window' into an inner world that is connected to the spirit and the soul of human life. This 'inner' world is the real value of art and is where the real meaning and significance of creation can be found.*

6. *Universalities are exposed through the particular and the intimate.*

7. *Exploration of connections between reality and illusion, reflexions and voids, mind and spirits, physical spaces and mental ones.*

8. *Conceptual Chart:*

Table 17: Edward Hopper's Conceptual Chart

CREATION			CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Table 18: Edward Hopper's Synthesis Chart

EDWARD HOPPER

1. FIELD:
- *Painting, Etching, Drawing and Watercolours*

2. EDUCATION/BACKGROUND:
- *Student of New York School of Art and Design*

3. EVOLUTION:
- *Began by painting landscapes, doing etchings and searching for his unique approach to architecture and atmospheres.*
- *Early interest in the loneliness of human condition.*

4. CONTEXT:
- *American Realistic Painting: XIX century*

5. INFLUENCES:
- *Architecture*
- *Romanticism*
- *Goethe*
- *Emerson*
- *Impressionism*
- *Travels*
- *The world around*
- *European Architecture and Art*
- *American Architectural Atmospheres*
- *The landscape: urban and natural*

6. WORK/CREATIVE PROCESS:
- *Realistic*
- *Imaginative*
- *Emotional*
- *Believed in the power of memory combined with direct observation*
- *Imagination and Expression combined with direct influence of the world around.*
- *Set of studies and drawings from which the overall composition emerged.*
- *Characterised by a deep search for subjects that allowed him to express the inner world*

7. PERSONAL COSMOLOGY:
- *Belief in the emotions of Loneliness, Solitude, and Isolation (the contemplative being) as a reflexion of the spirit.*
- *'nostalgia' towards past places and spaces of 'pre-urban' America*
- *love for the architecture of the commonplaces of urban life and the moments of the day-to-day American culture and life*
- *Belief in a reality defined by imagination and dream-like characteristics*
- *Art as 'the window of the soul'*

8. EMOTIONS
- *Melancholy*
- *Solitude*
- *Loneliness*
- *Desolation*
- *Isolation*
- *Surrender*
- *Mystery*

9. OBJECTIVES:
- *Explore the human condition through the landscape: either urban or natural.*
- *To portray the 'inner world' and the human soul through his art.*
- *Aimed not only to capture the architectural essence forever, but also to create an intimate emotional and existential condition.*
- *To create 'windows' to the soul.*
- *Search for universal states of being and generalised emotions of the spirit.*

10. CHARACTERIZATION:
- *Use of Compositional effect: geometry, verticality, horizontality, light and darkness and studies of colour.*
- *Imaginative Realist*
- *Each painting acts as one complex element, filled with opposing references, vibrant characters and intimate images, that create a 'window' into a more deeper portrayal of life: the intimacies of the human soul.*
- *Addresses the issue of modernisation by capturing the archetypal power of everyday American life and architecture*
- *Representation of the 'spirit' of his time through his own views and beliefs*
- *The portrayal of human loneliness and solitude*
- *Use of the 'void' as a metaphor for life.*
- *Juxtaposition of opposites: light and darkness, life and death.*
- *Exploration of connections between reality and illusion, reflexions and voids, mind and spirits, physical spaces and mental ones.*

11. CONCEPTUAL FRAMEWORK:
- *Architecture*
- *Atmospheres*
- *Landscapes*
- *Nature*
- *Human Condition*
- *Emotions*
- *Inner world of self*
- *Soul and Spirit*
- *Emotions*
- *Purity*

12. VALUES
- *Metaphysical, Philosophical, Spiritual and Emotional*

13. MEANING/SIGNIFICANCE
- *Universalism of human condition*
- *State of the soul and spirit*
- *Window to inner worlds*
- *Metaphysical understanding of life*



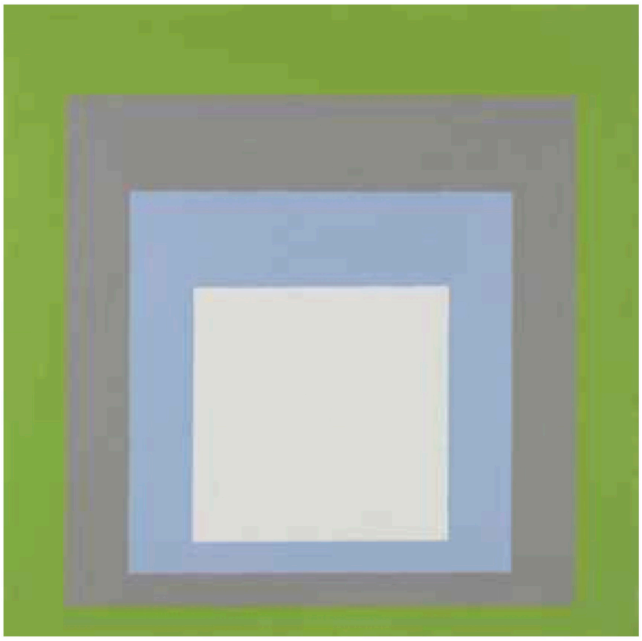


Photo: Josef Albers Portrait picture; Source: https://en.wikipedia.org/wiki/Josef_Albers;Photo 2: Homage to the square painting, 1956, 61 cm x 61 cm; http://www.christies.com/lotfinder/paintings/josef-albers-homage-to-the-square-sudden-5413295-details.aspx

PLATE 73: JOSEF ALBERS

6.3. JOSEF ALBERS

(1) artistic evolution, context and characterization

… Artistic Evolution

Albers started his career working with glass, but during his artistic career he grew his artistic practice in multiple artistic practices: in painting, in glass, in drawing, in prints, in leaf studies (collages), photography, furniture design and architecture. Albers work with pure colour, began with his glass paintings of the 1920's, while he was at the Bauhaus. When at Black Mountain, he started exhibiting his own artistic work in American Galleries, in solo exhibitions, where he featured works on glass, oil paintings and drawings. John Gage (1999) says that his devotion to colour begun with his work at Black Mountain, where he began to investigate: '' (…) the properties of colour in any systematic way. His work at the Black Mountain was the background to the longest series of colour-experiments, (…) '' (Gage, 1999, p. 264).

His approach to teaching was based both in direct observation and experimentation that led to self-discovery and understanding, based on design, drawing and colour. With his students, he brings attention to simple line drawings, the understanding of lines and shapes forming relationships, drawing block letters or numbers, recording shapes of objects and elements in spaces such as chairs or rugs, becoming aware of negative spaces, learning that the 'empty' spaces or hollow spaces were just as important as the solids (experiments were constructed using simple paper); other experiments included the juxtaposing of colour, and assemblages. He aimed to allow the development of his visual skills. Mexico deeply influenced Albers's painting: Mexican colours, pre-Colombian architecture and the sculpture: '' "Mexico," he wrote to Nina and Wassily Kandinsky in 1936, "is truly the promised land of abstract art." '' (Kueber, 2013). It was in Mexico that Albers returned to painting, after spending years creating stained glass and woodcuts and furniture designs. Also, Kueber writes: '' He significantly expanded his colour range, incorporating magenta, turquoise, violet, and ochre, among other colours, in varying combinations.'' (Kueber, 2013). It was the Mexican architecture and the Mesoamerican structures that inspired the geometric abstract paintings and sketches from the 1940's.

… Artistic Characterization

Albers's work explores the relationships and subtle or drastic connections between colour and form. Working with non-representational forms (abstract geometrical forms), he defines his theory on the idea of seeing, perception and experimentation. Albers sustained an experimental approach to colour understanding, believing that sight was better than knowledge and that all conclusions should derive from a hands on experimentation. Albers grew his art in multiple artistic practices: in painting, in glass, in drawing, in prints, in leaf studies (collages), photography, furniture design and architecture; where he studied and applied the different theories he was investigating. Throughout all his artistic practices there is a close connection between theory and practice. All of his work (in '*Colour Interactions'* and *'Homage to the Square'*) is devoid of personal sentiments or characteristic forms of expressions (such as gestures, textures or details). Albers believed that this removal of individual forms of expression and impressions,

would create more powerful visual impacts, and would allow for the colour properties to emerge rather than being detracted by 'styles' or gestures. The exception to this rule are his experimental works on paper (analysed further on in the present case study). On his artistic evolution, Cotter (2012) notes: '' (…) Pretty soon though, we see him settling on more solidly architectural forms, horizontal in orientation, made of receding planes that interlock ambiguously in space, a little like the eye-teasing structures of his Dutch contemporary M. C. Escher. '' (Cotter, 2012). Cotter refers to Albers evolution in the broadening of geometrical references and themes, turning to architectural forms and geometrical illusions as themes. Although Albers, defended that everything about his work depended exclusively on empirical test, Gage (1999) clarifies that the forms of the squares seem to respond to a certain Gestalt: proportionally. This proportionality and harmony is even more evident in his later stages of artistic creation, where geometry finds its roots in architectural references.

(2) creative process, methodology, techniques and characteristics

… Creative Process and Methodology

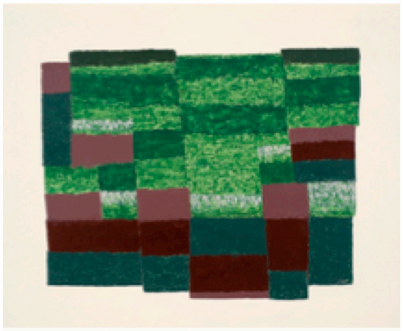
Albers was very rigorous in his process and catalogued every choice and method applied; each colour used for example, was listed at the back of the panel. He tested each of the colours, prior to painting, on small pieces of paper to see the result of the colour when completely dry, and used the same lighting conditions so as not to create colour differences[484]. He used a palette knife to paint, to achieve a smooth surface; beginning in the central square and working outwards. The painting never overlaps in colour; they are independent layers, applied side by side, so as to not detract from the intensity of the colour. Unlike Mondrian he never used masking tape, and achieved the perfect geometry without the aids of tools. In regards to his painting techniques and methods, Garland (1983) says: ''Albers painted alla prima and, in the name of purity, applied all of his paints directly from the tube, without additional medium.''(Garland, 1983, p. 64). His paints were unmixed, for he believed that mixing them would reduce the purity and intensity of the paint.

Another particularity about Albers creative process is that he used little studies and experimentations on paper in order to make all the creative decisions about the final artwork; as such, the final creation was a rational one, represented by techniques and rational choices already established from the experimentation stages. More, there is always a white border visible on the paintings, as Albers wanted them to have a beginning and an end; this centrality technique defines and characterizes his creative process. Although Albers was driven mainly by colour and geometry in his creative process, there is also a desire to capture the world around him through photography. These photographs, often various of the same site or landscape, were then organized and catalogued in pages, creating visually rich compositions.

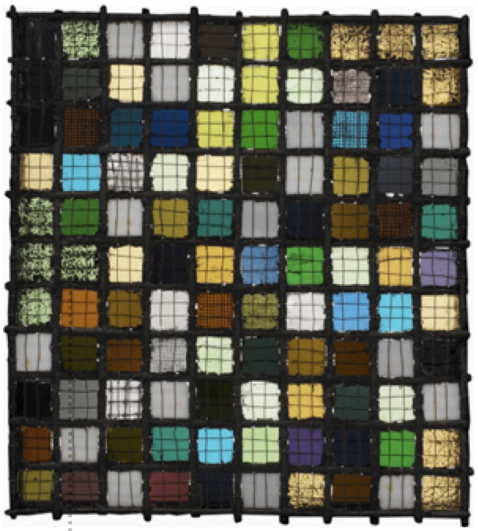
[484] Reference to: ''Albers truly paid attention to every detail: witness his listing all his materials on the back of the panels and his formulae for the design often appearing around the border of the front, in pencil. To achieve his desired effect, he even painted all his pictures under the same artificial lights: two fluorescent fixtures, one containing warm/warm, cool/cool bulbs and one containing warm/cool, warm/cool bulbs.'' (Garland, 1983, p. 67)



PHOTOGRAPHY STYDIRS



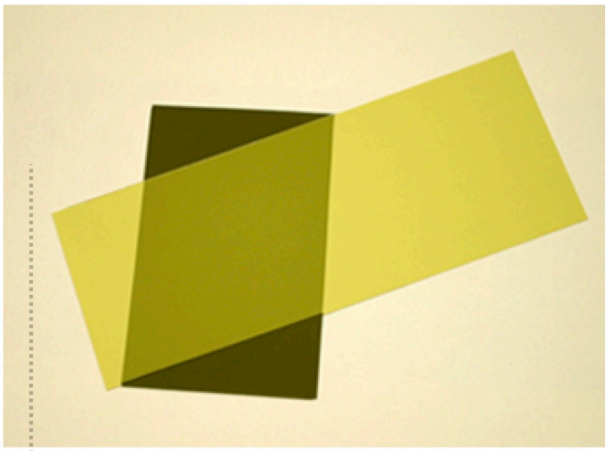


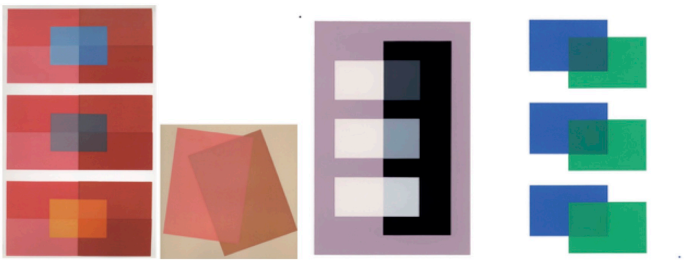


STAINED GLASS TECHNIQUE



STUDIES





INTERACTION OF COLOURS EXERCISES

Image 1: Untitled (Tenayuca, Mexico), n.d. photo collage, 25.7 × 40.6 cm; Source: http://albersfoundation.org/art/josef-albers/photographs/#slide13; Image 2: Bergfahrt Tamazunchale, Jacala, Mexico, n.d. (Mountain Journey, Tamazunchale, Jacala, Mexico) photo collage, 20.3 × 27.3 cm; Source: http://albersfoundation.org/art/josef-albers/photographs/#slide8; Photo 3:: Gitterbild (Grid Mounted), ca. 1921, glass, metal, and wire, 32.4 × 28.9 cm; Source: http://albersfoundation.org/art/josef-albers/glass/#slide1; Image 4: Josef Albers, Evening (an improvisation), 1935, oil on masonite, 27.9 × 30.4 cm. Source: http://albersfoundation.org/art/josef-albers/paintings/1915-1946/#slide14; Image 5: Josef Albers, Color Study for Homage to the Square, nd, Oil on blotting paper, 33.2 × 30.9 cm; Source: http://artblart.com/tag/colour/; ; Image 6: Study for Airy Center, ca. 1938, oil and graphite on blotting paper, 33 × 44.1 cm; Source: http://albersfoundation.org/art/josef-albers/paintings/paintings-on-paper/#slide2; Photos 7, 8 and 9: Interaction of colour experiments and templates; Source: http://weseebeauty.com/visions/interaction-of-color/;

PLATE 74: ALBER'S WORK PROCESS, METHODOLOGY AND INTERACTION OF COLOUR STUDIES

… (a) Painted Studies

Although the final painting took only a few hours to complete, his work process is centralized around the series of studies and experiments. These painted studies of all of Albers artistic practices are less well known, but they are the core of his creative process. They abandon the rationality quality, and are expressive in nature, although still using geometry as their basis. In these sketches and oil experimentations on paper, there are marks and imprints that make his work appear more personal and sentimental, rather than the exclusive rational approach. As experiments, they reveal more into Albers artistic process and his research and constant investigation of colour. These experiments were exhibited for the first time at the Morgan Library and Museum, in an exhibition entitled "Josef Albers in America: Painting on Paper" (2012), featuring exclusively the experimentation and research side of Albers's work. The exhibition was comprised of approximately eighty studies crossing four different decades. In these studies, Albers explores form and colour more freely. They can be organized in three groups: 1. The Abstract Geometric phase, of the 1930's decade; 2. The Variant / Adobe series, from the 1940s, influenced by the time Albers spent in Mexico and the influence of pre-Columbian Architecture, where he 'created' a series of paintings that resembled adobe like facades; 3. The Homage to the Square studies, from the 1950's onwards.

… Techniques

Albers was very rigorous about his materials, paints and techniques. He painted on un-tempered wood fibre-board panels, frequently Masonite. Previous early works were also on composition boards, or aluminium. Garland (1983) believes that, these choices were for the properties inherent to each material; his dislike for canvas for example, being caused by the fact that it is too absorbent; Albers, instead searched for materials that were rigid and allowed for a precise painting system: ''(…) he favoured the rigidity of the panels, where his painter's knife could glide smoothly over the surface maintaining a near-perfect, flat effect. Albers felt the rigid surface permitted the colour to project more.'' (Garland, 1983, p. 63). In the paintings of the 40's and 50's, the boards were primed on both sides (as Doerner suggests); to allow a higher luminosity and pure surface, the base of the works were always, as white as possible. Besides the rigidity of the surface, Albers searched for the 'perfect white' background: '' In an effort to achieve the perfect white ground, Albers experimented with a number of materials.'' (Garland, 1983, p. 63). In an earlier stage, he used Alkyd Enamel paints and finally settled with Liquitex white gesso, from 1959 onwards. In order to achieve this pure white surface, the grounds were coated with up to 8 layers of gesso, each left to dry before the other one was applied. He further experimented, with various materials and paints such as linseed oil, damar and turpentine to avoid the flaking of his paint.

(3) inspiration, influences, conceptual framework and themes:

… Influences

Gage (1999) writes that the psychological texts introduced by Kandinsky at the Bauhaus school, (that included for example, the problem of the relativity of colour sensations) strongly shaped Albers.

Albers was also deeply influenced by Max Doerner, his teacher at the Art Academy in Munich. Garland (1983) considers that it was his views on the art technique, as a pure evenly painted surface that had a profound influence on him. The Bauhaus in general, also had a great importance on Albers; it changed Albers and his way of designing, according to Cotter (2012), '' It led him, as a teacher, to emphasize large ideas and the development of those ideas through the mastery of materials. It was at the Bauhaus that he decisively embraced abstraction.'' (Cotter, 2012). Another important aspect for Albers was Architecture. Not only was he profoundly inspired by the architecture in Mexico in his travels, but throughout his life, architecture had deeply inspired his creative views. Albers drew from architecture the overall quality of his work, as Garland (1983) continues, and drove his clear methodological process and material selection: '' The overall architectural quality which they possess extends beyond the selection of the wood fibre-board panels to the careful priming, the orientation of the design, the laying down of the grid system, the application of the paint film, the meticulous care in choosing proper framing and even the proper strainer on the reverse.'' (Garland, 1983, p. 67).

… Conceptual Framework and Themes

Sustaining Albers work is two driving themes: colour and geometry.

… (a) Colour: Importance, Vitality and the driving theme

Colour was a central subject for Albers in all of his work. About the inter-relationships of color being so important to him, Albers himself says: "Colour, in my opinion, behaves like man—in two distinct ways: first in self-realization and then in the realization of relationships with others. In my paintings, I have tried to make two polarities meet—independence and interdependence." (Garland, 1983, p. 62)[485]. Not only is colour used as an 'independence' and 'interdependence' of elements, but Albers also turned colour into both the theme, the subject and the conceptual research of all his each work. On this issue Gage (1999) also continues: '' By around 1950 colour had become for Albers what he called 'autonomic'; he articulated this idea especially in the context of Homage to the Square: ' For me, colour is the means of my idiom. It's automatic. I'm not paying ''homage to the square''. It's only the dish I serve my craziness about colour in.'. '' (Gage, 1999, p. 265). In the statement, Albers clarifies that the underlying geometry is not important at all, instead just the motive he uses to explore and use 'colour'. Gage (1999) summarizes: ''Albers seemed to believe that the demonstrations of colour dynamics, both in paintings and in the Interaction of Colour, functioned independently from form. '' (Gage, 1999, p. 265). Whether independently or interconnected, colour was the primal theme of research and study for Albers, so central to all his conceptual framework, it is inseparable.

… (b) Geometry: Elements and Interdependence of Space

Even if as a secondary element to colour, geometry (shapes, lines and forms) designated the second theme of Albers's work. Through geometry he found the simplicity and sharpness of form to

[485] As quoted from Garland's research paper; Original source of the quote: ''Kuh, Katharine. *The Artist's Voice*. New York, 1960, p. 11.''

create the visual compositions and connection he wished to emphasize. On this issue, Gage (1999) claims: '' The square was neutral and in particular static: it had no movement of its own until it was brought to life by colour.'' (Gage, 1999, p. 265). Another formal aspect derived from geometry is the fact that Albers searched for connections between elements and forms; so, each of the elements in his artworks are not independent but connected amongst each other, and from those connections Albers searches for the extra quality that derive from them. On this issue, Albers notes: '' "An element plus an element must lead to at least one interesting relationship over and above the sum of the elements. In art, 1 + 1 can equal 3." (Garland, 1983, p. 62)[486].

(4) underlying theories and ideals

… Personal theories

… (a) Interaction of Colour

Josef Albers published his research on colour theory in 1963, with the title '*Interaction of colour'*. With an experimental approach, deriving a colour theory by a trial and error approach rather than an theoretical one and elusidating a new kind of approach: one that places practice prior to theory, instead of the traditional opposite theory to practice and focuses on 'observation'. *'Interaction of Colour*' is a summary of both his teachings and his conclusions and findings of his own color experimentation on colour interactions. In the form of instructions, notes, exercises, or rules, Albers explains values, relationships between colours, colour properties, and many other color notes that resulted of his years of both a teacher and an artist. The later version of the book is accompanied by 80 prints that represent and illustrate the exercises and points outlined in the theory book. These serve as a visual representation of his research and findings.

Interaction of colour (1963) is based on the idea that colour visual perception deceives, and therefore in order to use colour correctly a study of colour interaction is of the essence, developing what the author indicates as 'an eye for colour' and acquiring 'seeing' skills rather than knowledge, allowing for an awareness of colour phenomena to emerge, related to feeling. Colour, thus, is related to a sensitive way of perception, which is that which needs to be acquired, and should be understood not in an independent way, but in relation to each other[487]. Some of the main principles defined in the book are: the 'Relativity of colour' (colours appear differently when in contact with other colours)[488], the 'After Image

[486] As quoted from Garland's research paper; Original source of the quote: 'Weber, Nicholas Fox. Lecture delivered at The Fort Worth Art Museum, Fort Worth, Texas, April 7, 1981(taken from lecture notes for this institution and others).

[487] **The basis of 'interaction of colour':** Albers (1963) explains that '' In visual perception a colour is almost never seen as it really is – as it physically is. This fact makes colour the most relative medium in art.'' (Albers and Weber, 2006, p. 1). What is of the essence, Albers continues is vision or 'seeing' rather than knowledge: ''Seeing here implies Schaeun (as in Weltanschauung) and is coupled with fantasy, with imagination.'' (Albers and Weber, 2006, p. 2). Only through this way of search and understanding will a 'visual realization' and an 'awareness' of the colour phenomenon be clarified. The emphasis of the work, thus, is not only on the sensitive nature of learning to see colour, but also to understand the 'feeling' elements related to the interactions of colours. Albers (2006), explains that to understand the sensitive nature of colour, related to a sensitive way of seeing and to the understanding of the 'colour action', one cannot simply identify the colours; only this kind of study, an understanding of the interactions of colours can clarify a sensitive approach.

[488] **Relativity of colour:** He further clarifies: ''Because of the after-image (the simultaneous contrast), colours influence and change each other forth and back. They continuously interact – in our perception.'' (Albers and Weber, 2006, p. 73). But these relativities are not the same for all colours: ''It is discovered that certain colours are hard to change, and that there are others more susceptible to change.'' (Albers and Weber, 2006, p. 9).

effect' (the eye, when focused on one colour specifically, will produce its after image of its complementary colour) which demonstrates the interdependence of colour[489]; optical mixtures (which refer the third optimal result derived from two colour mixtures), of which the Bezold effect is an example[490]; the idea of colour harmony (which is the aim of colour combinations and can occur either by concordances or dissonances)[491] and the idea of quantity (explaining that quantities can change the overall colour effect). Other key issues detailed by Albers are the connections of colour and visual memory, the transparency, space-illusion, temperature of colours, amongst others.

… (b) Experimentation Theory and Practice: a guide for the apprentice

Intersecting colours is a way of practicing the eye to become alert to different colour phenomenon's. The studies aim to understand colour in itself. Not associated to form or any other means of representation. The studies do not aim to create or define knowledge, but instead to allow for the development of '' (…) imagination and taste.'' (Albers and Weber, 2006, p. 42). This type of study can lead to new discoveries in the multiple fields of colour use.

There are two types of studies according to Albers, each with its own set of rules and objectives. The first, the 'systematic problems' are studies outlined by Albers that aim to be rigorous exercises; through them, the students all work towards one single direction: ''This means they compete for the solution of 1 given problem at a time – that of a single colour effect.'' (Albers and Weber, 2006, p. 47). These studies aim at the development of observation and differentiation, and like so, they allow for ''hardly any self-expression''. In parallel to these systematic studies, the student is encouraged to develop 'free studies' (the second type of studies) that aim to 'challenge the imagination'. The opposite of the 'systematic problems' and as its complement, arise as the 'free problems'. These 'free studies' are encouraged by 'thematic suggestions': '' Experience has taught that pairs of contrasts invoke a more distinct ''meaning'' and a more precise ''reading''. First themes: gay – sad, young – old, major – minor. More daring: bright – dull, early – late, active – passive. '' (Albers and Weber, 2006, p. 48). Also, a further stimulation, Albers continues, is a restriction of the colour range, a restricted palette; for example, only contrasting, or only adjacent colour. To accompany such studies Albers suggest torn paper rather than properly cut paper, offering looser edges and freer outlines. Another suggestion is the exclusive use of stripes. Lastly, on the importance of these such experiments, Albers explains: '' To honour the masters creatively is to compare with their attitude rather than with their results, to follow an artistic understanding

[489] **The After-Image or Simultaneous Contrast**: Albers explains, occurs physically, by the body, when the eye is fatigued by one colour it creates its complementary one; this universal and general effect, a psycho-physiological phenomenon, implies that nobody is 'fool proof against colour deception', and that '' He who claims to see colours independent of their illusionary changes fools only himself, and one else.'' (Albers and Weber, 2006, p. 23). He further explains: ''Staring at red will fatigue the red-sensitive parts, so that with a sudden shift to white (which again consists of red, yellow and blue) only the mixture of yellow and blue occurs. And this is green, the complement of red. '' (Albers and Weber, 2006, p. 21).

[490] **Optical Mixtures:** are a process of combination of two colours and the successive creation of a third (the result) that is 'optimal'. An example of this type of mixture was defined by the impressionists, where colour was applied individually, unmixed in small dots, adjacent to each other, '' (…) so that they become mixed only in our perception – as an impression.'' (Albers and Weber, 2006, p. 33). This mixing through the perception itself not only led to the discovery of this new technique by the impressionists, but also the Pointillists, continues Albers. Albers further explains that there is a special kind of optical mixture called the Bezold Effect, named after its discoverer Wilhelm von Bezold (1837-1907).

[491] **Colour Harmony:** Albers explains: '' Colour systems usually lead to the conclusion that certain constellations within a system provide colour harmony. They indicate that this is mainly the aim and the end of colour combination, of colour juxtaposition.'' (Albers and Weber, 2006, p. 39). However, colour dissonances are also desirable, derived from colour tensions and dynamic asymmetries. Furthermore: '' Besides a balance through colour harmony, which is comparable to symmetry, there is equilibrium possible between colour tensions, related to a more dynamic asymmetry. '' (Albers and Weber, 2006, p. 42).

of tradition – that is, to create, not to revive.'' (Albers and Weber, 2006, p. 53). On the purpose of such studies, he says: ''The purpose of most of our colour studies is to prove that colour is the most relative medium in art, that we almost never perceive what colour is physically.'' (Albers and Weber, 2006, p. 72). Of all the colour properties, Albers most emphasizes the condition of 'Colour Relativity', explaining, that all of the experiments were to prove it's mutable and shifting essence.

(5) specific work analysis, examples and key features

… (a) Variant/Adobe Series

In his Variant / Adobe series, began in 1947. Cotter (2012), explains the origin of the series: ''By 1947, in a series of oil studies called "Variant/Adobe," spatial game playing has all but run its course. The once three-dimensional planes have been flattened out and packed into block like horizontal rectangles, their width broken by two small, widely spaced vertical rectangles.'' (Cotter, 2012). The compositions resemble wall structures and window openings. In these series, pure colours were placed beside one another, exploring their effects. On his intent and new found exploration, Albers explains: '' In a letter to friend Franz Perdekamp in September 1947, he wrote, "Since January [I have painted] only one theme in about seventy studies. What interests me most now is how colours change one another according to the proportions and quantities [I use]…I'm especially proud when [I can make] colours lose their identity and become unrecognizable." ''(Kueber, 2013). Resembling adobe like facades, the paintings consist of a horizontal rectangle with small, vertical shapes near the left and right sides. Highly textured paintings, with effects that result from the oil thickly applied on the subtle absorbing paper.

… (b) Homage to the square series

Albers began the Homage to the Square series in 1949/1950. The Homage series features more than a hundred paintings, similar in size and design approach. He found, in the Homage Series, a way to explore colour: the form of the painting was never his concern, but instead the colour. It is difficult to say if the Homage series (like the Adobe series) grew out of his inspiration in Mexico. The colours used vary: he was not conditioned only to contrasting colour combinations, but explored multiple ones: even opposing ones or apparently discording ones. Based on a grid system. The square was the form in which colour could be explored endlessly. More than 1000 paintings were painted in this series. The first studies for his Homage to the Square were black and white. Cotter (2012) concludes that the first studies for the series was defined in a dark toned and muddy colour palette, almost defined by a complete absence of colour: '' The early studies for "Homage" are curious items: blackish, brownish, mulchy things, muddied with coats of varnish. The double-windowed rectangle has been compacted into a dense, dark square, sometimes with a smaller square centered inside. Color is out of the picture for a while, except for black, white and gray.'' (Cotter, 2012). However, Albers, with time, evolved into using the most varied colour systems and combinations.

As the series evolved, it aimed at exploring and relating pure colours, one to another, untainted and undamaged by other visual phenomena. For that end, the square was the perfect form, as Garland

(1983) summarizes: ‘’ The square's perfectly harmonious form is clearly manmade, not representative of anything in nature. It is a pure form, a “non-subject”, so that one comes to it with no preconceived notions or emotions.’’ (Garland, 1983, p. 63). The colour interactions in combination with the three squares one inside the other, create a kind of three dimensionality, freeing the forms into space; this occurs (intentionally or unintentionally) because of the colour effects of the colours applied and the perceptual experience created: ‘’ This perception is due to the fact that certain colors recede, while others come forward, as well as because, by being weighted or positioned close to the bottom, the squares evoke a landscape proportion (and the effect of an unseen horizon line).’’ (Garland, 1983, p. 63).

… The Aesthetic Experience: Experiencing the Homage to the Square Series

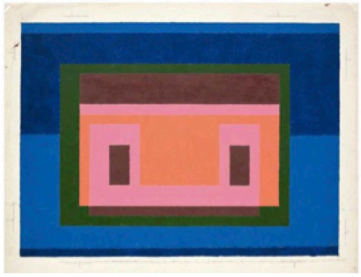
Having encountered various Josef Albers works of the Homage to the Square Series in multiple locations (at the Bárragan house in November 2014, at the Pompidou in February 2016, at the Arco fair 2015 in January of the same year in Madrid, among others) following is a brief description of the artistic experience. The works establish a very strong impression at the very first glance, independently of the location, setting and environment that surrounds them. The painting are quite small in scale, specially when in comparison with other contemporary artworks, however, their colours and their strong geometry, act as a sort of magnetising window drawing us into them and making us step closer and closer until we are up very close to the actual work. The limited range of colours in each artwork and the stable squares within squares create a dramatic effect that sort of shocks our senses and our thoughts; as we observe the painting closely, the lack of details and imperfections strikes a chord, and it seems to be almost too perfectly executed.

Most of the encounters with the works were in galleries, art fairs and permanent exhibitions at museums, however there was another experience, which is worth distinguishing, and that is two Homage to the Square paintings set in by Luis Barragan in his house and studio in Mexico City (as analysed in the according case study). These paintings, although the act independently of their surroundings (mirroring the same experience of the others in the series), they also establish another sort of encounter. Immersed in a specific architecture, and having been placed to fulfil a specific purpose in the house, they act as moments of contemplation and reflection in an overall complex architectural experience. Barragan, seems to have not only understood the significance of the works but also potentiated it’s development through the architecture.

Overall, in all their locations, the work acts as a window into another dimension, opening up a space in time, both physically, emotionally and spiritually.

… (c) Structural Constellations series

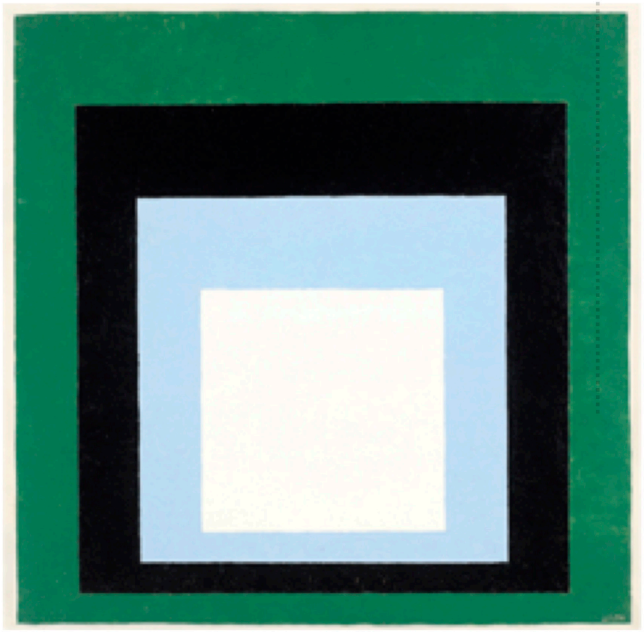
The Structural Constellations series, are apparently simple compositions in which straight lines create illusory forms. While the Structural Constellations Series was created in the 50’s, they seem to derive from his previous geometrical studies on paper and Masonite of the 40’s. In these geometric studies that evoke architectural spaces or elements: there are the uses of surface effects and three-dimensional effects. The third dimension is only indicated by thicknesses of lines and never completely defined.





VARIANT/ADOBE SERIES

HOMAGE TO THE SQUARE



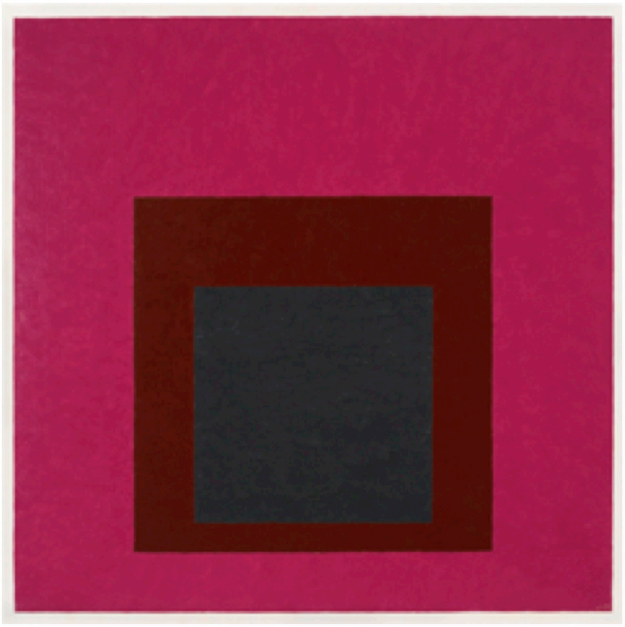


Image 1: Josef Albers, Variant/Adobe Series, 1947, oil on blotting paper, 48.3 cm x 60.9 cm; Source: http://retrorenovation.com/2012/09/19/josef-albers-homage-to-the-square-studies-at-the-morgan-through-oct-14/; Image 2: Josef Albers, Study for a Variant / Adobe (I), ca. 1947, oil on blotting paper with pencil, 24.1 × 30.6 cm, Credits: © 2010 The Josef and Anni Albers Foundation/VG Bildkunst, Bonn/Artists Rights Society, New York.; Source: http://artblart.com/tag/colour/; Image 3: Homage to the Square: Guarded, 1952, oil on Masonite, 60.9 × 60.9 cm; Source: http://albersfoundation.org/art/josef-albers/paintings/homages-to-the-square/#slide10; Image 4: Homage to the Square: Advancing Spring, 1952, oil on Masonite, 40.6 × 40.6 cm; Source: http://albersfoundation.org/art/josef-albers/paintings/homages-to-the-square/#slide8

PLATE 75: HOPPER'S SERIES AND CHARACTERISTICS

These graphic experiments indicate continuity and movement; escaping 'the point' and 'the plane' and using only line. In relation to his constellations series, Albers states: '' Colours appear connected predominantly in space. Therefore, as constellations they can be seen in any direction and at any speed. And as they remain, we can return to them repeatedly and in many ways. '' (Albers and Weber, 2006, p. 39). The Structural Constellations abandon Albers passion for colour and rely exclusively on formal elements and the contrasts of darkness and light to communicate its artistic values.

… (d) Architectural Installations: Murals

Albers designed various murals in collaborations with architects; in all of them he explored the same themes and concepts that he was investigating in his own artworks, but incorporated them into space. 'The Manhattan' was designed for the lobby of the Pan Am building (now known as the MetLife), in 1963, at the request of the building's architect, (his friend) Walter Gropius; the mural is an homage to New York City. The design was based on a glass design created in 1929 from Bauhaus entitled City. Today the mural is stored after being removed for renovation in the year 2000.

(7) Key principles, concepts and values

… Principles of Order, Structure, Simplicity and Abstraction

Holland Cotter, in his review of Albers's exhibition for the New York Times entitled, '*'Harmony, Harder Than It Looks: 'Josef Albers in America: Painting on Paper,' at the Morgan"* (2012), explains that: ''Albers's overall aim was to create an impression of effortless, inevitable harmony (…)'' (Cotter, 2012). Albers found in the structure of geometry and simplicity the capacity to do that, and combined those forms with colour to communicate emotions and psychological effects.

… Principles of Meditation, Harmony and Spiritual Connections

Holland Cotter (2002) continues: '' Abstract paintings of an emptied-out kind are like meditation devices. To look at them in a serious way requires sustained concentration. To create them, particularly if the process is arduous, is a form of psychic discipline, a species of yoga, a performance of faith.'' (Cotter, 2012). Indeed, underlying Hopper's creations is this desire to create a 'harmonious' and meditative moment for the viewer. Everything from the process of creation to the overall result, has the aim of communicating that stillness and to some degree, that sort of spiritual connection. Like a 'meditation technique', the author says, these paintings act as a systematic practice of 'faith'. Although Albers himself does not describe his paintings in this way, it is true that they hold that 'spiritual' harmony and silence quality that could describe and portray the divine world of stillness. Looking at them is allowing our eyes and our selves to dwell in that world of order and stillness, harmony and peace: we become immersed into that harmonious construction that describes the most abstract concepts of our being.

Ending Remarks:

Underlying Josef Albers creations is the main understanding that art has a power to affect and change our perceptions communicating intellectually and emotionally at multiple levels and thereby achieving levels of meaning. In order to do so, Albers believed that form, order, geometry and colour associations, combined in significant ways, would create those specific visual impacts. For him, art shouldn't rely on expressive qualities or the manifestations of the artist (brushstrokes, or gestures) but instead be a clean, sharp, ordered and pure creation that could, due to its visual perfect perception, speak to human's intellect. In order to achieve these deeper levels of meaning and significance art would have to rely on an intuitive level, attached to the faculties of insight and use experimental approaches of trial and error to achieve and define those harmonies. For Albers, art is based on 'seeing' rather than knowledge, and is associated at a first level with fantasy, feeling and imagination.



Image 1: Structural Constellation, n.d., ink and pencil on paper, 45.7 × 58.4 cm; Source: http://albersfoundation.org/art/josef-albers/drawings/#slide13; Image 2: Study for To Monte Alban, 1941, ink on paper, 59.1 × 45.7 cm; Source: http://albersfoundation.org/art/josef-albers/drawings/#slide14; Image 3: Multiplex A, 1947, woodcut, 41.9 × 31.7 cm; Source: http://albersfoundation.org/art/josef-albers/prints/#slide11.Image 4: Transformation of a Scheme No. 19, 1950, machine engraving on brown laminated plastic, 43.2 × 57.2 cm; Source: http://albersfoundation.org/art/josef-albers/structural-constellations/#slide2; Image 5: Structural Constellation, ca. 1950, machine engraving on black laminated plastic, 43.2 × 57.2 cm; Source: http://albersfoundation.org/art/josef-albers/structural-constellations/#slide3

PLATE 76: STRUCTURAL CONSTELLATIONS SERIES

Summary Notes: Josef Albers

1. *The relationships between colours can be summarized as **two opposing connections**: first the influencing of colours is known as **Interaction** and secondly the opposite viewpoint, where they co-exist, known as their **interdependence** .*

2. *Colours possess two main characteristics, **their brightness and their lightness**: ''Any colour (shade or tint) always has two decisive characteristics: colour intensity (brightness) and light intensity (lightness). Therefore, colour intervals also have this double sidedness, this duality. '' (Albers and Weber, 2006, p. 34).*

3. *Colour harmonies also occur and depend of the existence of the their opposite; colour dissonances are also desirable.*

4. *All colours **are relative and thus deceiving in their nature**.*

5. *Thinking and creating by experiments in multiple fields of action such as 'quantity', 'intensity' or 'weight' allows for new relationships to emerge between colours: ''In searching for new colour organization – colour design – we have come to think that quantity, intensity, or weight, as principles of study, can lead similarly to illusions, to new relationships, to different measurements, to other systems, as do transparency, space and intersections.'' (Albers and Weber, 2006, p. 42).*

6. *All colours are unstable mediums and rely completely on the relationships between adjacent colours.*

7. *Vision should always be trusted over Knowledge.*

8. *Order and geometry are the foundations of meaning and significance; expression is personal and therefore cannot be used for universal understandings. It is through geometry and formal expressions that the real essence can be portrayed.*

9. *The nature and significance of colour can convey the meaning of the nature and significance of human life; it can be and act as a metaphor for human emotions and human meanings.*

10. *Intuition, direct observation and self-discovery process is the best creative process. 'Seeing' rather than knowledge: associated with fantasy, feeling and imagination.*

11. *Conceptual chart:*

Table 19: Josef Albers Conceptual Chart

CREATION			CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Table 20: Josef Albers Synthesis Chart

JOSEF ALBERS

1. FIELD:
- *Drawing, Painting, Glass design, Prints, Photography Furniture design, Architecture*

2. EDUCATION/BACKGROUND:
- *Student of the Bauhaus School*
- *Professor at the Bauhaus School*
- *Head of the Art department at Black Mountain College in North Carolina*

3. EVOLUTION:
- *Began designing glass, evolved to painting*
- *Gradual geometrical clarification and progression*

4. CONTEXT:
- *Bauhaus*

5. INFLUENCES:
- *Mexican Architecture*
- *Architectural References and the use of geometry*
- *Architecture in general*
- *Geometry studies*
- *Bauhaus*
- *Psychological texts introduced by Kandinsky*

6. CREATIVE PROCESS:
- *Believed in direct observation and experimentation*
- *Led by self-discovery decisions*
- *Intuition and Insight*
- *Rationality*
- *Empirical test*
- *Set of studies and experiments to make decisions*
- *Core of the creative process*
- *Rigorous categorisation of colours and forms*
- *Architectural process: methodological*
- *Work process is centralised around the series of studies and experiments*

7. PERSONAL COSMOLOGY:
- *Believes that sight is better than knowledge for understanding Art and colour*
- *Through all art forms and architecture, there is a close connection between theory and practise*
- *Colour is associated to feeling and functions independently from form.*
- *'Seeing' rather than knowledge: associated with fantasy, feeling and imagination*
- *Understood colour as a phenomenon that allows the development of imagination and taste*

8. EMOTIONS
- *Order*
- *Structure*
- *Harmony*
- *Balance*

9. OBJECTIVES:
- *Explore the relationships and connections between colour and form*
- *To understand the phenomena of colour*
- *Search for the perfect geometry and the perfect colour combinations*
- *Demonstrate colour dynamics that are independent from form*
- *Guided by a search for the extra quality that defines art*
- *Understand and define the principles associated to Colour: Theory, Psychology, Relativity, Quantity, Effects, etc.*
- *To allow through colour the development of taste and imagination.*
- *Search for the extra quality that derives from colour and geometry compositions*
- *Explore and relate pure colours, one to another, untainted and undamaged by other visual phenomena.*
- *To create an impression of effortless, inevitable harmony*

10. CHARACTERIZATION:
- *Non-representation/Geometrical Abstraction*
- *Experimental approach to colour and form*
- *Devoid of personal expressions (such as gestures, or details): allows for a more intense visual impact.*
- *Centrality theme and technique*
- *Colour combinations on the same geometry patterns*
- *Drawing from architecture the qualities of the work*
- *Inter-relationships of colour: the theme, the subject and the conceptual research of all his work*
- *Proportionality and harmony*
- *Use of geometry: the simplicity and sharpness of form to create the visual compositions*

11. CONCEPTUAL FRAMEWORK:
- *Form*
- *Colour*
- *Geometry*
- *Proportion*
- *Architecture*
- *Perception*
- *Simplicity*
- *Abstraction*

12. VALUES
- *Philosophical and Sustainable*

13. MEANING/SIGNIFICANCE
- *Universalism of the human condition*
- *Search for truth (beyond the illusions of the eye)*

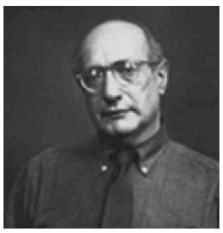




Photo 1: Mark Rothko Portrait; Source: http://www.pacegallery.com/artists/404/mark-rothko ;Photo 2: Untitled, 1967, Dimensions: 173 x 153 cm; Source: http://www.wikiart.org/en/mark-rothko/untitled-1967

PLATE 77: MARK ROTHKO

6.4 MARK ROTHKO

(1) artistic evolution, context and characterization

… Artistic Evolution

Mark Rothko went through various artistic styles until reaching his signature fields of colour, in the 1950's. His work evolved from representation and mythological subjects, that were in his early stages, into rectangular transcendent fields of colour and light, that define his mature work and his signature style. The initial work, is characterised by a figurative character (that includes landscapes, still lives, figure studies, and portraits) and is a mixture of Expressionism and Surrealism *(see Glossary)*. At this stage, he experimented with mythological themes, symbolism, figuration and narrative[492]. After this stage, Rothko evolved into a more abstract spatial aesthetic, that relied on colour and geometrical forms to create it's language. The abandonment of surrealism towards abstraction was greatly influenced by Clifford Sill *(see glossary),* and occurs in the mid 1940's, of which the painting *'Slow Swirl at Edge of Sea'* is an example (the painting portrays two humanlike forms in a floating atmosphere of shapes and colours, surrounded by a rigid rectangular background). This new phase is also seen as a greater appreciation and attention to colour and light as substances in their own right.

In 1946, Rothko creates what has become known as the transitional "multiform" paintings. The "multiform" became Rothko's mature signature style[493]. His mature style was severely influenced by his passion for light and desire to capture and portray light, and his love for colour. Forms were soft and seemed to be floating, and rectangular in format, substituting the morphed forms of prior stages. In 1947, Rothko begins to introduce large blocks of colour to his paintings, and the canvas still remains relatively small in size. There is also an abandonment of the rectilinear 'grid' structure, and an inherent concern with harmony and order of the whole work. He experiments with freer forms, reduces the compositions to few blocks of colour and allows the forms to merge with the grounds. These paintings are the ones for which he is best remembered and that best characterize his work. In the mid 1950's, Rothko began using dark blues and greens, restricting the colours of the painting to more dark tones. In the late 1950s and early 1960s his paintings began to be monumental in size. Some of his final works for the Rothko Chapel, where the final culmination of his style, and use darker tones and shades; lastly, the final creations by Rothko, right before his death are characterized by the total absence of colour, and the restricted use of black, grey and white.

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[492] **The early stages:** About Rothko's evolution and specifically these early stages, Waldman (1978) explains that it is difficult to trace the exact evolution of style, themes and content with exactitude, during the twenties until the forties, for many reasons: firstly, because he rarely dated his works, secondly because, '' (…) many canvases have more that one title, more than one date and were oriented in more than one direction.'' (Rothko and Waldman, 1978, p. 26). As such, this phase of his work, although difficult to define precisely, is loosely characterized by the figurative and symbolic elements. Author Dorment (2008) in his article for the Telegraph, about this transition, explains: '' For twenty five years he struggled as a run of the mill expressionist figure painter before rejecting representation, spatial recession, and line to work with pure colour, brushed onto the canvas in layers, as though to veil light imprisoned just beneath the paint surface.'' (Dorment, 2008).

[493] Author Phillips (2005) claims: '' It is important to remember that Rothko had been painting for nearly twenty-five years, with only intermittent success, before he arrived at his signature style. His classic format was not born from sudden inspiration, but from slow, methodical, difficult progress. '' (Phillips et al., 2005, p. 3). This slow progress indeed characterizes Rothko's evolution and his overall aesthetics, for it represented a gradual growing towards abstraction and towards a more 'free' and more 'meaningful' means of creation.

… Artistic Context

Rothko's work is known for belonging to the Abstract Expressionist Movement *(see Glossary)* and is also characterized as Colour Field Painting, of which he is considered a leading pioneer.

> **Abstract Expressionism:** Abstract Expressionism emerged in the early 1940's, in New York, with a small group of artists that possessed a diverse body of work and a radical new way of understanding the creative process and what art was supposed to be. Also known as 'The New York School', it encompassed the work of Jackson Pollock (1912–1956), Willem de Kooning (1904–1997), Franz Kline (1910–1962), Robert Motherwell (1915–1991), William Baziotes (1912–1963), Mark Rothko (1903–1970), Barnett Newman (1905–1970), Adolph Gottlieb (1903–1974), and Clyfford Still (1904–1980), and they shared some ideals in common: they were all in a search for significant content. Abstract expressionism emerged in the context of the Great Depression; and the growing exposure to European modernism, through the opening of museums, such as The Museum of Modern Art that had opened in 1929, or Albert Gallatin's Museum of Living Art, which was housed at New York University from 1927 to 1943, that showcased artworks by Mondrian, Gabo and El Lissitzky. Author Stella Paul, in an article on Abstract Expressionism for the The Met's Heilbrunn Timeline of Art History, The Metropolitan Museum of Art, (2004) explains '' Breaking away from accepted conventions in both technique and subject matter, the artists made monumentally scaled works that stood as reflections of their individual psyches—and in doing so, attempted to tap into universal inner sources.'' (Paul, 2004). The artists placed an emphasis on the artistic process valuing spontaneity, improvisation and intuition as key aspects of their creative processes. The author explains that the imagery was primarily abstract; they also resisted stylistic categorization, and had in common a focus on '' (…) on dynamic, energetic gesture, in contrast to a reflective, cerebral focus on more open fields of colour.'' (Paul, 2004). Overall, the artists were greatly influenced by primitive myth, archaic art and by surrealism, believing that art should derive from the subconscious mind. As a movement, it changed the nature of painting with their large, abstract canvases, energetic and gestural lines, and new artistic processes.

Abstract expressionism is further characterized by a focus on the creative process (valuing spontaneity, improvisation and intuition) and on what art was supposed to be (attempt to tap into universal inner sources), breaking away from traditional forms of creation, the use of monumental scale, the use of a primarily abstract vocabulary (trying to capture dynamic and energetic gestures), and it was greatly influenced by primitive myth, archaic art and by surrealism, believing that art should derive from the subconscious mind. Colour Field Painting *(see Glossary)*, considered to be one of the various paths defined by abstract expressionism is considered to be one of it's mature styles; it explored the expressive nature of colour, an abandonment of figuration, a focus on large scale and large fields to create a strong impact, and avoided the suggestions of forms and masses, by creating a sort of 'field' or atmosphere. Rothko is considered to be a pioneer and one the leading artists that defined both movements.

… Artistic Characterization

Although Rothko never considered himself an Abstract Expressionist or a Colour Field painter, what he was striving to accomplish resonates with those two styles. However Rothko preferred to avoid any categorizations of his work, sustaining that his work possessed a deeper and wider connection to the world. Rothko's work can be determined by: an attraction to order, stability, and balanced asymmetry, in an emotional means of expression; a rejection of the qualities of paint and an abandonment of the complex relationships of forms and colours to a more simplistic and direct form of expression (like Newman and Still); the desire to focus on what is essential; the idea that art is an act of revelation and an embodiment of universal truth; the idea that each painting possessed its own meaning as a spiritual essence that could

communicate human emotions[494]. In general Rothko's mature work can be described as large immersive compositions that are defined by multiple soft-edged blocks of colours that seem to float in space: they are compositions that possess blurred boundaries, a continuousness vs. contrast of colour, an overall wholeness and unity of form and a very large scale; they were meant to be experienced in an intimate environment[495]; they contain no direct reference to the world, and therefore can be considered purely 'abstract' works, that use abstraction, geometry and colour as resources of composition; they use psychological and emotional references of the human psyche and the human spirit, the intangible world he was deeply interested in (the work contains metaphors and symbols that evoke an inner world for the viewer); they use both vertical and horizontal connections (that metaphorically and symbolically, can represent the horizontality of the world and the verticality of human life towards the heavens). Whether these were consciously applied, or if they just resulted intuitively from his creative process is unknown, but those two directions are present in all of his colour paintings.

His work can also be described as a 'romantic sensibility', which Waldman (1978) points out, establishes a connection with music (rhythmic structures spatially articulated).

> **Connection with music:** Another main property or characteristic of Rothko's work is it's 'romantic sensibility' quality that Author Waldman, in the book '*Mark Rothko, 1903-1970 : A Retrospective'* (1978) summarizes. He explains that Rothko's work '' (…) shares with composers of music an absence of explicit imagery, and a corresponding developed capacity to evoke content by association.'' (Rothko and Waldman, 1978, p. 12). The process, he continues, is similar to listening, because it involves 'rhythmic structures', in his case that are spatially articulated. His sensibility, the author explains seems to evoke the German Romanticism, (Schubert or Brahms), that just like them, Rothko creates '' (…) melodic surfaces rendered vital and sonorous by means of formal structures which are, for the most part, hidden. '' (Rothko and Waldman, 1978, p. 12). This association with music, the author explains, doesn't occur exclusively because of the 'analogous devices' used, but also because he shares with them a certain 'romantic sensibility'.

And lastly, it is important to announce the general experience of Rothko's work, which is also a main driving characteristic, as explained by Philips (2005), in *Seeing Rothko* (2005). For Philips (2005), there are a few generalizations and qualities that can be drawn from what he describes as the 'Rothko experience', or the Rothko aesthetics in general: first the fact that, the experience is spatial (requiring an involvement through space from the viewer), second, that photographic reproductions fail to capture those qualities required by human scale and physicality (they diminish the nuances of colour that can only be visible when actually observing the painting up close, the textures and the levels of glossiness and opaqueness that are experienced); third, the fact that, there are innate contradictions within the work (such as roughness and glossiness), however there is a balance between the contradictions *(see below);* fourth, the fact that, the paintings require time to be understood (it is a temporal experience); and lastly, the fact that, the experience always remains incomplete since one can never fully understand the painting, or capture all of the infinite details or even the overall feel of it, precisely because of those innate

[494] On this issue, Waldman (1978) claims: '' Art for all of them becomes an act of revelation, of exaltation, an embodiment of universal truth.'' (Rothko and Waldman, 1978, p. 54). Rothko reached with this simplification and focus on the essentials his own mature and unique means of expression, his own aesthetics. Author Wolf (2015) explains that: '' He believed his fields of colour were spiritual planes that could tap into our most basic human emotions.'' (Wolf, 2015); as such, each of his works was indented to provoke a specific significance and meaning in the viewer.

[495] Author Paul (2004) on this series and their scale, claims: '' (…) the works were vast in scale. And they were meant to be seen in relatively close environments, so that the viewer was virtually enveloped by the experience of confronting the work. Rothko said, "I paint big to be intimate." The notion is toward the personal (authentic expression of the individual) rather than the grandiose.'' (Paul, 2004).

contradictions. Therefore, the author explains, that rather than resolving these contradictions, one should understand the value of discovering these contradictions in the first place.

> **Rothko's Contradictions:** The author Phillips (2005) about Rothko's contradictions, further explains that '' (…) descriptions almost invariably turn to aspects of the composition that seem to contradict one another and to ways that the canvases keep these contradictory aspects in balance. '' (Phillips et al., 2005, p. 2). One of the most contradictory aspects of the paintings is Rothko's use of simple colour arrangements evoking atmospheric effects and the use of contrasting drips, splashes and visible brushstrokes, which pull the attention away from the overall field into specifics. Other contradictions are for example the flatness of the composition and the desire to create depth as an illusionistic effect on the canvas, or techniques that seem to capture fullness and those that seem to portray emptiness, openness or closeness. However, the author continues, authors do agree, that there is an overall balance of these contradictions: '' The paintings are seen to balance contradictory, irreconcilable components, and, as a result, they exceed the viewer's immediate apprehension.'' (Phillips et al., 2005, p. 2).

(2) creative process, methodology, techniques and characteristics

… Creative Process and Methodology

Little is known about Rothko's methodology itself: he is known for taking his time with each work, and often sitting for hours starring at a blank canvas in contemplation: '' He often spent hours sitting near a blank canvas in quiet contemplation before proceeding to paint.'' ("Mark Rothko Biography," 2015). He was an avid painter, and progressed consciously through the different styles of painting throughout his life. His creative process was led and guided by his overall ideals and beliefs of what art could and should be. Above all, his creative process was intuitive, expressive and led by the imagination. His mature painting technique, was to apply thin layers of paint over each other, allowing for the various layers to show through each other in an almost transparent way. The first layers (binder mixed with pigment) were applied directly onto uncoated canvas. His brush strokes were fast and light, creating a vivid and dynamic application of paint. By repeating the method, layers upon layers, over and over, he creates an overlapping complexity of colours and shapes that show through each other. When reaching his mature stage, Rothko painted in oil only on large canvases with vertical formats. Large-scaled designs were used in order to overwhelm the viewer, or to allow the viewer to become immersed into the work, placing the viewer directly into the experience, rather than being a mere observer. Through scale, Rothko found the tool he needed to overwhelm the viewer and make him be apart of the experience of art, rather than just being an outsider. Besides this broad understanding of his technique, the details of his working method and his techniques are still a mystery today. Rothko was very private and secretive about them, keeping them a secret even from his assistants. Today, after scientific analysis of his canvases, it is known that he used different additives to the oil paints besides linseed oil and turpentine such as egg, glue, acrylic resins, among others. One of his main objectives for experimenting with different additives was to make the paint dry faster, so that new layers could be applied without mixing of colours.



EVOLUTION: MYTH AND MYTHOLOGY TO FORMS

THE MULTIFORM SERIES



EVOLUTION: Photo: Rothko Painting; Source: Photo 1: Untitled, 1945, Oil on Canvas; Source: http://www.wikiart.org/en/mark-rothko/not_detected_242121; Photo 2: N° 9, 1948, location National Gallery of Art, Washingon, DC, USA; Source: http://www.wikiart.org/en/mark-rothko/no-9; MULTIFORMS: Photo 1: N° 5, 1964, oil on canvas; Source: http://www.wikiart.org/en/mark-rothko/no-5-1964; Photo 2: N° 18, 1951, oil on canvas; Source: http://www.wikiart.org/en/mark-rothko/no-18; Photo 3: Ochre and Red on Red, 1962, oil on canvas; Source: http://www.wikiart.org/en/mark-rothko/ochre-and-red-on-red-2; Photo 4: Untitled, 1963, oil on canvas; Source: http://www.wikiart.org/en/mark-rothko/not_detected_242131; Photo 5: N° 16, 1961, oil on canvas; Source: http://www.wikiart.org/en/mark-rothko/not_detected_242132; Photo 6: Orange over Violet, 1968; Source: http://www.wikiart.org/en/mark-rothko/orange-over-violet-1968; Photo 7: Untitled, 1968, oil on canvas; Source: http://www.wikiart.org/en/mark-rothko/untitled-1968; Photo 8: Untitled, 1968, oil on canvas; Source: http://www.wikiart.org/en/mark-rothko/untitled-9; Photo 9: Untitled, 1969, oil on canvas; Source: http://www.wikiart.org/en/mark-rothko/untitled-1969-1

PLATE 78: JOURNEY TOWARDS ABSTRACTION AND THE MULTI FORMS

… Techniques

… (a) The Use of Colour and Light

Rothko regarded colour as one of the most important tools in his work and aimed to emphasize it. In order to do so Rothko uses symmetrical rectangular blocks of two to three opposing, contrasting or complementary, colours. The relationships between these colours was of the utmost importance to him, and he experimented profoundly with multiple combinations. In each painting, Rothko employed a combination of two, three or four colours that varied in intensity, brightness and saturation creating a rich and deep atmosphere, enhancing each other's properties through these associations[496]. The colours each play with each other, creating a coherent harmonious expressive whole. Also, with this unique approach to colour, Phillips (2005) explains that it produces a specific colour effect, which is the 'afterimage' effect[497]. In this way, the painting through specific colour combination creates a visual effect that allows it to expand way from the physical limits of the canvas.

Rothko's use of colour is also specified by: the fact that colours stand for themselves (rather than being applied to an object), making them both volume and emotion[498] and acting as a link to another reality; there is the ability to make colours appear to recede and approach the viewer; this is achieved by different colour combination effects and the width and strength of each mass; there is also the desire to achieve a quality of luminosity (that creates a unique drama and emotional charge).

As a brief summary, for Rothko, colour and its lightness or darkness was 'merely an instrument', that allowed for the communication of spiritual and complex emotions. Colour for Rothko was a vehicle to express 'basic human emotions': it was through the combinations of colour that transcendental effects of art could be achieved. Waldman summarizes, claiming that for Rothko'' Colour is the vessel for transcendental meaning.'' (Rothko and Waldman, 1978, p. 60).

(3) inspiration, influences, conceptual framework and themes:

… Influences

Rothko's life and artwork's were thoroughly affected by the World War II, his reading of Friedrich Nietzsche, Jewish and Social revolutions, Mythology, subjects he was profoundly interested in. Rothko was also greatly influenced by the fellow artists of the New York School of Painting and other artists prior to his time. Another great influence on him was the Surrealist Movement *(see Glossary),* in both poetry and art. All of these influences led Rothko to believe and develop a deeper connection through

496 On Rothko's website (2015) an article explains: '' Rothko often enhanced one intense colour by placing it next to another equally brilliant, as in Untitled (Violet, Black, Orange, Yellow on White and Red), luminous touches of white paint surround the central rectangles of violet, orange and yellow; the painting reveals (…) his ability to contain a vast array of colours of differing hues in differing proportions on the same plane.'' ("Mark Rothko Biography," 2015).

497 The Afterimage effect is described in the Josef Albers case study. It consists of the fact that when the eye is exposed too ne specific colour for an extended period of time it recreates the opposite colour of the colour spectrum spontaneously. In his words: '' With prolonged focus on the saturated fields of colour, the viewer's eyes begin to produce afterimages that expand beyond the boundaries of the painting.'' (Phillips et al., 2005, p. 7).

498 With this transition Rothko starts to understand colour as a means to another reality: '' Rothko's goal was to make colour both area and volume, emotion and mood, at once palpable and disembodied, sensuous and spiritual.'' (Rothko and Waldman, 1978, p. 58). Colour begins to represent something larger than itself.

his creations. With them he aimed to transcend the specifics of history, culture and individuality and strived to understand the universality of humanity.

… (a) Mythology, Myth and Primitive Art

Rothko was also deeply interested in primitive art, in archaic cultures, the art of the Aegean and ancient Near East; and he believed that myth could be a source of inspiration for abstraction; Nietzsche's book 'Birth of tragedy', with its classical interpretation of tragedy, reinforced this idea of myth, influenced his views on art and shaped his idea that myth could indeed communicate universal principles. He found in primitive art and myth a great source of inspiration. Rothko believed that the lack of mythology in the 'contemporary' world was responsible for the absence of awareness and guidance of the people of the world. He was also greatly influenced by Freud and Jung, specially the theories concerning dreams, archetypes and the collective unconscious, which also contributed to the belief that art, through myth and symbol, operates at a deeper level of consciousness.

… (b) Surrealism: The Unconscious and Symbol

Another main influence on Rothko, was the Surrealists *movement (see Glossary)*. It had been in Paris since 1924, and defended that the '' (…) function of the poet or artist was to select appropriate symbols, which correspond in their power and magic to myths, parables and metaphors of the past.'' (Rothko and Waldman, 1978, p. 35). These symbols created mutltiple associations and emotions, and were anti-rational in their nature: they favoured an art that was fantastic, imaginary and accidental in its nature in order to communicate with the unconscious, which was believed to be the original source of art, 'the inner universe of the imagination'. They had a profound influence on Rothko, specifically the artist Max Ernst, because of his innovative techniques and stylistic consistencies. Waldman (1978) adds: ' (…) Ernst had equally vital message for Rothko and his contemporaries, he reinforced the young painters belief in the power of myth, (…) .'' (Rothko and Waldman, 1978, p. 38).

… (c) Fellow Artists: Clifford Still and the New York School of Painting

Rothko maintained that he was self taught and that he had '' ''… learned painting from his contemporaries and their studies.'' '' (Rothko and Waldman, 1978, p. 26); indeed, fellow artists of his time had an immense influence on him. One of those great influences was Clifford Still, a fellow artist and friend that had a profound impact in the definition of his mature work. Like Rothko, Still wished to be independent of art movements; artistically, he also affected Rothko in regards to form, colour and concepts. They held a close contact during those years of the late 40's, overall, '' Still's paintings helped to liberate Rothko.'' (Rothko and Waldman, 1978, p. 52).

Another important influence was the artist Gottlieb. Author James Breslin, in his book 'Mark Rothko: A Biography' (2012), explains: '' When Rothko and Gottlieb met in 1929, both were beginner painters who had rebelled against the expectations of their Jewish families.'' (Breslin, 2012, p. 161). Gottlieb, the author continues, he offered Rothko a kind of 'personal solidity', and both of them saw Milton Avery as their personal and artistic mentor.

Both used to attend Milton Avery's studio and learn from his process and ideals. At the time, Avery, was developing a style that minimized the number of shapes and colours used in one single canvas

while simultaneously maximizing their importance. Waldman (1978) says that Avery established a bridge between Matisse and Rothko, in content form and means of creation. Simultaneously, Rothko also had a profound connection to more classic artists. An example of this, is when in 1947 Rothko became fascinated by Matisse's Red Studio, acquired by the Museum of Modern Art, that year. The painting was a great motivation on Rothko, mainly for its use of colour, and the atmospheric connections it portrays. He was also intensely shaped by Pollock and the other artists that belong to the New York School of Painting, for their experimental approaches to art and their love for abstraction.

… Conceptual Framework and Themes

… (a) Myth

Concerning myth as a theme, author Waldman (1978) writes that '' Although Rothko's symbol-laden imagery of the early 1940's was often ponderous, it is sometimes lightened by an element of surprise that derives from Surrealist automatism and exploration of chance.'' (Rothko and Waldman, 1978, p. 40). The author is referring to the use of 'myth' in a more figural way, as Rothko did in his first series of work. Despite this affinity with symbol and myth, Waldman mentions that Rothko and Gottlieb were unable to endow their work with the strength and relevance of myth, for '' (…) removed from their culture, the symbols loose their context, the connectivity tissue that is crucial to their meaning and use; they become abstract signs, without significant mythic content.'' (Rothko and Waldman, 1978, p. 42). Both their approaches, Waldman explains, was completely different from Picasso's synthesis of emotion and intellect. They both understood, that their 'search for the 'timeless' in art' was also a search for a new vocabulary. Once Rothko had defined his new language, his new 'multi-forms' through colour, his connection to myth never seized to exist, it just changed in means of expression. Nevertheless, for Rothko the paintings still held a great association to myth and to their meaning, but in a new way: an abstract way, connected to emotion.

… (b) The Formless Space and Colour Atmosphere

Rothko wanted to explore subjects other than urban and natural scenes that echoed his concern for form, space and colour, and as we have seen, he found in abstraction the language to do so. The formless space through formless or ambivalent forms defined the means by which his colour atmospheres could express all of his ideas and values in regards to art. Colour, as a central tool and an essence in itself lent itself to these matterless and formless creations.

(4) Underlying theories and ideals

… Personal cosmology and art beliefs

Rothko's art is considered a materialization of his spiritual and intellectual ideals and views of life and art itself. He was an intellectual, restless, rebellious and idealistic[499]. His restlessness and

[499] Author Dore Ashton, in her article *Rothko's Frame of Mind* (2005) for the book *Seeing Rothko*, explains that '' Rothko was an intellectual among painters. His mind was nurtured within a certain intellectual frame and his great task was to translate his principles into the non-discursive language of painting with its secret emanation.'' (Phillips et al., 2005, p. 21). His character and

eagerness to create a new type of art form began in his early stages of painting (when he joined the ten, in 1935, a group of artists that aimed to create a new paradigm for art: art free from contraints[500]). Rothko's ideal of art was continuously shaped by his encounters and experiences. An example of this is the influence teaching children had on his views and in 1936, Rothko began writing a book, never completed, about similarities in the art of children and the work of modern painters.

Around 1941, Rothko wrote another manuscript for a book, which was to be called *The Artist's Reality*, however, it was not published in his lifetime, and was published by Yale University Press in 2006. These writings present Rothko's ideas about Modern art *(see Glossary),* myth, beauty, and the artist. From these writings it is possible to understand Rothko's views about art and the artist in general, as well as what he was trying to achieve through his own creations.

Rothko believed in the artist's total freedom of expression, which he felt, was compromised by the market and the demands of the public. The artist, for Rothko, was a kind of visionary, responsible for transmitting ideas of human life, human emotions, to the audience. He defended that each painting should speak for itself, and could never be really described, only experienced and felt. Rothko in one of his note books wrote: '' Freedom can manifest itself thru tightness and well as exuberance, thru fixation on detail and well as large mass areas.'' (Rothko and López-Remiro, 2006, p. 11). It was this ideal of freedom that deeply accompanied both his views on art and his own creations. This freedom materialized not only in an independence, from pre-established artists and movements, but also a complex freedom of thought and emotions. Author Waldman, in the book '*Mark Rothko, 1903-1970 : A Retrospective'* (1978) writes that, accompanying Rothko's desire for freedom and for a new language of art, were also some ambitious goals and purposes for his art: '' This painter of genius wanted to achieve the grandeur of tradition and at the same time to rebel against tradition.'' (Rothko and Waldman, 1978, p. 17).

Rothko was also very demanding about the way his art should be appreciated and viewed. Rothko said that, in regards to his paintings being placed in the wrong environment: '' This would be a distortion of their meaning, since the pictures are intimate and intense, and are the opposite of what is decorative; and have been painted in a scale of normal living rather than an institutional scale." ("Mark Rothko Biography," 2015). He believed that in order for them to convey their real meaning they needed to be seen and viewed in the correct way.

… (a) The Aim of Art: Human Consciousness, Art as Emotion, Life and Spirit

One main reference of Rothko's views on art was made clear in a letter (dated June 7, 1943), written with Gottlied and with Barnett Newman, to the New York Times art critic Edward Alden Jewell, in response to Jewell's negative reviews of the third annual Federation of Modern Painters and Sculptures exhibition. In the letter, the authors remarked that for them, art was an 'adventure' into an unknown world, a sort of imaginative wandering (opposed to common sense) connected to complex thought (a main

way of being was a restless one, the author continues, that can be characterized as both rebellious and idealistic. Both these ways of being, the were conveyed into his art.

[500] **The Ten:** In 1935, Rothko joined a group of fellow artists painters and formed *'The Ten'*, (that consisted of artists such as Gottlieb, Solman or others), and aimed to create collective exhibitions of their works in galleries across New York and create a new paradigm for art: opposed to the conservative styles that dominated the artistic circles, specially in Europe, they had no declared program, and most of its members painted representational figures in a more abstract way. They believed in an art that was liberated by conditions and restraints and that was free to pursue different materializations of their principles.

aspect which defined artistic significance) and to the ideas of the tragic and the timeless (connection to primitive and archaic art)[501]. Art, thus, for Rothko, was this expression of the imagination, through complex thought, associated to the tragic and the timeless.

Rothko's ideals of art, influenced, as mentioned before, by both Nietzsche and the classical interpretation of tragedy, were that art had the power to communicate to human consciousness and relieve modern man of his spiritual emptiness. For Rothko his art should be a form of tragedy that would cater to the hearts of people, by allowing them to feel deep emotions and finding their place in the world. Mythology was seen by Rothko to operate as a symbol that communicated in human consciousness. In his early works, myth and symbol was manifested in more figurative associations, however with the colour field paintings the metaphors are more symbolic and abstract in nature. There is, as a result, an evolution in the way myth and symbol are perceived and transmitted. Art should be able to transcend the confines of current social and political life and strive to elevate human life to another type of connection and realm. Mainly, he believed that art was also the expression of human emotions, such as tragedy, ecstasy or doom, and in doing so, would allow for the awakening of those emotions, through its experience, in the viewer. In the process, a sort of spiritual cleansing would occur, as the viewer would be confronted with the multiple emotions of human life, and in feeling them, awaken to a higher understanding of life. It is in this context, that resides Rothko's belief in the emergence of a spiritual experience through the contemplation of his artworks; through his creations he aimed to transcend the mere aesthetic experience into a deeper metaphysical, religious and spiritual encounter. Further, in order to generate a spiritual experience in the viewer, he, as the artist needed to portray a spiritual experience too. His artworks, then, through the expression of emotions echoed the spiritual experience that Rothko himself was living. He searched through his art, for a connection into the human psyche, his own and other. His creations, then, become windows through which the viewer could find a state of consciousness and contemplation that allowed for a spiritual connection. On this regard, Rothko claimed '' Art to me is an anecdote of the spirit, and the only means of making concrete the purpose of its varied quickness and stillness." ("Mark Rothko Biography," 2015).

[501] **Rothko's letter:** The letter was published in the Times in June 13. Some of the most important ideas are cited bellow: '' 1. To us art is an adventure into an unknown world, which can be explored only by those willing to take the risks. 2. This world of the imagination is fancy-free and violently opposed to common sense. (…) 4. We favour the simple expression of complex thought (…) because it has the impact of the unequivocal. (…) 5. (…) There is no such thing as good painting about nothing. We assert that the subject is crucial and only that subject matter is valid which is tragic and timeless. That is why we profess spiritual kinship with primitive and archaic art. '' (Rothko and Waldman, 1978, p. 39).



Photo 1: The Rothko Chapel; Source 1: http://www.wikiart.org/en/mark-rothko/rothko-chapel-1967;

PLATE 79: THE ROTHKO CHAPEL

(5) specific work analysis, examples and key features

… (a) The multi-forms

His most notorious works of the first multiform paintings include No. 18 (1948) and Untitled (also 1948). Mark Rothko's *Untitled (Purple, White and Red)*, 1953, is typical of his most mature style, and depicts rectangular shapes of colour suspended in space. These suspended rectangular forms in space, became the vocabulary that marked Rothko's work, changing only scale, dimensions, techniques and colour combinations. For Rothko, the blurred forms of various colours, without references to landscape or human figure, possessed a life of their own. The rectangles of pigment appear to float atop a solid ground, creating an atmosphere that seems alive in its own way. Each painting possessed it's own significance and meaning, emphasized by different colour combinations. What all of them possess in common, is the overall reduction of forms, the idea of a creation of an atmospheric impression that lives in space, the large scale aimed at creating an intimate connection with the viewer and the overall idea of communicating a mythological and universal idea and meaning.

… (b) The Rothko Chapel

The Rothko Chapel (1971) is located adjacent to the Menil Collection and The University of St. Thomas in Houston, Texas. It was funded by John and Dominique de Menil and opened to the public in 1971, after Rothko's death. During the development of the project, Rothko worked and collaborated with the architects, having almost complete control over the shape of the building and its meditative environment within. He insisted that it had a central cupola like that of his studio. The original Architect Philip Johnson, refused to compromise with Rothko's vision, leaving the project in 1967, and being replaced by Architects Howard Barnstone and Eugene Aubry. Rothko wanted the chapel to be a place for pilgrimage, a destination. The Chapel is a Roman Catholic Chapel, and as such, references to Byzantine church like architecture led the creative process of both Rothko and the architects. The use of the octagonal form is one of those references, and also the use of triptych that was based on the Crucifixion.

Approaching the chapel from the south, visitors encounter a steel sculpture entitled *Broken Obelisk* by Barnett Newman. The sculpture is placed in a sort of lake, appearing to be floating on the water. The Chapel itself is a geometric, small structure devoid of windows. Considered to be a 'postmodern' architectural structure. It is a space for mediation and contemplation, a place for understanding and clarity. It contains fourteen of Rothko's paintings (there are three triptychs and five individual works) which are one of the last of his series of works: three triptychs and five individual, large in scale and dimension.

Author Dore Ashton, in her article *Rothko's Frame of Mind* (2005) for the book Seeing Rothko, refers that, Rothko had begun to think about the work for the Rothko chapel as '' (…) a matter of finding the right proportions in an almost mystical way. Rothko told Motherwell, (…) that at first he had thought of his murals as pictures, but then, had not wanted to distract visitors to the chapel with images; what they needed was ambience.'' (Phillips et al., 2005, p. 23). The author further explains that Rothko told to her once in a conversation that he wanted to paint both 'the finite and the infinite'.

All of the paintings use dark hues (abandoning the bright use of colour Rothko had become well known for), in shades of dark purple, maroon and black and are generally understood as melancholic works, echoing the meditative feel and atmosphere of the chapel. Yet when observed closely, the vast fields of dark hues present themselves as being composed by multiple variations of colours, creating a sensation of depth. It represents Rothko's growing concern for 'transcendence' and 'spirituality' and consciousness. The experience of the works, in the space of the chapel, would in this way immerse the viewer into a state of meditation, contemplation and awaken consciousness through spiritual emotions. Paintings fill every wall of the chapel and aim to surround the viewer in an overpowering way, imposing emotions of melancholy and darkness. The paintings become an echo of the meaning of the Crucifixion and the pain and the suffering of Christ through emotions rather than through forms and symbols. The art works for the chapel became his final artistic statement to the world. Further, the colours of the paintings and the overall atmosphere aimed to express a sort of 'vision into the beyond'. Author Waldman summarizes: '' In these murals of the Passion of Christ, Rothko evokes with his red and black his belief in the passion of life, the finality of death, the reality of the spirit. '' (Rothko and Waldman, 1978, p. 68).

In his article, author Glenn Phillips (2005) explains the David Antin analysis of the Rothko Chapel entitled ' The existential allegory of the Rothko chapel', where Antin writes that Rothko's work '' (…) '' offers you a confrontation with the existential condition that ultimately characterizes our experience in the world.''. '' (Phillips et al., 2005, p. 7). This dark experiences, creates a sense of anxiety, because it generates a sense of 'self slipping' away. The author Phillips points out, that Antin builds the narrative experience of the chapel and the paintings as a very personal account, constructing descriptions in a type of objective language of perception. This type of language is typically associated with minimal art (contemporaneous of Rothko's later works).

… (c) The last series of field paintings: Black and White

His last series of paintings are generally entitled *The Black Paintings*. Mostly they are composed of works of acrylic on canvas, and were produced in the year of 1969, just before his suicide. The colours and the scale of the paintings were restricted down to a more intimate size, but some are still large. They are characterised by an extreme contrast of light and dark, grey and black, evoking sadness and a deep psychological drama. The aim of these works was to: '' (…) bring to the fore the formal tension that Rothko sought to imbue in all of his work, but which some viewers, he felt, lost sight of, seduced or distracted by the luminous colours he employed elsewhere.'' (Davis, 2013). Surrounding most of these paintings, is a white border that had the purpose of restricting the view of the work to the forms; it was achieved by taping tape onto the paper or canvas and then removing it when the painting was finished. In his website, about these painting, it is summarized: '' In these late creations, Rothko conveyed all of his meaning through reductive form, minimal colour, painterly gesture, and the way the darker, heavier mass of brown or black meets the lighter, usually smaller area of grey below.'' ("Mark Rothko Biography," 2015).

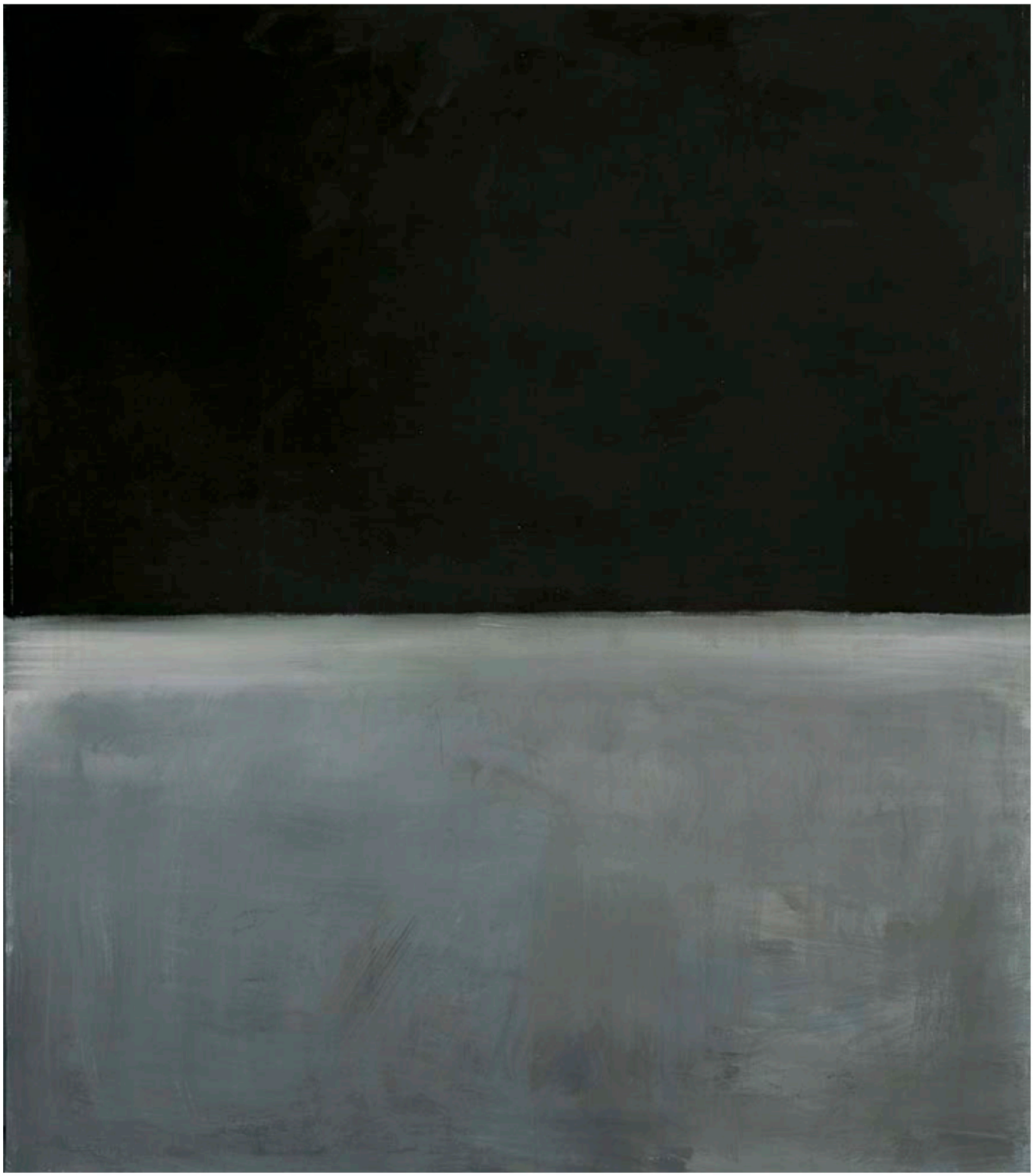


Photo: Untitled (Black and Grey) by Mark Rothko, 1970, Acrylic on canvas, National Gallery of Art, Washington, D.C., Dimensions 203.3 cm × 175.5 cm; Source: http://totallyhistory.com/untitled-black-on-grey/

PLATE 80: ABSENSE OF COLOUR: SPIRITUAL METAPHYSICS

Waldman (1978) further discloses about the works: '' The new works, however, speak entirely of another, transcendent world, of a painter who has crossed a threshold into the far side of reality. '' (Rothko and Waldman, 1978, p. 70). They are what the author Waldman refers to 'landscapes of the spirit', with the prominence of the horizontality alluding to the landscape and the mood and emotion of the painting alluding to the spirit. They resemble, the author adds, the artworks of Caspar David Friedrich, being that both artists are 'in awe of the spirit'. Whereas Friedrich, incorporates human being into his works, Rothko coveys his meaning through gesture, colour and form. For Rothko, these works symbolized death. In general it is ascribed to them the melancholic mood of their creator, but others refer to these works as 'landscapes of the mind'. Viewers and critics also establish a connection with the moon (the time at which it was painted, was shortly after the Apollo visit to the moon). *Untitled (Black on Grey)* (1970) is painted with acrylic on canvas, black top (layering's of shades of black) and bottom grey (layers of multiple of grey and shades of brown and lavender) painted with expressive brushstrokes, with the white perimeter frame surrounding the forms.

... *The Aesthetic Experience: Experiencing Rothko*

There has been a numerous number of times that I have experienced Rothko's paintings, (at Art Palace Museum in the City of Mexico, in October 2014, at Arco Madrid Art Fair, in January 2015 or at the Pompidou in January 2015), however these paintings were set in the midst of other paintings, and did not respond to the way Rothko wanted the works to be observed. These paintings, smaller in scale (between one and two meters), were placed in a fully lit environment surrounded by other artworks, as is standard in collective exhibitions. Either way, their colours, tones and simple abstract language capture ones attention from even meters away, standing out like a lighthouse. One is compelled to gaze at the works from both up close and far away, moving towards and backwards, constantly, in search of details, marks, and colour differences between the vast fields of colour. It seems that they possess a life of their own, that we as spectators need to decode and understand. In Tate Modern, in May 2015, however, I got to experience a set of six large scaled Rothko paintings, that were donated by Rothko himself to Tate in a later stage of his life, and that fulfilled his vision and ideals as to how and why they should be observed and experienced. Following is a brief description of the overall experience.

The room where the artworks are is large in scale, ample, devoid of any furniture (except for a couple of low benches in the middle) and is flooded with a sort of dim, yellow, soft light, that grants the atmosphere a shadowy mood that sits just on the edge of full darkness. There is a sort of silence that floods the dim lighted atmosphere. Within this dark diffused space and mood, the six or seven artworks that are very large in scale (up to eight meters long each one) sort of jump alive and demand immediate attention. They are filled with pink colours and tones, vibrant, energetic and almost alive, or red tones equally as vigorous; one of them is filled with a deep aubergine colour, with purple hues, and another with a deeper shape of violet. The colours and tones are appealing and magnetising. In each of the canvas is a free form, mostly rectangle in shape, represented in a different shade of the colour used on that specific canvas, that makes it seem as if the form is floating in an endless space, freely. The form makes it seem as if it is a sort of gateway or door, into another world.

As one walks across the room, wandering around from artwork to artwork, one is immersed into

each painting fully. It takes about ten steps to walk by each of the paintings, and this immersive spatial experience of walking besides the painting makes it seem as if they they are not something that is outside of ourselves, but something that is spatial itself, belonging to the room. It's as if the works are the architecture themselves, for one belongs to those works, in a sort of weird way. We feel small in scale and in depth, as we try to let the painting take over us completely, and welcome those colours into inside of ourselves. We move up close to see the details, move further away to see the full image, sit down in the bench to gaze at them softly, and then we repeat the cycle, moving close and then far. We are taken into another sort of world, a world where colour reigns the atmosphere, where emotions are alive and come out freely, and where there is a sort of ecstatic harmony that floods the air.

The experience is an open ended one, that never sees any form of completion at all: as a viewer, nothing satisfies our curiosity and our questions. We wonder: ' Where am I? What am I doing here? What is this in front of me? What kind of painting has the ability to make our physical dimension change from a corner in Tate Modern to another world completely? ' The more we look, the less we know; the more we try to understand the less the painting answers us. All we have to hang on to, in this immersive aesthetically and existentially immersive experience: a feeling and as emotion as fleeting and as intangible as the brushstrokes themselves. It is a sort of metaphysical and spiritual experience, that makes us want to stay there forever immersed into those pink bright colours and strong vibrant emotions.

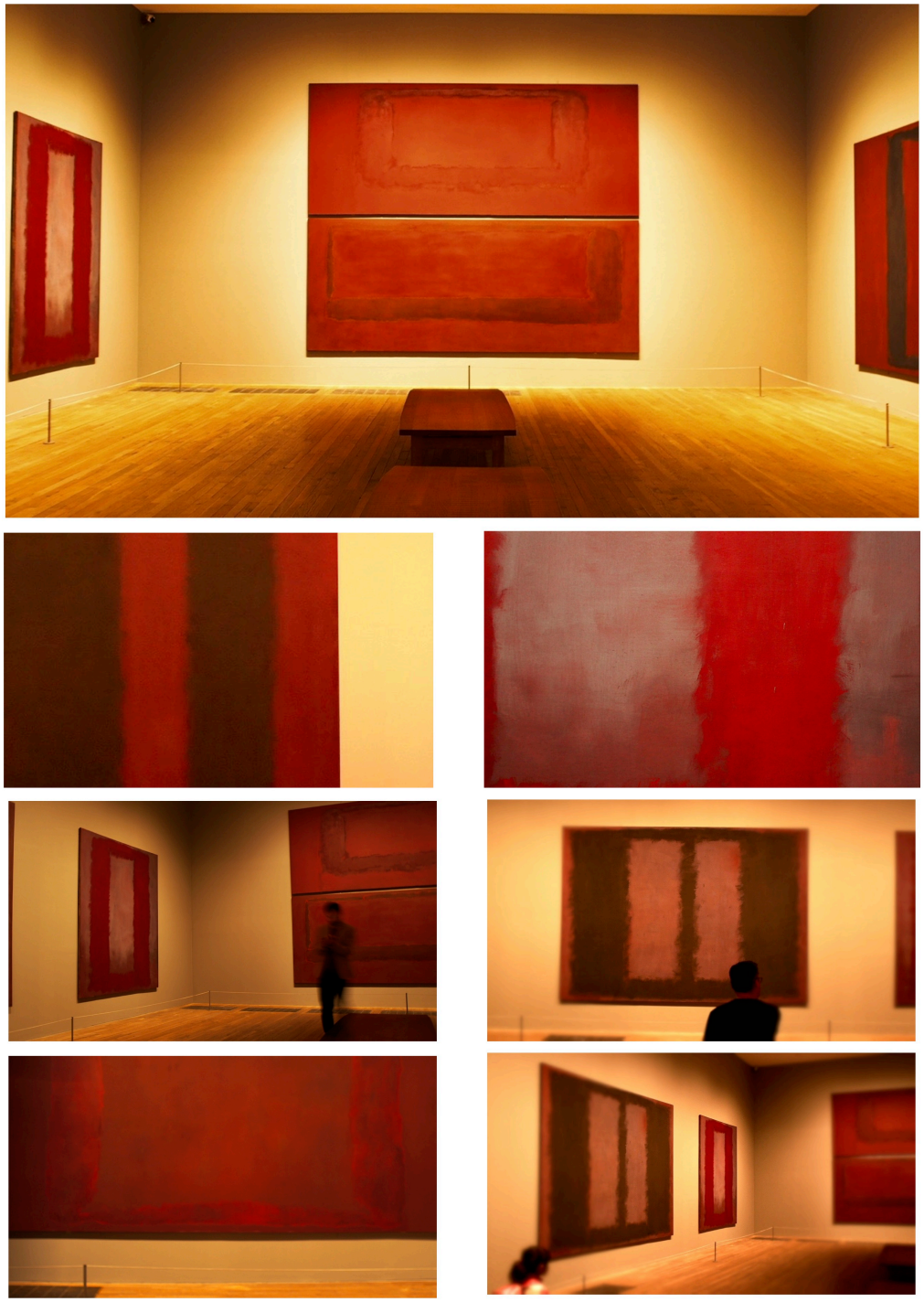
(6) Key principles, concepts and values

… Expression of Metaphysical Meaning

Rothko, did not consider himself an abstract artist, he believed that the things he was expressing were indeed very concrete and real. He was committed to express the spiritual and metaphysical rather than the mere physical. He combines magic and mysticism, myth and ritual in order to bring out the spiritual aspects of the work. Waldman (1978) writes: '' To suggest multiple levels of meaning he had first to strip away extraneous detail, just as the Surrealist poets and painters divested the object of conventional associations.'' (Rothko and Waldman, 1978, p. 62). Once this purification has occurred the viewer can then apprehend new kinds of associations. It was what the author calls 'formal reductivism' that allowed Rothko to create an 'expanded meaning'. In doing so he could express a 'metaphysical meaning', in a synthesis that is both physical and spiritual.

… Universal Truths and Spirituality

Rothko's work, attains an equilibrium, a harmony and a wholeness that enables him to express universal truths and spiritual connections. On this regard, Waldman (1978) says that he fuses: '' (…) the conscious and the unconscious, the finite and the infinite, the equivocal and the unequivocal, the sensuous and the spiritual.'' (Rothko and Waldman, 1978, p. 70), and in doing so, conveys this depth of universality and spiritualism. Rothko found in 'abstraction' the language that communicates to the human spirit. The paintings aim to represent the most pure and timeless condition of human life: that of the spiritual life. Rothko's art becomes a window into the universality of the human soul.



Source: Sarah Frances Dias Photography, photos taken by the Author

PLATE 81: AESTHETIC EXPERIENCE OF ROTHKO

Ending Remarks:

Rothko's creations, are windows through which the viewer can find a state of consciousness and contemplation that allows for a spiritual connection. Rothko's work, through its use of colour as substance and form as a non-limiting entity, expresses universal truths and spiritual connections. In this emotional and spiritual connection exist, his many layers of significance and meaning. Besides this deep meaningful aspect of Rothko's work, his legacy and meaning also exist in his views of art itself. He believes art could communicate to man's inner worlds, and that paintings can aim to represent the most pure and timeless condition of human life: that of the spiritual life. Through myth, tragedy and timelessness, in communicating to human consciousness, art could enable man to find his place in the world once more. It is this metaphysical meaning of art, in a synthesis that is both psychological, physical and spiritual, that art can transcend it's own dimension and belong to a timeless and more universal one.

Summary Notes: Mark Rothko

1. *Rothko's creations are windows through which the viewer can find a state of consciousness and contemplation that allows for a spiritual connection. In this emotional and spiritual connection exist his many layers of significance and meaning.*

2. *Art expresses a 'metaphysical meaning', in a synthesis that is both physical and spiritual.*

3. *Paintings can aim to represent the most pure and timeless condition of human life: that of the spiritual life.*

4. *Rothko's work attains an equilibrium, a harmony and a wholeness that enables him to express universal truths and spiritual connections.*

5. *Depuration and reduction, for Rothko, were a means of expressing multiple layers of meaning. Once this purification has occurred the viewer could then apprehend new kinds of associations.*

6. *Through myth, man could find his place in the world once more. For Rothko his art should be a form of tragedy that would cater the hearts of people, by allowing them to feel deep emotions. Mythology was seen by Rothko to operate as a symbol that communicated in human consciousness.*

7. *Art was a world of the imagination, and should be ' a simple expression of complex thought'*

8. *Art's subject matter should always be the tragic and the timeless.*

9. *Art should be able to transcend the confines of life and strive to elevate human life to another type of connection and realm.*

10. *Art is the expression of human emotions: the viewer is confronted with the multiple emotions of human life, and in feeling them, awaken to a higher understanding of life.*

11. *Conceptual chart:*

Table 21: Mark Rothko Conceptual Chart

CREATION			CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Table 22: Mark Rothko Synthesis Chart

MARK ROTHKO

1. FIELD:
- *Painting*

2. EDUCATION/BACKGROUND:
- *raised to understand politics, knowledge and religion*
- *qualified high school with distinction and honours*
- *scholarship to attend Yale university: dropped out*
- *Attended New York School of Design for art lessons*

3. EVOLUTION:
- *went through various artistic styles until reaching his signature fields of colour, in the 1950's*
- *first stages are defined by an Expressionism and Surrealism with mythological themes, symbolism and narrative - surrealistic phase*
- *moved to a more abstract spatial aesthetic, that relied on colour and geometrical forms - mature phase*
- *gradual evolution towards abstraction, colour and freedom of form.*

4. CONTEXT:
- *was part of the Abstract Expressionist Movement*
- *defined also the Colour Field Painting (one of the paths defined by Abstract Expressionism)*

5. INFLUENCES:
- *Mythology, Myth and Primitive Art*
- *Nietzsche's book 'Birth of tragedy'*
- *Freud and Jung, specially the theories concerning dreams, archetypes and the collective unconscious*
- *Surrealism: The Unconscious and Symbols*
- *Fellow Artists: Clifford Still, Gottlieb, Milton Avery (mentor) and the New York School of Painting*
- *Classical Art*

6. CREATIVE PROCESS:
- *led by contemplation process of silence*
- *Intuitive, expressive and led by the imagination.*
- *apply thin layers of paint over each other, allowing for the various layers to show through each other in an almost transparent way.*
- *a vivid and dynamic application of paint*

7. PERSONAL COSMOLOGY:
- *Art as an act of revelation, of exaltation, an embodiment of universal truth.*
- *believed in an art that was liberated by conditions and restraints and that was free*
- *believed in the artist's total freedom of expression*
- *Art was a world of the imagination, and should be ' a simple expression of complex thought';*
- *Art's subject matter should be the tragic and the timeless.*
- *art had the power to communicate to human consciousness*
- *that the aim for art, would be to relieve modern man's spiritual emptiness*
- *Through myth, man could find his place in the world once more.*

8. EMOTIONS
- ***Surrender***
- *Melancholy*
- *Belonging*
- *Happiness*
- *Harmony*

9. OBJECTIVES:
- *a desire to achieve that which is essential*
- *desire to create universal symbols of human yearning.*
- *believed his fields of colour were spiritual planes that could tap into our most basic human emotions*
- *communicate to human's invisible an dinner worlds*
- *create a deeper and wider connection to the world*
- *through the creations he aimed to transcend the mere aesthetic experience into a deeper metaphysical, religious and spiritual encounter.*

10. CHARACTERIZATION:
- *attracted to order, stability, and balanced asymmetry, in an emotional means of expression*
- *a rejection of the qualities of paint and an abandonment of the complex relationships of forms and colours to a more simplistic and direct form of expression*
- *large immersive compositions that are defined by multiple soft-edged blocks of colours that seem to float in space*
- *no direct reference to the world, and therefore can be considered purely 'abstract'*
- *vast scale and dimensions to provoke intimacy*
- *blurred boundaries, a continuousness vs. contrast of colour, an overall wholeness and unity of form*
- *possess a 'romantic sensibility'*
- *are defined by their innate contradictions*
- *quality of luminosity that suggested depth*
- *Colour is the vessel for transcendental meaning*
- *Colour allows for the communication of spiritual and complex emotions.*

11. CONCEPTUAL FRAMEWORK:
- *Mythology*
- *Light*
- *Space*
- *Colour*
- *Transcendentalism*
- *Communication*
- *Atmosphere*
- *Vagueness*

12. VALUES
- *Spirituality, Metaphysical, Emotional and Symbolical.*

13. MEANING/SIGNIFICANCE
- *each of his works was indented to provoke a specific significance and meaning in the viewer*
- *levels os emotions*
- *achieves a universal and spiritual meaning*





Photo: Anselm Kiefer Portrait; Source: http://likesuccess.com/author/anselm-kiefer ; Photo 2: Anselm Kiefer painting installation; Source:http://www.serlachius.fi/en/exhibitions/upcoming-exhibitions/27-anselm-kiefer/

PLATE 82: ANSELM KIEFER

6.5. ANSELM KIEFER

(1) artistic evolution, context and characterization

… Artistic Characterization

Kiefer's art is generally characterized by his individual and unique artistic language, its physical materiality, its monumentality, its visual complexity that expresses the weight of history and of time, and contextualizes humanity in a cosmological way. In order to do so, he uses 'powerful imagery', 'critical analysis' and a deep understanding of the poetical and mythical being in the world. For Prodger (2014), to characterize Kiefer's work is to understand that he is a sort of Shaman[502], in the sense that for Kiefer his work is a creation of something meaningful and deeply rooted in the metaphysical world. His work is also greatly defined by the use of varied fields of artistic expression ranging between sculpture, architectural objects, spaces, objects, paintings, altered photographs, or others, and some of his creations blend the lines between the fields of sculpture, architecture, installation and painting. Using either a monumental scale or a smaller one, his work is like this characterized by layers of multiple meanings (histories, mediums, techniques, influences and themes) that act together in conveying multiple significances. Ian Alteveer (2000), in an article for the The Metropolitan Museum of Art, about Kiefer's work writes: '' Their encrusted surfaces and thick layers of impasto are physical evocations of the sediments of time and meaning they convey.'' (Alteveer, 2000).

… Artistic Evolution

Whereas Kiefer's initial work was focused on German History (such as his early works Occupations) [503], he moved away from that vocabulary and his art expanded in themes and content, in search of something more universal, poetical and transcendental. This quest for a universal understanding of the primal untainted world, is the drive sustaining his most iconic creations. His artistic evolution also changes towards a three dimensionality, almost abandoning completely the two dimensional static world for a highly textured and 'alive' kind of surface. In this manner, Kiefer's work evolved into creating a new kind of third space, one that sits between painting, sculpture and even architecture.

… Artistic Context and categorization

Kiefer's Art is generally identified and categorized as 'romantic anti-capitalism', as explained by Ramply (2000), which focuses on the cosmic and mythological dimensions. The term, first coined by Georg Lukács in his studies on Dostoyevski, is associated to: the early Romantics such as Friedrich Schlegel, and their concern with life and unity, and the works of Henri Rousseau and Edmund Burke.

[502] Prodger (2014) explains, that to describe Kiefer '' (…) perhaps the only word that makes some sort of sense is **"shaman".**'' (Prodger, 2014) and also, emphasizes the importance, that ''(…) for the artist, there is something meaningful going on, however knotted or nebulous that meaning might be.'' (Prodger, 2014). These two conceptual descriptions deeply characterize Kiefer's work, from conception to the final art work.

[503] Referring to 'Occupations', Prodger (2014) explains: ''In these he photographed himself in his father's army uniform standing on rocky outcrops, sea shores or in front of famous buildings giving the Nazi salute. (...) It was his way of forcing his fellow Germans to confront the past rather than ignore it.'' (Prodger, 2014). When Kiefer moved away from Germany to France, his art expanded in themes and content. His art evolved into a wider more universal concern, or as Prodger (2014) claims: ''His art from the 1990s onwards has had at its heart the connection between earth and heaven''. (Prodger, 2014).

Ramply (2000) further clarifies, that what all these movements and schools of thought have in common is the focus on a 'pre-reflective experience' of the world, prior to modernization (technological and economical), characterized by 'purity' and 'openness'[504]. Kiefer's work, besides this description as a 'neo-romantic' or 'anti-capitalist', is also linked to what is described as New Symbolism, a movement that sustains the same core principle: the return to a primal world, where technology and economy has not drowned out the mysticism and purity of the world. His techniques are also defined as a Neo-Expressionist style, where having expression at their core, new materials and techniques are introduced.

> **Romantic Anti-Capitalism:** Matthew Rampley in his article 'In Search of Cultural History: Anselm Kiefer and the Ambivalence of Modernism', published in Oxford Arts Journal, (2000) analysis Kiefer's approach to Art is an art historian context associating Kiefer's art with what is defined as a 'romantic anti-capitalism'. Ramply (2000) explains that Kiefer's use of specific symbols made him the object of some negative reviews: '' In particular, Kiefer's repetitive use of icons of the Third Reich, including Albert Speer's Chancellery building, his inclusion of Wagnerian themes, (…) made him the focus of a considerable amount of negative comment.'' (Rampley, 2000, p. 1). However, some positive reviews, such as the works written by Gudrun Inboden, focus on the cosmic and mythological dimensions of Kiefer's work, which is what Kiefer's work evolved into, after abandoning the social and political aspects of his artworks from the early stage of his career. This approach, this 'romantic anti-capitalism' Ramply (2000) continues, can be seen in multiple spheres of creation (such as authors of Germans History, the founding fathers of sociology, Max Weber or even the work of Georg Simmel's analysis of modernity in his '*Philosophy of Money'),* however, he continues, '' The intellectual ancestry of this concern with life and unity can be traced back to early Romantics such as Friedrich Schlegel and Hölderlin, who sought to overcome the subject-object dichotomy in the name of a pre-conceptual intuitive immediacy.'' (Rampley, 2000, p. 7). Under this same label, the author continues, one could also contextualize Emil Nolde and Theodor Adorno and finds its 'two-fold origins' in Henri Rousseau and Edmund Burke.

(3) creative process, methodology, techniques and characteristics

… Creative Process and Methodology

Kiefer believes that the art process, in both painting and sculpture is a transcendental process. In Kiefer's words: '' (…) "It begins in the dark after an intense experience, a shock", he says. "At first it is an urge, a pounding. You don't know what it is, but it compels you to act. At first, it is very vague.'' (Prodger, 2014). It is this vague shock value that drives Kiefer into creation and allows him to conceptualize his creation as an on-going evolution. This shock value, usually derives from reading (every morning he reads a book in the library before starting the work, the shock stops him from reading more, and he starts to paint), it is the first stage of his artistic creation work process.

After this initial stage, the work process develops in a sort of experimentation process, that either begins in small paintings as experiments (in small works on paper such as sketches, watercolours, collages, or altered processes, that can themselves be viewed as works of art[505]) or in a large work. For Kiefer, the experimentation process is an integral part of his work process, however, from the experiences result an emotion and an idea, rather than a literal transposition of the experience to a larger scale. Kiefer,

[504] Reference to: '' Common to all such positions is an attention not only to some form of pre-reflective experience of the world, an openness, as it were, to pure, unmediated being, before the disruption of such primordial unity by the mediation of conceptual language, but also to the role of modernity (and its capitalist economic formations) in hastening the process of rationalization.'' (Rampley, 2000, p. 7).

[505] Ian Alteveer (2000) clarifies that Kiefer develops the subjects and themes of the paintings in little experiments (in small works on paper such as sketches, watercolours, collages, or altered processes), where '' These drawings develop the artist's themes through experimentation—as preliminary or intermediary studies—and result in beautifully finished, stand-alone works of art.'' (Alteveer, 2000).

in the documentary *Imagine* (2004), explains that the process of art making is a hard 'endeavor', because there are a lot of possibilities and at every point of the painting, only one 'road' can be chosen. Therefore, time and space are needed to understand the work itself: as a living organism; so, the process evolves and changes, and is never really finished only abandoned (the work is always open ended). The process requires that both making and observation, work together in cycles, and that he searches constantly for what is out of 'the normal' (by making himself do different types of creations)[506]. The art process, as such, is always open, on-going and in continuous transformation.

… Techniques

> ''His vast pictures, thick with paint and embedded with objects from sunflowers and diamonds to lumps of lead, nod to the Nazis and Norse myth, to Kabbalah and the Egyptian gods, to philosophy and poetry, and to alchemy and the spirit of materials.'' (Prodger, 2014).

Kiefer's work uses heavy impasto techniques, multiple layers upon layers of different materials (substances) and different techniques to apply them to the canvas: such as lead, paper, acrylic, broken glass, dried flowers or plants, gold leaf, shellac, objects, clothes, wood, led, etc. Besides the direct techniques of painting (brushes) onto the canvas, Kiefer also uses different strategies that result in visually complex creations: writing numbers on bits of paper and gluing them to the canvas, using glued children's clothes, using found waste, drying flowers and wheat, incorporating sand, straw or stones. His paintings result as heavy and rich surfaces, of encrusted surfaces and thick layers. Because of their thick layers the paintings result in fragile and temporary creations. In one single painting Kiefer uses various materials and multiple techniques: as an example is the painting '*Cette obscure clarté qui tombe des étoiles'* (1999) he uses acrylic paint, oil paint, shellac, earth, sand, wood, paper and glass on two canvases, lead, iron, books and other material.

Kiefer's techniques, are driven by a deep desire to be true to the material he is using, allowing each one to act in its way and interact with the other materials accordingly. Besides the desire to allow each material to speak for itself, the choice of material is also very metaphysical and mystical in its own way. One of Kiefer's preferred material is led, because it comes from the 'depths of the earth' and possesses mystical and spiritual qualities[507]. For Kiefer, led is the only material that can carry the weight of the world and of human history. In some paintings, his technique, is painting in colour and then covering it up with greys, browns, whites, ashes and other substances. In others the work starts, with the sense of the material itself. However each painting, once the first stages of the work are complete, is

[506] **Kiefer on his art process:** sometimes, he explains, it is a failure… time and distance is needed to understand what works and what doesn't. It is like a 'war in your head', he claims. When asked how he knows when the painting is finished, Kiefer replies that it is a very difficult moment: '' It is an artificial interruption. It is a crucial moment when I have to give a painting to a show and they sell it and I cannot touch it anymore. '' (*Imagine*, 2014). For Kiefer, the process of making, something completely immersive is also a distanced process of observation: it is both. First the painting is completely immersive, after that phase, he steps back and observes, looks and analyses. With time, Kiefer in another interview with Tim Marlow (2014) explains, his work process gets both easier and harder: easier because he possesses the methods to 'change' the painting, once it gets stuck (putting it in the rain, in the sun, a technique, etc.) and harder because, it is more difficult to bring 'out of the rail' of the work, out of the 'normal' type of creations. To get himself into that state beyond the familiar, Kiefer claims that he tries to make himself do different things: such as painting small watercolours, or small paintings.

[507] **The use of Led:** on this use of Led as a material Kiefer explains: '' (…) "lead comes from the depths of the earth, from which it is extracted and a shaman then places a chunk of it on a plinth between heaven and earth, between the spheres of the Nigredo and the spirituality of the Albedo … equally I could mention the sacred groves of the Druids, the Celts, the Germanic tribes …" (…)''. (Prodger, 2014).

submitted to changing circumstances that change it, alter it and shift it's direction; these multiple techniques range from shutting the painting away in a dark room, letting it sit in the rain for days, or submitting it to electrolysis processes. On the electrolysis process, Kiefer reveals: '' "You cannot produce it, it's such a powerful green, that's the electrolysis, it changes the painting and when I see it, I am surprised. And that's what I live for: to be surprised." '' (Wullschlager, 2014). These strategies, not only create a 'surprise' element' to the artistic process but also allow Kiefer to surrender the artistic process to something foreign and outside of himself: to nature. As such, nature imprints its own marks and allows the paintings to become deeply alive and always mutating, evolving and shifting.

… (a) The Use of Colour

The paintings possess an abundance of black and white tones, in high contrast between both; but they also possess the multiple shades of greys, browns, ashes, whites, ochre's and others that define the in-betweens of those two opposing colours. Some paintings begin with deep and rich vibrant colour and then they are covered up with greys or blacks and whites, but always allowing for those rich colours to show through the layers of whites and blacks. In some paintings colour makes a reference, either subtly in little scattered references or abruptly in statements like intense forms; in most of the paintings, colour sits in the background, subdued or covered up by multiple layers of softer tones and shades. Colour in Kiefer's work is both symbolic, allegorical and in a deeper sense, one of the tools that allows him to grant a metaphysical and spiritual dimension to the work.

(4) inspiration, influences, conceptual framework and themes:

… Conceptual Framework, Influences and Themes

For Kiefer, his influences are directly transported into the creation itself as themes, so, Kiefer's work covers a wide range of cultural references, subject matters and conceptual frameworks. Raising against the triviality that defines the modern culture, Kiefer, dwells in History and Culture, allowing for poetic significances, existential 'being' and the weight of history, of the world and of humanity to become clear, through the artwork. In this manner, the broad combination of themes and references allows for the affirming, of a deeper meaning and imagination to emerge and assert its place in the world. However it is the complexity of the combination of these multiple themes, that can never quite be pointed out on their own, but that work together as a whole system that creates the visual density and richness of Kiefer's work. Some of these multiple concepts, themes, influences and subjects are: the idea of civilization (questioning the birth of the planet, the birth of civilization, the death of the planet, or the death of civilization), the concept of time (both geological time, a-temporal time, and even universal time), the opposition between creation and destruction (the birth and destruction of the world, of things and of humanity); the power of myth and legends (Ancient Mythology, Fictions of the world, Legends of Creation, Egyptian mythology and others), the weight of history (The History of Germany, Art History, the history of civilization), the art, literature, philosophy, poetry (Goethe's poetry), architecture, music, archaeology, astronomy, alchemy and many other references.



Photo:Anselm Kiefer, Sternenfall, 2007, Gouache and glass on photography, 126 x 88 cm (49.61 x 34.65 in); Source:http://www.yvon-lambert.com/2012/?page_id=230

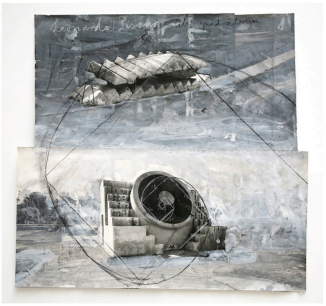


Photo:Anselm Kiefer, Leonardo Pisano liber quadratorium, 2008, Black-and-white photographs, gouache, watercolour and graphite , 48.03 x 50 in (122 x 127 cm), Source::http://www.yvon-lambert.com/2012/?page_id=230



Photo: Anselm Kiefer, collage and painting on photograph; Source::http://www.yvon-lambert.com/2012/?page_id=230

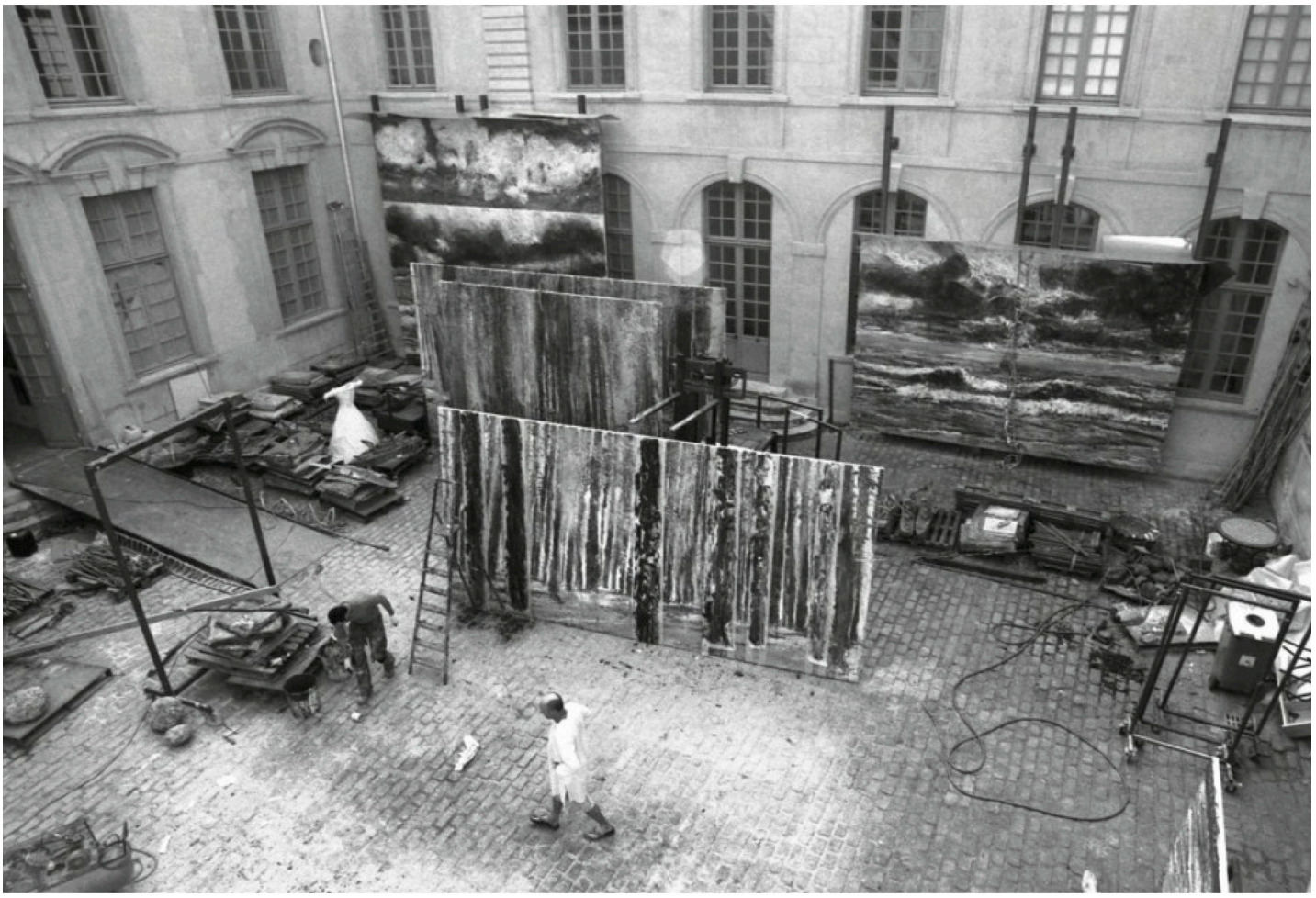


Photo: Kiefer in his studio; Source:http://www.sz-mag.com/news/2013/11/anselm-kiefer-studios/

PLATE 83: WORK PROCESS AND METHODOLOGY

Besides all the concepts encoded into the creations, Kiefer has a preference for some visual themes or subjects, as: the open landscape, the vast fields, flowers in a field, empty and 'un-cropped' fields, sunflowers, wheat fields, the ocean, the heavens, architectural spaces and elements such as pyramids, geometrical elements, airplanes, clothes, constellations and books. All these determine the complexity of subjects that define the visual references that compose Kiefer's creations. These subjects accompany all of his work: being cross discipline and inter-relating together between paintings, sculptures and even in the *in situ* creations. The subjects aim to create links and connections between themselves and between the viewer; they are archetypal in their nature and abstract in their essence, and as such, they inter-relate with the concepts described previously, giving them form, substance and content. Below is a series of exploration of some of these significant themes:

… (a) History

Michael Prodger in his article 'Inside Anselm Kiefer's astonishing 200 acre art studio', for the Guardian (2014), explains that Kiefer's 'complex personal cosmology' is very closely linked with this consciousness of history and the weight of memory. On his complex interest with history, Prodger (2014) clarifies: '' He is a child of the rubble and of the national silence about Hitler's atrocities that settled on Germany after 1945. It was here that he formulated his idea that "creation and destruction are one and the same".'' (Prodger, 2014). For the author, it is in this complex history and memory of Kiefer's birth place that originated this sense of 'memory' and appeal for history, but Kiefer moves beyond it in his search for the transcendental extemporal existence. Kiefer (2014) answers[508] that he uses History, not as a traditional artist does (describing events) but instead he uses it as a material, 'like clay'; while a photograph captures a moment in time, a painting captures many moments in history, 'more than a year' even more than many years… condensed into one creation.

… (b) Fields and Landscapes

One of the archetypes explored constantly by Kiefer, is the use of concept or visual associations of 'Fields'. One of these fields, is the Wheatfield, which can find it's reference source in Van Gogh, or is some sort of timeless utopian land[509]. The wheat fields, possess this mystical and transcendental meaning: they are a reference to a golden time, a golden age, where the earth is filled with golden wheat; this imagery is found in multiple poems and poetry from various artists, such as Kerouac's 'Golden Eternity' (see Glossary). Besides the wheat fields, Kiefer's work is determined by the landscape: with references to flowers, empty landscapes filled with snow, mountains, the ocean, the horizon or the open sky with stars. The landscapes are usually anonymous but Kiefer adds references and names to them, so as to specify a location, a metaphor or to evoke a specific memory. When painting heaven and earth, the theme always recurrent in Kiefer's landscape, Kiefer maintains the same palette, the same colours and the same material

[508] As part of Anselm Kiefer's retrospective at the Royal Academy of Arts, in London (27 Sep to 14 Dec 2014), Anselm Kiefer speaks about his work with the art historian Tim Marlow.

[509] **The Wheatfield:** According to Prodger (2014) these are a '' (…) reference to the Nazis' fixation with Blut und Boden (blood and soil) and Hitler's belief that "true Germans" came from the soil.'' (Prodger, 2014). In his *Morgenthau* paintings, the fields are referenced as wheat fields; they are an homage to Van Gogh, and also refer to the Morgenthau Plan. Another significant reference to the wheat fields is found in Barjac Studio: '' One of Kiefer's pavilions at Barjac contains a Morgenthau installation: a field of wheat fashioned from rushes, with each of the heads covered in gold leaf, (…). It is Kiefer's version of Nicolas Poussin's 1637 memento mori painting Et in Arcadia ego – "I [death] am here, even in Arcadia." '' (Prodger, 2014).

representation, representing a conceptual union between both. The landscape is metaphorical and poetical as much as it is symbolic, and it also creates a link and a reference to the German Romantic painter Caspar David Friedrich.

… (c) Sunflowers and flowers

The sunflower is another symbol used a lot in paintings, sculptures and installations. Pritchard (2014) considers that this symbol is used for it's blackened seeds: '' Sunflowers, in Kiefer's work, are embedded into paintings, apparently dead, but bearing the potential for life.'' (Pritchard, 2014).

… (d) Alchemy and Astrology

In addition, astrology and alchemy (the works of Robert Fludd, astrologer and alchemist), are another of Kiefer's fascinations. The alchemical process is a process known to transform ordinary materials, metals and substances into gold. For Prodger (2014), Kiefer's work is a sort of alchemical process itself[510]; this aspect is also echoed by Wullschlager (2014) and by Kiefer (2014) himself, when he claims that alchemy is what he does, because an alchemist is that which transforms material things into spirit; it is this fact, as an alchemist, that his works possess 'value' or significance: ordinary life elevated into spiritual realm.

> **Painting as alchemy:** In an interview, conducted by Jackie Wullschlager (2014), she asks: '' Is alchemy a metaphor for what Kiefer does?'' Kiefer replies, correcting her: "It is what I do," he corrects. "Alchemy is not to make gold, the real alchemist is not interested in material things but in transubstantiation, in transforming the spirit. It's a spiritual thing more than a material thing. An alchemist puts the phenomena of the world in another context.'' (Wullschlager, 2014). He further explains, that this is what adds a 'certain value' to his paintings; and as such he is indeed an 'alchemist'. Rampley (2000) explains that: '' Kiefer's attention to alchemical practices obviously goes beyond the question of romantic modernism, but nevertheless indicates again his interest in the notion of unmediated affinity as the fundamental relation between objects and between humans and the world.'' (Rampley, 2000, p. 28). It is this complex 'fundamental relation' between things and life, its transformation and transmutation that characterizes Kiefer's work, or his alchemical pursuits.

Besides from the mystical, metaphorical and poetical references of 'alchemy' Kiefer also uses the phases of alchemical transformation and symbols in multiple of his works. An example, is the painting *'Nigredo'* (1984), where Kiefer writes the word '*Nigredo*' on the top left corner which is one of the stages of the alchemical transformation[511].

… (e) Poetry

Poetry also shapes Kiefer's work and also acts as a theme. For Kiefer (2014): '' A poem is like a diamond, it is concentrated energy; it is something you cannot find in the world, something erratic, really unique.'' (Marlow, 2014). But further, Kiefer continues to say that, he has a conversation with the 'poems' or with the poets. For him, the poem is an alive substance that is used in the painting not only as

[510] The author further explains: '' What Kiefer tries to do in his work is what Fludd tried to do with base metals: examine what links an earthbound substance such as lead with a heavenly one such as gold, and how one becomes the other.'' (Prodger, 2014).

[511] **Nigredo:** as Rampley explains, '' Nigredo (1984), (…), refers to the first stage in the transmutation of base materials into gold.'' (Rampley, 2000, p. 28); this first stage of transformation of the alchemical process is characterized by a 'blackening' and is followed by the emergence of a glowing light.

an influence but as a complex and mystical theme. In the painting *Bohemia Lies by the Sea* (1996), Kiefer's title is from a poem by the Austrian poet Ingeborg Bachmann, and Kiefer echoes the poems meaning in the painting (the longing for a utopia while understanding that it can never be found) and simultaneously recreates the feeling and the inspiration that drove it to existence. Another example of a poem defining the theme of the painting is in the painting *Margarethe* (1981), based on a poem by Paul Celan entitled 'Death Fugue' (analyzed in part 6). This idea of poetry also creates a link to Heidegger's views of art and poetry[512].

… (f) Words and Writing

Another strong theme or influence is words and writings that act as symbols. Rampley (2000) on the use of words by Kiefer, explains: ''In his works the word ceases to be a mere sign, external to its referent by a fatal act of mediation, and becomes instead equi-primordial with the world as a constituent part of the works.'' (Rampley, 2000, p. 29). The word is used by Kiefer not only as a reference but as a constituent part of the art work. It maintains and completes the artwork, adding yet another layer of meaning.

… (g) Architecture

> '' "He loves the idea of man making bricks as God makes stars," says Soriano.'' (Pritchard, 2014)

Architecture is present in Kiefer's work in multiple ways. First as a theme: Kiefer uses architecture and draws inspiration from classical architecture (specifically Mesopotamian pyramids and other architectural classical elements) and unique spaces such as vaulted rooms and represents them (transformed and alchemized) in is paintings. Second as a subject/object as sculpture: Kiefer creates sculptures that use architectural elements or that creates architectural spaces in themselves through their forms and their intentions. An example of this is the cubic-formed installations in Barjac Studio. Another example of sculptural/architectural creations is the amphitheatre composed of containers (same location), created without architects and engineers, as 'a kind of architecture'. The constant use of architecture as a theme and the creation of spaces through sculpture derive from a deep connection Kiefer developed with architecture; there is a constant admiration and respect for architecture that characterizes Kiefer's work, both in his paintings and in his sculptures. According to Pritchard (2014), this love for architecture in its variying forms, both the monumental buildings or the destructed ruins and pebbles, is a result of his background and personal history as a 'child of the Second Wolrd War' which acts as a strong influence and led him to create physically and allow for physical interactions[513].

[512] **Heidegger and Poetry:** Rampley (2000) explains that there can also be found a direct correspondence between Kiefer's work and the writings and concepts of Heidegger's thesis: '' It forms a central element of Heidegger's thinking, from his critique of the rootlessness of modern abstract 'gossip' in Being and Time to his later idea, in 'The Origin of the Work of Art,' of poetry as the saying of being, treating poetry as a form of language which overcomes the mediations of language.'' (Rampley, 2000, p. 25).

[513] **Reference to:** '' Kiefer, a child of the Second World War, was born into another polarity: on the one hand the grandiose, fascist buildings of architects such as Albert Speer, on the other, the rubble of bombed houses.'' (Pritchard, 2014). Further, the author continues, it is the respect for architecture that characterizes his work: '' This is not simply an aesthetic response to a well-proportioned building, but a physical interaction with the bricks and mortar that can be both mankind's triumph and its disgrace.'' (Pritchard, 2014).

Architecture, Kiefer claims deeply influences even the way that an exhibition is curated: '' (…) I respond to the spaces. It's an important relation between the building and the work. '' (Marlow, 2014).

Also of importance is a clarification of the unique approach Kiefer has towards the making and understanding of Architecture. Chipperfield in conversation with Kiefer (2014) claims that he finds interesting the way that Kiefer explores architecture, exploring aspects that '' (…) architects don't or can't.'' (Marlow, 2014). He explores ideas that are lost in contemporary architecture: ideas such as texture and organic qualities, precisely because he doesn't have to conform to health and safety issues that architecture has to. Chipperfield also accentuates that because of these issues and client requirements, architects cannot ever be intuitive, however, Kiefer has an absolute freedom to be intuitive and decide what and when he wanted and how (such as in the case of Barjac). Architects have conformed, he claimed, to the idea of knowing form and having absolute control over the outcome. However, he claims, Kiefer, despite the use of intuition and possessing utter freedom, uses the same formal aspects (doors, cubes, pyramids, etc.).

… (h) Time

Kiefer is likewise fascinated with time and the idea of a geological time. Alan Yentob later clarifies:'' Kiefer's fascination with time seems to be getting deeper and wider. Geological time is the oldest time on earth, stretching back millions of years. A time scale in which the human race, and everything that is achieved is little more than a blip…'' (*Imagine*, 2014). As such, Kiefer maintains that painting belongs to 'something that is beyond human time', it belongs to a geological time and a cosmic time. It is this 'cosmic time' that fuels Kiefer's creative spirit. History is used as an underlying theme, but not factual or descriptive, but as a subversion of history itself, aiming for the a-temporal or the in temporal, for the place that exists beyond history or even before history.

(5) underlying theories and ideals

… personal cosmology and art beliefs

Kiefer's personal views of the world and of existence permeate through his work: more specifically his quest for the understanding the great questions of life, such as 'who am I and what I am doing here?'. Creating is a way of answering these questions[514]. He is guided by this deep search, that characterizes both who he is and his creations, leading his creative impulse and artistic vision. Therefore, in conversation with Tim Marlow (2014), Kiefer claims that his art is a journey of self-understanding, with each work, the 'self' becomes clearer: it is in the establishment of this 'another world' (in art) that he expands his own existence and his own consciousness; which is why it is important that the work itself 'surprises' him: through making connections, in creating this kind of 'another world'. Creating, thus,

[514] **Existential questions and Kiefer's art:** In the documentary '*Imagine: Anselm Kiefer Remembering the Future'* (2014), a contributing guest/art critique explains that what makes Anselm Kiefer so interesting, is the fact that he is only interested in the great questions of life and the universe: '' How did I get here? What am I here to do? And that's what he is trying to work out in his paintings, in his sculptures and in all of his work. '' (*Imagine*, 2014). Kiefer uses his art as an exploration of universal questions, searching for identity and a sense of self in the world and in the universe. Kiefer, in this regard, explains that he is always looking and searching for something that is beyond our own sense of understanding. He claims: '' It is evident that there is something above us, far above us… whom we cannot understand. And more and more we ask ourselves, why we are here? And for what reason? Nobody knows it… And for this reason, **we** are always searching for something…'' (*Imagine*, 2014).

becomes a projection of his own 'self' and as such, Kiefer feels like he is creating a projection of himself into a future, into an unknown time: '' A 'me' projected into a geological time… kind of like a 'self aspiration', to be continued into the geological time, and then I have more time… you know? '' (*Imagine*, 2014). His religious ideas (Hinduism being the best religion for him because according to him, there is no dogmatism) also have a profound impact in his creations, simply because for Kiefer, what Art and Religion have in common is the mythology (the idea of trying to explain the world as a whole thing)[515]. It is in mythology that Kiefer found partial answers for what he was searching for, and managed to find a sense of wholeness where all other forms of knowledge failed. Through mythology, art becomes like religion, expanding human understanding and allowing a connection between all the elements to become a whole. Through mythology, through art as a sort of religion, thought the self and the projection of the self, Kiefer finds in his artworks a way of creating a unification of the world, and an imprint in the world that seems to propel through the ages.

… (a) Art beliefs

About art is general, Kiefer clarifies that true art is a way of creating new connections: '' You see a lot of things, they are disparate, and you want to create a connection, to feel more secure, and to feel better. This is what artists do, they create a new connection with things. '' (*Imagine*, 2014). Art, for Kiefer, is a form of establishing connections through things, concepts and values (unifying the world and the universe, nature and man, landscape and humanity); a means of unifying and connecting time throughout the ages and, through it, a means of propelling man into a more mystical and self-aware type of existence.

This construction of connections, however, he clarifies, doesn't mean that it is a 'sense' of the world, but rather it is a 'constructed sense'[516]; art, as a consequence is a construction of a specific sense of the world, a sort of 'primordial sense', rooted in the primitivism of the world. These issues are also clarified in the Tim Marlow Interview (2014), in regards to art as a form of 'truth', where Kiefer refers to Heidegger's notions, where art is a 'seeking out of the truth'; but, he continues, the truth is always inaccessible, because it does not exist. However, in making new connections, he claims, one can find another truth. His art, he claims, is primordial… there is no sense in our lives, and we don't know anything of what we are doing here, on earth, living; we don't know the 'why' we are here; as such, Kiefer continues, as an artist we create some 'sense', 'we' make a 'primordial' sense.

[515] Reference to: ''Art is not the same as religion, one part of the art, is the same as in religion, and that's the mythology. The mythology tries to explain the world as one whole thing, where as science has always parts of the world; mythology tries to explain the whole world.'' (Marlow, 2014). In this way, he continues, art is like religion, but not the same.
[516] In creating art, he claims: '' It doesn't mean that you have the sense of the world, it means that you have constructed a sense.'' (*Imagine*, 2014).



FLOWERS, FIELDS AND LANDSCAPES



Photo: Bohemia Lies by the Sea, 1996; Oil, emulsion, shellac, charcoal, and powdered paint on burlap; 191.1 x 561.3 cm; Source: http://www.metmuseum.org/toah/works-of-art/1997.4ab; Photo 2: Nigredo (1984); Oil, acrylic, emulsion, shellac and straw, mounted on canvas, with woodcut, dim. 330 x 555 cm Source: http://www.arthistory.cc/auth/kiefer/nigredo.jpg

STARS AND THE HEAVENS

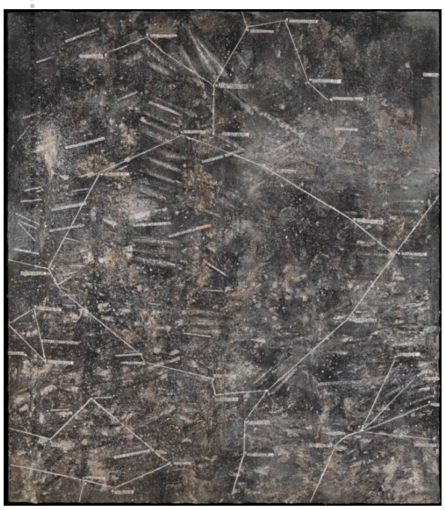


Photo: 'Cette obscure clarté qui tombe des étoiles' (1999), dimensions: 3400 x 1650 x 1100 mm; acrylic paint, oil paint, shellac, earth, sand, wood, paper and glass on two canvases, lead, iron, books and other material; Source: http://www.tate.org.uk/art/artworks/kiefer-cette-obscure-clarte-qui-tombe-des-etoiles-ar00041

PLATE 84: THEMES AND SUBJECTS

Kiefer's art is driven by an immensity of subjects and connections; but he states that it is not driven by some sort of 'platonic ideal' but instead by a sense of 'precision'; also, it is not driven by the sense of the sublime: for him, the sublime relates only to music[517] rather than to art, and it is not driven by a sense of beauty, because for him, beauty is a kind of curse of art (a necessary condition, rather than something to aspire to)[518]. Art, Kiefer's art, is driven by connection and a desire to construct a sense.

… New directions

Chipperfield in his conversation with Kiefer (2014) also accentuates that is of vital importance in Kiefer's work the fact that he is breaking the traditional conception of viewing art (art on a wall a meter away), and creating another means of understanding art: art that needs to be experienced in motion and through all the senses; it is, Chipperfield explains, a change of boundary between the viewer and the artist.

(5) specific work analysis, examples and key features

… (a) Margarethe and Shulamith: The poem 'Death Fugue' by Paul Celan

One of his most iconic paintings is *Margarethe* (1981), oil and straw on canvas. It is based on a poem by Paul Celan entitled 'Death Fugue'[519], written by the poet while he was in a concentration camp. The poem gave origin to two distinct works *Margarette* and *Shulamith*, each 'embodying' the names of the two characters of the poem: the first the German prison guard (a blond Aryan) and the second the incarcerated prisoner (the black haired jew). However, it is *Margarethe* (1981) that has become the most notorious one, of both. About this painting, Prodger (2014) upholds that: '' The fronds are made of straw (a representation of Margarete's blond hair) while the soil represents the remains of Shulamith's hair after the ovens have turned it to ash (Kiefer will often mix sand and ash into his paint).'' (Prodger, 2014); about the use of the 'fire' and the 'flames' he continues: '' The flames are those of the furnaces, the flickering of spirits, the formation of stars, the artist himself … the interpretations, as so often with Kiefer, are innumerable.'' (Prodger, 2014). *Margarethe* (1981) is an evocation of the emotions of the poem through the materials, the form and the concepts. For Shulamith, Kiefer used as a model a photograph of a funeral hall for the German Soldiers by the German architect Wilhem Kreis (architect during the the Third Reich and the Federal Republic) thus subverting its use and its purpose. Both paintings when placed side by side, better clarify the crystallization of the emotions felt by each of the characters: where as *Shulamith's* pain is represented by an interior architectural space, enclosed, black, dark and with no reference of light, *Margarette's* by opposition is represented by light blues of the air, and straw as 'candles' in the wind,

[517] Tim Marlow asks Kiefer if he is driven by some sort of 'platonic' idealisms or perfection that underlies all his work: '' I wouldn't say **perfection I would say precision**. It has to be as precise as you can do it for the moment; so yes… I try to always do it better than before. '' (Marlow, 2014). '**Is the sublime a sensation you are interested in**?' Tim Marlow also asks; for Kiefer, sublime relates more to music, than to art; it is more abstract than art, and so the music is sublime, not his own art.

[518] Reference to: ''Art becomes beauty.'' (*Imagine*, 2014) he claims earlier in the documentary, explaining that it is kind of art's curse, to become beauty; beauty is not something he aspires to create, but it is a necessary part of art.

[519] Reference to: '' Written in 1945, it compares the fates of the Jewish woman Sulamith, reduced to ashes, and the German woman Margarethe. Margarethe bears the characteristics of the 'typical' Aryan woman, not only through the golden colour of her hair, but also by virtue of the fact that her very name evokes the quintessential work of German literature, Goethe's Faust. In contrast, the ashen hair of Sulamith functions both as the marker of her difference, in other words, the darkness of her hair, and also as the indication of her ultimate fate, namely cremation; as Celan puts it, 'as smoke you will rise in the air.'.'' (Rampley, 2000, p. 30).

burning and 'being consumed' from within, from the ground up – characterizing an intense destruction of the self. The poem influenced Kiefer to such a degree that he has been creating artworks with reference to it for multiple decades; just in the decade of the 80's Kiefer made more than thirty paintings, painted photographs, and watercolours that refer to the poem. In Picture 2, is a sculpture named *Shulamith* as well, made out of soldered lead, composed out of 64 pages. In all his creations associated to the poem Kiefer echoes emotions of solitude, loneliness, and silence; feelings and visual content of destruction, desolation and a broken kind of hope.

… (b) The books

Kiefer has been making the 'book's since 1968, the pages of each filled with different content, but never images or text, although those seem implicit. These are connected to his views on literature and philosophy, but also to a more fluid and cinematic view of the world, as something fluid that can be manipulated and understood. These representations of books, either in painting, as large sculptural elements or through photographs, underwent drastic evolutions and changes: '' (…) his more recent books consist of sheets of lead layered with the artist's characteristic materials of paint, minerals, or dried plant matter. '' (Alteveer, 2000). In each of them, the book is represented in its own unique way: transformed, added upon, amplified, burnt, open or closed, etc. According to Rampley (2000), the book form used by Kiefer '' (…) recalls the central role of the word in this peculiarly German romantic ideology of the poetic as the locus of the disclosure of being in its plenitude.'' (Rampley, 2000, p. 26). The author continues clarifying that through the book form, devoid of representations and imagery, Kiefer creates a free poetic world in parallel with the traditional philosophical ambition[520]. Ambiguity also characterizes these books, as it does all of Kiefer's other works; for they are books devoid of stories or lettering or words. They are empty books, serving only as itself, as its own essence. In his sculpture 'The Language of Birds', for example, there are a number of books with wings, as if the books were trying to fly off. Other examples are, *Mesopotamia* (or Zweistromland) which is composed of a series of lead 'books,' with decayed landscape photographs, 'supported by steel bookcases'.

… The Aesthetic Experience: Experiencing Kiefer

Having visited a retrospective exhibition of Anselm Kiefer's work at the Pompidou, Paris, in February 2016, the following is a brief description of the overall experience. The first rooms of the exhibition are devoted to Kiefer's early works; following is a series of large rooms, each filled with a specific subject, theme or technique. In the very first rooms, the works represent Kiefer's love for books, landscapes, paper, colour and the theme of the Nazis that characterized his first body of work. These are smaller types of works, more representational in their essence and character; they are filled with details and specific ideas; each one of them compels us to be immersed in it's story, capturing us either with colour, texture, or form. However, as we continue throughout the exhibition, the works evolve into other

[520] Reference to: '' (…) offers a clear parallel with the philosophical ambition to let the world be in the poetic word, free of the mediations of representation.'' (Rampley, 2000, p. 27). About the character of the 'books' Rampley (2000) further clarifies that '' The mixing of media serves to explore the types of representation available, playing off the iconic photograph and the symbolic words against the non-representational and overlaid on the surface of the image.'' (Rampley, 2000, p. 27).

more expansive ways of creations. The works become much larger in scale, broader in their depth, driven by a sense of freedom and abstraction (pyramids, constellations, fields of flowers, fallen man), and they use all types of materials in a complex way. These painting are no longer something to observe at a distance or to be focused on in detail, but become something that is lived and experienced as a whole: they become the space itself in which we find ourselves in. Some of the works are monumental in scale, making us walk through the space in order to contemplate it in its full capacity: we are forced to look up and down, compelled to walk straight up to almost feel the small details of body and masses, and driven back as far as we can go in order to understand the whole story from a distance. A couple of rooms possess Kiefer's vitrines, and some words need to be said about these pieces. The vitrines are all combined closely together, forcing the viewer to view each one specifically and individually before moving on onto another one. Each vitrine is composed of a glass rectangle sustained by a metal encasing, and inside the glass prisms are strange day to day and non-ordinary objects (such as books or metal boats), there are materials (both natural ones and artificial ones) and all sorts of natural elements (such as twigs, sands or leaves). Each vitrine is composed as a mixture of these elements creating a sort of story telling, which is culminated with the writing of words or sentences on the glass. Some of these are inspired by biblical stories, other by poetry and others the mere objects used.

They echo Kiefer's vision in a more tangible way. But it is the large paintings, their monumental scale, the size of the letterings marked on some of the large canvas, the texture of the materials that resemble dirt, stones or old construction materials, the subdued colors, the strange objects placed within each large spatial canvas: that are incredibly overwhelming, communicating to both sensitivities and intellectual ideas. They seem to create a sense of place to which we belong to; however this space we find ourselves in is not something of this world, but something of another dimension altogether. They speak of a lost time; a distance future or a forgotten past world. Each work transports us, with its materials, elements and ways of telling half stories, into this unworldly dimension that is both ours and that belongs to no-one. Kiefer's works combine a sense of existence (of place) that is very tangible and palpable with an elusive and intangible idea: the fact that we belong to an eternal condition, inhabited by the soul that is not only timeless but also immortal.

… (c) The studios: The on-going Work of Art

Kiefer works in two distinct studios: the Barjac Studio also known as La Ribaute, and the Ozymandian Studio**.** Each of the studios is composed of a complexity, of both land and abandoned or converted buildings, that are transformed into a studio, and art exhibition space where he showcases each of the works and lastly into a work of art in itself, acting as an ever changing ever evolving architectural and artistic complex. In Barjac Studio, the whole space acts as one large ever evolving work of art: composed of both the series of individual works and the overall whole, where each part adds its own value and meaning and contributes to the overall significance; each artwork, with its specific location and according environment allows it to communicate individually and as part of one word in a whole poem.



ANDROMEDA

MARGARETHE AND SHULAMITH







BOOKS, TIME AND WORDS

Photo 1:Anselm Kiefer, "Andromeda", 2001; Source:http://www.exporevue.com/magazine/gb/kiefer_monumenta_gb.html; Photo 2: Margarethe (1981), Oil and straw on canvas, 280 x 380 cm, Saatchi Collection, London; Source: http://www.arthistory.cc/auth/kiefer/margarete.jpg; Photo 3: Shulamith, 1983, oil, emulsion, woodcut, shellac, acrylic, and straw on canvas; 541 x 368.3 cm; Doris and Donald Fisher Collection; Source: http://www.judithwinther.dk/emner/niveau_3/visual_culture/sulamith.html; Photo 4: Anselm Kiefer, 20 Jahre Einsamkeit, 1998; Source:http://www.bta.it/txt/a0/01/en/bta00182.html

PLATE 85: PAINTINGS AND THE BOOKS

The scale and the magnitude of the 'art/architecture' create metaphysical, poetical and symbolical references to an untainted and forgotten world. Besides Barjac, Kiefer also has another studio, the Ozymandian, with about 36,000 square meters in converted from an old department store warehouse in Croissy-Beaubourg outside Paris. The studio follows the same principles and ideals as Barjac, and creates the same resonances between art, space, scale and emotion.

Kiefer explains in another conversation with Tim Marlow and David Chipperfield (2014) that it was very important that the studios possess a sense of history to them, because he begins his work through that history, continuing it and changing it. Another aspect that he claims in regards to his studios is that they are like his brain: chaotic, and constantly searching for inspiration and new connections. It is in constant progress. At Barjac, Kiefer explains, everything was developed organically and intuitively; there was no initial plan at all, for any of the spaces; but instead they grew out of use, necessities, ideas and imagination.

The Barjac Studio:

Near the town of Barjac, in the South of France, Kiefer has converted and re-used an old silk factory and transformed it into a large work of art. In Prodger's words: '' The artist turned this quiet domain into a Brobdingnagian Gesamtkunstwerk, surely one of the most extraordinary artworks of the last century.''(Prodger, 2014). La Ribaute, is a 200 acre compound near Barjac in the Cévennes, and started being used as a studio when Kiefer moved to Barjac in 1992, to escape the 'art world'. Kiefer defines the place as a kind of 'reverse architecture', '' (…) putting artifacts back into the landscape.''(Prodger, 2014); this 'reverse architecture' aims at creating a space filled with the atmospheres of the artworks, through addition to the landscape. Throughout the whole complex, Prodger continues: '' Metaphysics and megalomania are mixed on a daunting scale, and the effect is overwhelming.'' (Prodger, 2014). Besides the main central converted factory that is the main studio, Kiefer has added on the sides of the long drive, a series of glass pavilions; Kiefer builds pavilions, mainly of glass to house his own artworks in his studios; for him, these respond to the conditions of what an architecture space for art should actually be. Those pavilions, or houses, are 'like a skin around the painting or around the sculpture', creating a porous environment, connected to the network. The complex, also possesses a series of network of alleys that act as a web of connections between the art pieces. There are also multiple 'Kew Gardens-size greenhouses' containing each one, its own art piece; there is also a 'cathedral-like barn with six house-size paintings' in it and an 'underground temple of Karnak'.

(7) Key principles, concepts and values

… Principles of Polarity and Ambiguity

One of the main principles that can be driven from the above analysis is the idea of the creation of a polarity and an ambiguity, which is concordant in all of Kiefer's work. On this regard, Pritchard (2014) demonstrates some of Kiefer's polarities: between history and present, chaos and order, ambiguity and definition, mythology and life, creating a sense of repulsion and attraction. Other polarities that is possible to announce are: light and darkness, existence and non-existences, significance and non-significance, etc. According to Rampley (2000) what creates these opposing polarities, is precisely the ambiguous nature of the works: '' (…) it is this very ambiguity which has provoked such a range of hostile responses. '' (Rampley, 2000, p. 34). Yet, ambiguity is found at a deeper level: the paintings use a

visual vocabulary that is ambiguous in it's nature: using morphed forms, changed and transformed that are always open ended in their essence (the forms are derived from the materials, rather from lines or geometry), creating an open ended interpretation.

… Principles of Mutability, Change, Reformulation and Constant Flux

Another aspect than Prodger (2014) points out is Kiefer's interest in Mutability: the constant search for change and mutation within each artwork, such as dribbling acid on the canvas or gluing straw. On this subject, Pritchard (2014) continues: '' A completed work may, to him, appear too organized, and so he relinquishes it to nature – leaving it outdoors, allowing it to disintegrate.'' (Pritchard, 2014). Whichever way Kiefer, uses to emphasize mutability and change, these principles are inherent qualities of his work. Echoing nature and the language of nature itself, where nothing stays the same but is always in permanent change, Kiefer creates artworks that embody change, mutability and life itself. Kiefer (2014) himself claims: '' I am in a stream… in different streams… and parts of the painting stay with me. '' (Marlow, 2014), emphasizing that nothing is fixed, and that there is always a constant flux between all elements. On this issue, Prodger (2014) notes: '' "No atom is ever lost," he points out, and so, for him, the atoms that surround him and make up his work are the tangible remains of former times and long dead people.'' (Prodger, 2014). This interconnectivity of all elements, allows for inter-changeability between substances. This mutability of all elements and constant change of particles and nature led Kiefer to the principle of the on-going reformulation and constant flux of energy between materials and elements. Like this, there is a reformulation and a continuation of all elements, a belief that all things can be transformed and re-utilized. So too, matter is changed, transformed, re-used, and re-shaped, in order to find a new meaning, a new essence and a new life.

… Authenticity, Truth and Creating a 'Sense' of existence

Another idea that is of the essence in all of Kiefer's works is the fact that creative process, as a process of discovery (alchemical process) is related deeply to the establishment and understanding of the self, a clarification of our own existence as a humanity, and a discovery of our own authenticity in the world. For Kiefer, with each creation the world becomes more clear, and an 'idea of truth' emerges naturally.

Ending Remarks:

Kiefer's works aim at understanding the cosmic and mythological dimensions of existence, establishing connections and unions between the self and the universe and generating a transcendental and Universal awareness. Kiefer is known for the individual and unique artistic language, its physical materiality, its monumentality, its visual complexity and the weight of history and time, that uses multiple essences, materials techniques and subjects in order to generate new meaning and significances through his art. The creative process, then, is a transcendental process, that allows man to be rooted into cosmic dimensions of his existence, allows man to discover new sides of himself (process of self understanding) and allows for the viewer to become immersed in the artwork and develop his own consciousness.















Source: Sarah Frances Dias Photography, photos taken by the Author

PLATE 86: AESTHETIC EXPERIENCE, PAINTINGS EXHIBITION

Summary Notes: Anselm Kiefer

1. *All art is a continuous process (always open) and is never really finished.*

2. *Creation is an alchemical process of matter into a spiritual essence; painting is a form of 'alchemy' extracting the spirit of mundane substances and elevating them to 'gold' - metaphor for spiritual transformation*

3. *The creative process, then, is a transcendental process, that allows man to be rooted into cosmic dimensions of his existence, allows man to discover new sides of himself (process of self understanding) and allows for the viewer to become immersed in the artwork and develop his own consciousness.*

4. *It is the focus on great questions of life and the universe that should define the artistic creation and the artistic process, as a process of discovery.*

5. *Through mythology, art becomes like a religion, expanding human understanding and human consciousness.*

6. *Art as a journey of self-understanding and a way of creating new connections*

7. *Blending the lines between the fields of sculpture, architecture, installation and painting allows for new discoveries and meaning to emerge*

8. *Multiple meanings and significances emerge through multiple complex subjects and themes, that work together as a whole.*

9. *The use of multiple materials, techniques, textures, elements, and visions, create new possibilities of connections, new discoveries and new understanding of the self and of the world.*

10. *Conceptual Chart:*

Table 23: Anselm Kiefer Conceptual Chart

CREATION			CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Table 24: Anselm Kiefer synthesis Chart

ANSELM KIEFER

1. FIELD:
- *Painting, Sculpture, Photography, Drawing, Objects and Architecture*

2. EDUCATION/BACKGROUND:
- *begun studying law*
- *abandoned his studies in 1966 to study in an art academy in Dusseldorf, where he studied under Peter Dreher*
- *went on to study with Joseph Beuys during the late 60's and 70s*

3. EVOLUTION:
- *early work was focused exclusively on German History*
- *Growing towards abstracted landscapes, larger scale and more poetical and metaphysical understanding of life and art.*
- *Growing the use of new materials and finding of new forms of artistic expression*
- *an evolution towards a three dimensionality, almost abandoning completely the two dimensionality*

4. CONTEXT:
- ***Contemporary world of art.***

5. INFLUENCES:
- *myth, legends, historical events and facts, ancient civilisations, mythology*
- *poetry, music, philosophy, art, literature*
- *the concept of Time (both geological time, a-temporal time, and even universal time)*
- *architecture, archeology, astronomy, alchemy and other influences and references.*
- *open landscape (the vast fields, flowers in a field, sunflowers, wheat fields, the ocean, the heavens)*
- *architectural spaces and elements airplanes, clothes, constellations and books*

6. CREATIVE PROCESS:
- *The creative process as a transcendental process*
- *Development of the subjects and themes of the paintings in little experiments*
- *Led by and experimental intuitive process*
- *Driven by a deep desire to be true to the material he is using*
- *After first stages of creation are complete, Kiefer surrenders the artistic process to something foreign and outside of himself: to nature or electrolysis.*

7. PERSONAL COSMOLOGY:
- *defined as a 'romantic anti-capitalism'*
- *all art is a continuous process and is never really finished but that all art, is always open*
- *belief that a painting captures many moments in history*
- *Led by the idea of a 'cosmic time'*
- *Painting is a form of 'alchemy' extracting the spirit of mundane substances and elevating them to 'gold' - metaphor for spiritual transformation*
- *Interested in the great questions of life and the universe*
- *Through mythology, art becomes like religion, expanding human understanding.*
- *Art as a journey of self-understanding and a way of creating new connections*

8. EMOTIONS
- *Connection, Understanding and Belonging*
- *Immensity, Sublime and Smalness*
- *Transcendental Awareness and Harmony*

9. OBJECTIVES:
- *broad and universal quest*
- *to carry the weight of the world and of human history.*
- *against the triviality that defines the modern culture*
- *allow for poetic significances, existential 'being' and the weight of history, of the world and of humanity to become clear through the artwork*
- *to use Time as a material rather than a concept*
- *To recreate timeless utopian moments: the 'open field' as a manifestation of a utopian land.*
- *A search for something that is beyond our own sense of understanding*
- *To portray a sense of search, questioning and longing for union and connections*

10. CHARACTERIZATION:
- *Known for the individual and unique artistic language, its physical materiality, its monumentality, its visual complexity and the weight of history and time.*
- *balance of 'powerful imagery', 'critical analysis' and an understanding of the poetical and mythical being in the world.*
- *blending the lines between the fields of sculpture, architecture, installation and painting.*
- *characterised by layers of multiple meanings (histories, mediums, techniques, influences and themes).*
- *New forms of artistic expression: new materials, new layers, dimensions and combinations of elements.*
- *Merging of the various fields of art: architecture, sculpture, installations and painting.*
- *Use of multiple materials, techniques, textures, elements, and visions.*
- *An abundance of black and white tones, in high contrast between, however colours define the back layers and the details.*
- *Explores multiple concepts, themes, influences and subjects*
- *Complexity and combination of many themes*
- *Use of Mythology as a theme and concept.*

11. CONCEPTUAL FRAMEWORK:
- *Space, Landscape and field*
- *Utopia*
- *Symbolism, Imagination and Mythology*
- *Light, Darkness and Contrast*
- *Substance, Atmosphere*
- *Matter and Materiality*
- *Memory, Culture, History and Time.*

12. VALUES
- *Metaphysical, Sustainable, Poetical, Spiritual, Metaphorical, Philosophical, Symbolical, Emotional.*

13. MEANING/SIGNIFICANCE
- *Understanding of the cosmic and mythological dimensions*
- *Establishment of connections and unions between the self and the universe.*
- *Transcendental and Universal awareness*







Photo 1: Donald Judd; Source: http://c4gallery.com/artist/database/donald-judd/donald-judd.html; Photo 2: Various Stacks by Donald Judd Untitled Stack by Donald Judd, dates vary; Source: http://minniemuse.com/2012/10/03/stack-attack/; Photo 3: Installation view from Marfa, Texas. Source: https://historyofourworld.wordpress.com

PLATE 87: DONALD JUDD

6.6. DONALD JUDD

(1) artistic evolution, context and characterization

… Artistic Context

Judd's American artistic context is the Abstract expressionist movement that was growing in the 40's in New York City *(see Glossary),* that sustained personal expression through materials and different techniques[521]. Subsequently, Judd emerged against Abstract Expressionism and it's free personal and emotional language, searching for a new type of significance through art. He believed that abstract expressionism couldn't give art it's meaning, for it was focused on the self rather than in the art itself. Besides the rejection of Abstract Expression, Judd further defended a rejection of most of the European artistic values: such as art as a represented space, believing that art shouldn't be a representation of anything but the real thing (an object) in itself; his views were against illusion and falsity, believing in an art that should be definite and clear. Besides these, Judd also rejected all kinds of labels, stereotypes and categorizations in connection to his art, such as 'sculpture' or 'painting', the identity of the works Judd created was in itself an issue and a questioning of art itself.

… Artistic Evolution

Judd's evolution can be characterized as an increased development of his own language. This vocabulary, that was initially explored in painting (abandoned in the 60's completely), found concrete form in objects and in the repetition and transformation of those forms. Thus, his evolution can be described as a search for a specific language for his 'objects'. With the witting of manifesto-like essay 'Specific Objects' in 1964, he defined his views in a concrete way. Later, in the 70's art grew in scale, becoming objects that filled the whole space (expansive nature). His evolution is not only qualified by an abandonment of painting for sculpture (a shift towards three dimensionalities) but also, in the late 70's Judd expanded to both furniture design and to architectural 'objects'. These new scales and functions were explored specially in is studio in Marfa (Texas), and continued until the 80's. Yet, Judd sustained that sculpture and architecture were independent in their nature: that the principles of art couldn't be transposed to architecture; a work of art possesses no function, he used to explain[522].

[521] **Contextualizing Abstract Expressionism:** with leading artists of the time being Jackson Pollock, Mark Rothko, Willem de Kooning, Barnett Newman and others. These artists sustained that art should be a result of personal expression, materials, colours, techniques, form process of making, subconscious types of creation; as such, although different in final results and artistic creations, the various artists were united in their notions that art should be a search for a specific type of personal expression, whichever its materialization may be (either exploring form, colour, material or emotions).

[522] **Chronology of Judd's evolution:** Judd began his artistic practice as a painter in the late 1940s. From the mid 50's onwards, Judd's work started moving towards a more abstract character, using woodcut and carving forms of organic gestures and straight lines. It is in the beginning of the 60's that Judd abandoned painting completely for sculpture. His next solo exhibition was only in 1963, when he finally had a collection of works that he considered worthy. By this time, Judd had already defined his 'vocabulary of forms', such as 'boxes' and the 'stacks'. In 1964 he begun working on wall mounting sculptures; in 1965, Judd created the first stack; in 1966 Judd exhibited ''primary sculptures''; in 1968, a retrospective was featured in Whitney Museum of Art. In 1970, Judd's work increased in scale and complexity into room size installation: the experience of his art thus became a more immersive experience. Through his house in New York, 1968, where he housed his works, he believed this was a more permanent and sustainable manner of art displaying for his works, and later continued to defend this idea for his creations: that the art should find a more permanent place within architecture. In the later years, Judd explored furniture[522], design and architecture. However Judd believed that both were independent: Thus, in the 1970s and 1980s, after moving to Marfa, Texas, Judd produced larger works that questioned the 'representational' realms of sculpture and art in general. But it was his architectural work in Texas that drew most attention, along with his 'studios/gallery' sites of New York City and Marfa (Texas).

… Artistic Characterization

Donald Judd is considered to have defined minimalism as an aesthetic movement, partly because of his essay 'Specific Objects' (1965) that was fundamental for the formation and conceptualization of minimalist aesthetics. Overall, Minimal Art draws it's main influence from European geometrical abstractions: such as the De Stijl movement, the Bauhaus School *(see Glossary),* the works of Kazimir Malevich and Piet Mondrian. The term itself was first used to describe Kasimir Malevich's black square on a white ground in 1915; but was also applied to music, architecture, design and other forms of creation. Minimalism is generally understood as a reaction against Abstract expressionism and other forms of representational art. The term 'minimalist', refers to that which is stripped to its essentials; so, it finds grounding in the reduction of art to its surface, forms, geometry, equality of part and repetition or/and industrial materials. Minimal art, didn't sustain an art rooted in self-expression or on a subjective understanding, but about an objective and more universal understanding of art and of architecture[523]. Minimal art aims to achieve a synthesis of content and form through a minimal vocabulary, in order to achieve maximum significance through the use of abstract/universal principles and ideals. These ideals and principles were deeply influenced by Judd's conception of art.

(2) creative process, methodology, techniques and characteristics

… Creative Process and Methodology

Judd believed that artists didn't have to make their own art: he sustained that the art process and the methods employed did not matter, only the 'meaning' and the significance of the art itself. Appropriatelly, challenging the traditional creative process, Judd distanced himself from the process of 'making' art, and began using 'industrialized' mechanism and processes. By erasing all traces of the creation process (and of the 'artist's hand'), the object could gain an autonomy of itself, be observed independently and gained a life of its own (rather than being an image of the artists psyche or creative principles). In this way, much like in Architecture in general, Judd's work process was reduced to the conceptualization of the artistic object: a project, establishing dimensions and defining materials. On this regard, Judd claimed: '' You can think about it forever in all sorts of versions, but it's nothing until it is made visible.'' (Battcock, 1995, p. 157), explaining that no matter what the conceptualization has been, it is through the 'making visible' that art itself is defined and revealed. Although his 'design' methodology is in a way 'preconceived' as it follows a method and a system in his mind, before creating it, Judd (1995) claims that it is not a rationalization in itself, but instead his process aims to achieve a specific quality (that is interesting or true), and is connected to the fact that he strives to maintain an idea of the whole object (rather than the parts)[524]. In order to do so, Judd follows a process of reduction that he considers to

[523] **Minimal Architecture:** In architecture, minimalism finds echo in the architecture of Mies Van der Rohe, that with his expression of 'Less in More' sustained a space that was reduced to its essential elements and qualities, creating a sensation of extreme simplicity. Other contemporary architects that are considered 'minimalists' are Luis Barragan, John Pawson, Siza Vieira, Tadao Ando and Peter Zumthor to name a few. Most 'minimal' spaces are characterized by their use of white, depured environment, large spaces and a specific use of lighting and aim to reveal the essential properties of architecture.

[524] **The search for Wholeness**: '' (…) for a quality that I think is interesting and more or less true.'' (Battcock, 1995, p. 152). His irrationalized/un-rationalized approach, he explains further, is derived from the fact the parts do not relate to each other: ''The parts are unrelational.'' (Battcock, 1995, p. 152). For Judd (1995) the whole is much more important than the parts, and as such, they need to be independent of each other: '' The big problem is to maintain the sense of the whole thing.'' (Battcock, 1995, p. 152).

be 'essential to art', to all art; the reduction process, Judd states, is a simplification to the essential (a letting go of the things 'someone doesn't want'). In this regard, he continues: '' If my work is reductionist it's because it doesn't have the elements that people thought should be there. But it has other elements that I like.'' (Battcock, 1995, p. 155).

… Techniques

Judd's work stands directly on the floor or on the wall (no plinths), forcing the viewer to contemplate and interact with the object; further, this choice allows the object to be immersed into the space, belonging to it and acting as a continuation of it, rather than being an object in a space and acting on its own accord. The art pieces, become part of the architectural space, adding values and meanings to the before 'empty' space.

… Characteristics

… (a) The 'Forms': Balance between object and space

Linked to the Minimalist movement, Judd's works are based on a rigorous vocabulary that uses simple geometry, geometric forms and sharp shapes. There is a reduction of the forms to their bare essentials, in their most pure and basic forms: mainly the square and the rectangle. These simple forms are then amplified, repeated, isolated or transformed, and added to specific materials, to create visually simple yet complex objects that define a relationship between the user, the space and the object. Of the overall importance of the form, Judd (1965) claims: ''The radial and concentric parts meet more or less at right angles and in detail are structure in the old sense, but collectively are subordinate to the single form.'' (Judd, 1965, p. 5). Further, Judd developed his own vocabulary of forms: 'boxes', 'stacks' and (…). He repeated these 'vocabularies' with slight variations from the early 60's until the last decades of his life: varying dimensions, proportions and colours. Additionally, there is a strong sense of symmetry and proportion in all of Judd's work. He uses numbers to define the forms in proportional settings.

… (b) The Use of Colour

Judd's use of colour is specific and unique. In relation to colour, in this new type of object/art, Judd (1965) refers: '' The colour is also both natural and sensitive and, unlike oil colours, has a wide range. Most colour that is integral, other than in painting, has been used in three-dimensional work. Colour is never unimportant, as it usually is in sculpture.'' (Judd, 1965, pp. 3, 4). Colour, equally for Judd and his art/objects gains a specific and unique importance. The colour can be added in two ways: either from the material itself or adding it to the surface of the material. Mostly, Judd chooses materials that contain innate colours to them, allowing for the material and the colour to create the visual language. When using colour, Judd uses the most varied colours, all of them strong, intense and vibrant: red, violet, black, gold, orange, blue and more rarely green.

… (c) Materials: the Materiality

The materiality of the object is central to the work and both are inseparable. The material defines the properties of the form; the materials elected were partly due to their innate qualities and durability. Judd used various materials: metals, plywood, concrete, plexiglass with colour, iron steel, industrialized materials, plastic, etc. Plywood, the basis of the materials used, could be painted or unpainted; he started experimenting with cor-ten steel in the 80's; later in the 80's he also worked with enamel and aluminium. These experimentations with different materials allowed Judd to experiment with more colours. With reference to the materials, Judd (1965) says: '' Materials vary greatly and are simply materials (…). They are specific. If they are used directly, they are more specific. Also, they are usually aggressive.'' (Judd, 1965, p. 5). On their qualities and properties: '' (…) the qualities of materials — hard mass, soft mass, thickness of 1/32,1/16,1/8 inch, pliability, slickness, translucency, dullness — have unobjective uses. '' (Judd, 1965, p. 5). These unobjective uses allows for combinations and associations that never existed in art.

… (d) the properties

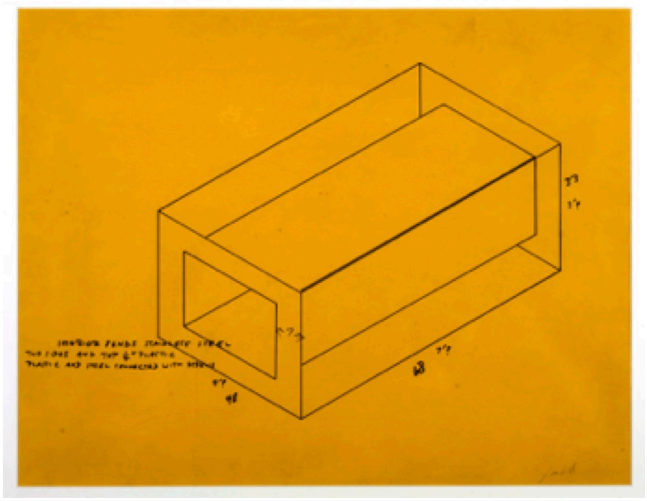
Judd, in an interview for the book '*Minimal Art: A critical anthology'* (1995), conducted by Bruce Glaser, explains that he is not interested in symmetry, but rather in 'spareness' claiming that symmetry is a means to an end; in his words: '' (…) I don't have any ideas as to symmetry. My things are symmetrical because, as you said, I wanted to get rid of any compositional effects, and the obvious way to do it is to be symmetrical.'' (Battcock, 1995, p. 150).

Getting 'rid' of the compositional effects, he continues, is a way to avoid '' (…) all the structures, values, and feelings of the whole European tradition.'' (Battcock, 1995, p. 150); these structures are intrinsically linked to European philosophy, namely to Descartes and rationalism. European art, in that sense, he continues, is linked to 'a priori systems' and carries with them a specific world view, from which he wished to depart from.

(3) inspiration, influences, conceptual framework and themes:

… Influences

His 'techniques and methods', associated to the industry and reproduction, are associated to the Bauhaus school, by whom he was deeply influenced. Also, in his manifest *Specific Objects* (1965), he speaks of various sculptures and painters, referring to their three dimensional qualities and pure form creation: the sculptures of Brancusi, Yves Klein's blue paintings, Frank Stella's work, Mark Rothko's field paintings and Ad Reinhardt work to name a few. Judd was in fact deeply influenced by the work being created at the time, as he states in his manifest, the objections to the past, are in themselves what defined the new.









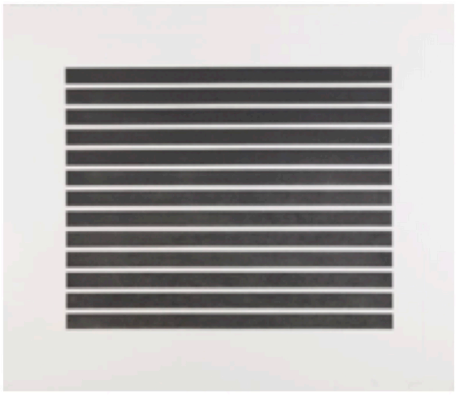


Photo: Donald Judd, Untitled, 1967/ 1968, Hand-coloured drawing on paper, 436 x 560 mm, The Tate Modern Museum, London; Source: http://theredlist.com/wiki-2-351-861-1411-1428-1430-1437-view-abstract-1-profile-judd-donald.htmlPhoto: Donald Judd, Wintergarden Bench, 1980. Photo by Stuart Whipps;; Source: http://the189.com/furniture/donald-judd-furniture-design/; Photo 3: Donald Judd, Untitled, 1969. Copper, ten units with 9-inch intervals, 9 x 40 x 31 inches (22.9 x 101.6 x 78.7 cm) each; 457.2 x 101.6 x 78.7 cm overall . Solomon R. Guggenheim Museum, New York; Source: http://theredlist.com/wiki-2-351-861-1411-1428-1430-1437-view-abstract-1-profile-judd-donald.htmlPhoto : [no title] 1988, Woodcut on paper, 598 x 799 mm, Tate Collection ; Source: http://www.tate.org.uk/art/artworks/judd-no-title-p77500; Photo 2: [no title] 1980, Aquatint on paper, 508 x 635 mm, Tate Collection; http://www.tate.org.uk/art/artworks/judd-no-title-p07555

PLATE 88: WORK PROCESS, METHODS AND TECHNIQUES

… Conceptual Framework and Themes

With Judd, the conceptual frameworks, the references and the visual themes are coincidental. Just as the form is content, in an inseparable way, so too, the conceptual framework is coincidental with the visual themes, being that both, in accordance in its simplicity, strive towards the same end.

… (a) The Freed Object

Questioning the traditional conception of sculpture, the identity of the objects was in question; this questioning wasn't a questioning associated to the art object itself (Judd's creations), but rather a philosophical questioning of art in general, being that, through his art, he found the materialization of the responses he envisioned. The rejection of traditional painting and architecture led to a conception of art built as 'the object' as it is in environmental space; a three dimensional object. Like this, there is a liberation of the object and the space by it created, and the viewing of art becomes an immersive experience, causing an engagement with the physicality of the spectator. The simple free objects (repeated or individual) in space, permit a growing union between the object, the viewer and space itself. The belief that the object and its presence was the only thing of value (led to the definition of the work as 'liberalist'), but that is not necessarily the case; Judd's work aimed to free art from stereotypes in the creation of a new type of art: an art that freed art itself. Judd believed that only the object, like in architecture, physics or geometry, can create a connection with the viewer. The objects in order to give life to a space needed to be strong and authentic; in this way only, do the objects respond to what they are: identity.

… (b) the Impersonal, The Reproduction and The Repetition

There is an underlying definition of an impersonal 'factory like' aesthetics in order to avoid the so-called personal aspects of the work. In this manner, the works are characterized by their industrialized, consumer culture, with standardization and fabrication of the parts. But not only; there is another type of repetition associated to each object, where the whole object is composed of the repetition of one single part: modular and geometric objects are repeated creating one single more complex object; such the individual defining the multiple. Judd was interested in the idea of seriality, through his progressions or repetition of standard units.

(4) underlying theories and ideals

… personal cosmology and art beliefs

Judd believed that art should not represent anything, it should unequivocally stand on its own and simply exist: for it's properties, aspects, and values as an object. Through his art, he searched for autonomy and clarity; truth and the real. Judd is generally criticized for a lack of significance and content in his art, however that is not necessarily the case. His art is filled with philosophical associations and implications that tried to release art, from stereotypes and search for a new kind of meaning. His various texts about art (as a critic) and his 'specific objects' confirm this.

… (a) 'Specific Objects'

Judd wrote his manifest *Specific Objects* (1965), where he expresses his own unique views on art and clarifies about a new kind of art form that is emerging that he defines as three-dimensional work. The manifest/essay begins with the statement: ''Half or more of the best new work in the last few years has been neither painting nor sculpture.'' (Judd, 1965, p. 1), where Judd shows the intent of clarifying a new realm of art. Although these art forms are related, they have been 'diverse', he continues, however there are many things in common between these fields (one of them being the negative assertions towards the kind of art created in the fields of painting and sculpture). This new type of 'new three-dimensional work', Judd (1965) continues, it is not a movement, a school or a style, but instead a new form of art that is composed of forms that produce 'definite qualities' and that will ultimately change the essence of both painting and sculpture[525]. This three dimensional work, Judd continues, will probably divide into other types of forms; but in its essence it will be 'larger than painting and sculpture'. Three-dimensions refers to real space itself, which distinguishes itself from the 'illusions' of earlier art forms; with it, the limits of 'painting' and of traditional sculpture are no longer an issue.

> **The limitations of painting and sculpture:** According to Judd, painting's limitations (confinement to two dimensionalities) have opened the way to the new spatial explorations of contemporary artists such as Reinhardt or Rothko; painting thus grows in order to compensate for it's own innate limitations (trying to become more spatial in new ways[1]). Traditional sculpture, Judd clarifies, is made of individual parts, composed by addition; it contains hierarchies of strength and proximity to one or two ideas, there is rarely use of colour (for the monochromatic palette allows for a unification of the parts) and the primary materials are wood or metal. The new type of art possesses none of these qualities, emphasizes Judd. The new type of work, thus, in opposition, 'resembles' sculpture more than it does painting, however it is nearer to painting in content, continues Judd. A precedent for this type of work is the sculptures of Brancusi. Two aspects define this new type of work: its broad scale and the use of the new materials available trough technologies and industrialization. Further: ''The parts and the space are allusive, descriptive and somewhat naturalistic.'' (Judd, 1965, p. 2).

Good art, explains Judd, needs to be interesting: '' It isn't necessary for a work to have a lot of things to look at, to compare, to analyse one by one, to contemplate. The thing as a whole, its quality as a whole, is what is interesting.'' (Judd, 1965, p. 4). The main things of the work, is that it has to be more intense and more powerful: it shouldn't be diluted in half forms or mild intensities, but have a bold, and definite claim. Another aspect of this new type of art, is that it allows for an infinite possibility of materials and colours, it can incorporate inventions, and new industrial techniques. Yet another property, Judd continues, in three dimensional work is that it doesn't involve 'ordinary anthropomorphic imagery', but instead focuses on form and in the connection between the general parts and the whole. Further: '' In the new work the shape, image, colour and surface are single and not partial and scattered. There aren't any neutral or moderate areas or parts, any connections or transitional areas.'' (Judd, 1965, p. 4). In summarizing Judd's text 'Specific Objects', the author Adrian Kohn (2007) writes: '' In it, he described new artworks characterized by, among other features, "a quality as a whole" instead of conventional "part-by-part structure," the "use of three dimensions" and "real space" as opposed to depiction, "new materials [that] aren't obviously art," and the unadorned appearance and "obdurate identity" of materials as they

[525] Reference to: '' They are particular forms circumscribed after all, producing fairly definite qualities.'' (Judd, 1965, p. 1), He claims: '' But this work which is neither painting nor sculpture challenges both. It will have to be taken into account by new artists. It will probably change painting and sculpture.'' (Judd, 1965, p. 1).

are.'' (Kohn, 2007, p. 79). According to Judd, 'shape, image, colour and surface' were indeed more 'specific' and 'intense' forms of communications for art.

… (b) Judd as a critic: Judd's views on art

The author Adrian Kohn (2007) is of the opinion that Judd's role as an art critic, allowed him an in-depth view and overview of the contemporary art at the time; his critical writings were incisive, 'he saw things that others missed' and he created his own vocabulary: interesting and structural as the main driving quality; Other aspects he accentuated and valued in art were the 'imagistic', ambiguous, contradictory or definite[526]. Another interesting particularity in Judd's criticism, explains the author, is the predictions made by Judd, in regards to the 'phenomena' in art, stating that art will evolve towards a new kind of dimension, that of a phenomenological experience[527], which is what he aimed to create. Phenomena in art is related, firstly to the quality of illusion and complexity, and secondly, to the quality of sensation it carries; lastly, Judd relates the phenomenon aspect to the aspect of colour, claiming that colour is the most 'powerful force'[528].

… Judd and Architecture

Judd had strong, clear and demanding views on what architecture should and could be, in the various realms of its existence: to be lived, experienced and to house art. The author Messina (2008) says that Judd's approach to architecture was founded in the core basic principles of architecture itself, however, where as other contemporary architecture might neglect or forget those principles, Judd made it a point of sustaining them and validating them through every intervention. The author continues explaining that Judd's strong views, led to a detachment, 'disdain' and negative view of 'contemporary' architecture such as Robert Venturi, Peter Eisenmann or Frank Gehry[529], and felt that their architecture to house art was led by personal interests rather than aesthetic ones. For Judd, the masters alone held value and understood the principles that should be carried out through architecture: '' Other than the masters: Wright, Mies, Corbu, Schindler, and then later, Kahn, he saw little to recommend most architects. He was an advocate of the axial and aligned positioning of openings and spaces, as well as symmetry – both being classical principles.'' (Messina, 2008, p. 536). Grounded on these classical principles of space, besides symmetry, for Judd, proportion was also of fundamental importance. Other core principles are found in

[526] Judd's criticism, the author continues, used a specific vocabulary, where the most 'interesting' was the best form of art, and where '' (…) the most interesting art tends to be that in which the form, colour, surface, space, and other "aspects" are "polarized" and "specific".'' (Kohn, 2007, p. 82). Thus, the art criticism framework was based on 'aspects, specificity, and interest', and should be infused with such qualities as 'immediate, structural, and imagistic' (such as described on the works of Jackson Pollock) or 'complicated and ambiguous, but actual and definite' (such as described on the works of Josef Albers); Reference to: '' Contradictory characteristics such as the "unbounded colour" and "rigid...geometry" vivify rather than compromise one another, and this makes for multifaceted, interesting art.'' (Kohn, 2007, p. 84).

[527] In Kohn's (2007) words: '' In Judd's assessment, phenomena make up only one attribute of Albers's and Poons's multifaceted paintings; yet "developed toward exclusivity" by Flavin, Bell, and Irwin, single phenomena manifest their own kind of multiplicity—a primary quality's numerous qualities.'' (Kohn, 2007, p. 92).

[528] In Judd's words: '' "Colour is the dominant aspect [in pieces by] Matisse, Mondrian, Malevich, Léger," he contended, and in the paintings of "Pollock, Newman, Still, and Rothko . . . colour is amplified beyond anything seen for centuries." (Kohn, 2007, p. 94). It is the phenomenon of intense colour that leads to other phenomena's in painting, summarizes Kohn (2007). Reference to: '' In his final essay, Judd expanded phenomena to include one of the most basic properties of visual art. "Colour," he proclaimed, "is an immediate sensation, a phenomenon." Judd viewed the continuous strengthening of colour as "the most powerful force" behind painting's evolution (…). '' (Kohn, 2007, p. 93)

[529] Reference to: '' As mentioned, Judd had strong, defined opinions on architecture, especially architecture designed to house art. He had a disdain for many of the late twentieth-century's notable practitioners such as Robert Venturi with his inclusive approach, as well as Peter Eisenman with his periods of linguistic or deconstructive correlations. He clearly disliked the architectural expressionistic and sculptural approach of Frank Gehry. He felt that most museum design reflected more of the architect's expressive tendencies rather than a true desire to create suitable spaces for the sheltering of art.'' (Messina, 2008, p. 535)

Judd's views on architecture; according to Messina (2008) three further fundamental properties can be identified: '' (…) enclosure, natural light and exterior expression of interior volume.'' (Messina, 2008, p. 535).

All of these architecture principles searched for the core values of architecture: the making of space, the adequate symmetry and proportion, adequate openings and considerations of light, and the expression of an interior volume well defined. On this concern for the internal space, Judd wrote: '' "(…) nothing is architecture unless the interior volume is evident. Otherwise a building is only a large object, as most of the skyscrapers are. If there is no evidence of the internal space and scale, there is no external scale.".'' (Messina, 2008, p. 535) Judd further sustained that buildings should 'make space' rather than merely occupy space. Through architecture, he believed that a deeper connecting between the art and the space could occur. Messina (2008) claims that his primary ambition was to create spaces adequate for a permanent installation of his art, in order to do so: '' His aesthetic disposition was for minimal (although he disliked the term "minimalism") and ahistorical art and architecture rather than for referential and emotive models.'' (Messina, 2008, p. 537). In this way, through architecture Judd created a symbiosis between the art and the space, where both intertwine and complement each other, creating an internal dialogue that resonates it's cohesive meaning within the user.

… Space and Colour: Two Considerations for Art and Architecture

It is space that is the most important consideration of both art and architecture. Judd (1994) says that although some considerations on space have been outlined by architects such as '' (…)Kahn, a little by van Doesburg, by Mies van der Rohe, by Le Corbusier, and by Wright.'' (Judd, 1994), contemporary architecture has forgotten all about it: '' Judging from the evidence of the buildings by recent well-known architects, space in architecture is no longer known.'' (Judd, 1994). In the visual arts too, space has remained unaddressed: '' There has been almost no discussion of space in art, nor in the present. The most important and developed aspect of present art is unknown.'' (Judd, 1994). Space, Judd continues, as the most important quality of art and architecture, has been neglected by the past, claiming 'it has no history'; and all developments of space have occurred exclusively within the last thirty years.

However, the same cannot be said for colour, continues Judd. Colour has been the focus of many studies and schools of thought, from philosophers, scientists and artists; in his words: '' Aristotle said that there was in the category of substance an entity that might have an aspect of the category of quality: material was primary, colour was secondary. He also said, to quote Copleston, that "matter is at once the principle of individuation and unknowable in itself." There is a history of colour in art.'' (Judd, 1994). However, Judd believes, there is a lack of understanding of new ideas in regards to colour. Colours, produce certain 'feelings', Judd making a reference to Kandinsky and Itten and the Bauhaus School, and affirms that the notions of colours being attributed to forms (yellow to triangle, etc.) has lost its place, where as the notions of 'cool' and 'warm', vaguer and more complex ideas still survive today. Colour enables a richer experience, and that in turn is knowledge. In respects to his views on colour, Judd summarizes: '' Colour is like material. It is one way or another, but is obdurately exists. Its existence as it is the main fact and not what it might mean, which may be nothing. Or rather, colour does not connect alone to any of the several states of the mind. '' (Judd, 1994).



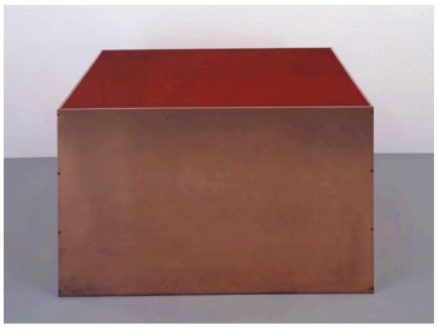




Photo: Donald Judd, Untitled, 1973. Brass and blue Plexiglas, 83.82 x 172.7 x 121.9 cm. Solomon R. Guggenheim Museum, New York; Source: http://theredlist.com/wiki-2-351-861-1411-1428-1430-1437-view-abstract-1-profile-judd-donald.html; Photo 2: Donald Judd, Untitled, 1972, Copper, enamel and aluminium, 916 x 1555 x 1782 mm, The Tate Modern Museum, London; Source: http://theredlist.com/wiki-2-351-861-1411-1428-1430-1437-view-abstract-1-profile-judd-donald.html; Photo 3:The third-floor studio at Donald Judd apartment, 101 Spring St NY; Source: http://archrecord.construction.com/projects/portfolio/2013/05/1305-Judd-Home-and-Studio-Architecture-Research-Office-slideshow.asp?slide=3;

PLATE 89: ART OBJECTS

(5) specific work analysis, examples and key features

… (a) The Stacks

The 'Stacks' series, were developed by Judd throughout various stages of his career. They were called, like his other artworks, 'Specific objects', and in the words of author Bacigalupi (2013), in brief, ''These were "specific" because the artist carefully orchestrated their shape, scale, proportions, and materiality. And they were "objects" because they were fabricated -- rather than sculpted -- by the artist.'' (Bacigalupi, 2013); but they are more commonly referred to as the 'Stacks'. The 'Stacks' are composed of ten identical boxes, arranged vertically one above the other, '' (…) with the spaces between each equivalent to the height of each box. The alternating of solid and negative space therefore creates a pleasing rhythm, while the enormity of the assembly dwarfs the viewer.'' (Bacigalupi, 2013). Maintaining the same basic structure, form, dimensions and volume, each of the artworks changes in colour, texture and material.

… (b) The 'Prints' and the 'Paintings': 2d visual expression of 3d form

Judd simultaneously to his 3 dimensional work, also explored visual language of forms, through two dimensional creations: drawings, etchings, aquatint on paper or woodcuts on paper. Exploring forms, lines, open or closed, and the relationship between space. Either exploring forms freely, or portraying built physical objects as in Photo 3, they explore Judd's three-dimensional vocabulary, focusing on the formal aspects of the objects.

… (c) The 101 Spring Street Building, New York

Donald Judd's apartment, 101 Spring St NY, was opened to the public as a museum in 2013 after an extended renovation by ARO architects whom aimed to maintain the building and the interiors exactly as they were when inhabited by the artist; currently the building is owned and maintained by the Judd Foundation. The five-story building, constructed by Nicholas Whyte in 1870, is the last surviving cast-iron building; it was purchased by Judd in 1968, used as both his studio and his residence until his death in 1994. Judd used the spaces to show his artworks, and it was through this connection between the space and the objects that he clarified his views on 'permanent installation' where he sustains that the place in which the work of art is placed is critical and of the essence for the overall meaning and significance of the work. Judd clarified the intimate connection between art and architecture, using the spaces to showcase the artistic objects in their full meaning. Each floor of the building contained art pieces, from both himself and other artists he considered shared the same ideals (such as works by Jean Arp, Ad Reinhardt and furniture by Alvar Aalto or Gerrit Rietveld); there are over 200 pieces of art and furniture spread on the five floors. Each object was placed in order to achieve a 'maximum contemplation', and enhance perceptual stimulation. In the building, Judd's main concern was with the materiality and objectivity of each art work, as well as the feeling of light and air that he strived to maintain in all spaces. As such, a unique dialogue results between the art object and the architectural space.

… (c1) Marfa, Texas and the Cinnati Museum

After visiting Marfa for the first time in 1971, Judd moved to Marfa permanently in 1977. Over time, he kept acquiring additional land in the region, buying buildings in town (that served different functions), traditional ranches, and property adjacent to the ranches, in order to prevent future developments; in total, when he died, he possessed around 40,000 acres of undeveloped ranch land. The buildings in town include: working spaces, the artist's residence, the art studio, an architecture studio, a library, a space for the archives, and ranch office. In 1986, Judd founded the Cinatti Foundation that was responsible for the overseeing of the large-scale public art works commissioned for Dia Foundation; the rest of the land and buildings are managed by the Judd Foundation. The Chinati Foundation Museum is located on 340 acres (1.4 km2) of desert in Marfa, Texas; construction and installation of artwork begun in 1979 and it opened to the public, as a museum, in 1986.

Chinati houses works from various artists (work by John Chamberlain, Dan Flavin, David Rabinowitch, Roni Horn, and Coosje Van Bruggen, to name a few), as well as Judd's installations; each artwork is exhibited in a different building or in a different location in the land. It echoes Judd's views on 'permanent installations' and art as an object. The Chinati Foundation, thus, aims to preserve the work of artists whose permanent installations have an emphasis and intricate link with the surrounding landscape. Judd's vision was to create a relationship between art, architecture, and landscape through site specific installations; at the foundation two of Judd's installations are of the most relevance, and mark this intention and achieve a sense unity, integration and meaning: 15 outdoor works in concrete and 100 aluminium pieces housed in two artillery type buildings. These two works will be analysed as follows:

> **''15 works in concrete'':** *'15 works in concrete' (*1980-1984), located Marfa Texas Cinnati Foudation, (dimensions: each box is 2.5 x 2.5 x 5 meters, the concrete slab is 0.25 m thick; overall, there are 15 'boxes'). The concrete works are located along the border of Chinati's property; they were the first works to be installed at the museum; their construction and installation occurred over a four-year period, from 1980 through 1984. Each of the boxes has the same measurements and thickness. The work aims to interact with the landscape and with nature.
>
> **'100 untitled works in mill aluminum': '**100 untitled works in mill aluminum' (1982-1986), located in Marfa Texas, Cinnati Foudation (dimensions: each box is of 41 x 51 x 72 inches; there are 100 boxes); Each of the 100 works has the same outer dimensions although the interior is unique in every piece. The installation was designed in accordance with the buildings in which they would be housed, and Judd went as far as adding changes to the architecture of the buildings in order 'harmoniously' accommodate the installations: he replaced derelict garage doors with long walls, opened windows to flood the space with light, and amplified the space of the building by creating a vaulted roof in galvanized iron. Through a combination of light and space, the installation comes alive shifting and changing according to the time of the day and the intensity of the light.

(6) Key principles, concepts and values

… Geometry, Pure Forms, Reason, Depuration and the Minimal

Judd found in the language of geometry and pure forms the universal ideas he was striving to achieve. These establish a connection with Plato's ideas on 'pure form', believing that they contained the secrets and forms of universe.

Photo 1: Donald Judd's 100 untitled works in mill aluminum, 1982-1986
Marfa Texas, Cinnati Foudation, each box is of 41 x 51 x 72 inches; there are 100 boxes.
Source: http://ehoffmann.blogspot.pt/2011/03/donald-judd-pintor-norte-americano.html;





Photo 2: Donald Judd's 15 works in concrete, 1980-1984
Location: Marfa Texas, Cinnati Foudation
Dimensions: each box is 2.5 x 2.5 x 5 meters, the concrete slab is 0.25 m thick; overall, there are 15 'boxes'.
Source: https://www.chinati.org/collection/donaldjudd.php;

PLATE 90: TOWARDS ARCHITECTURAL THREE DIMENSIONALITY

Pure forms do indeed have a long history and tradition in both the arts and in architecture, however Judd revives them in a new way: he uses the pure form as the base element and then adds other dimensions to it by transforming the object. These transformations can occur either in regards to materials, to colours, to textures, to reflexions, to repetitions or even making the object hollow on the inside. These uses of pure form and their decision making process are attached to reason and geometry, following logical processes and a rectilinear perpendicular system.

There is a total absence of curvilinear objects and their symbolic association of emotion and intuition, and a total surrender to reason and to logical aspects of creation. Also, another aspect that requires further notice is the depuration of form to its most minimal condition. In other words, Judd tries to achieve the most impact, with the minimal use of material and means. There is a constant depuration at all levels of creation that is read clearly in the final object. This leads to the core of Judd's theory: the minimal. The simplification process goes on until the essence is reached. Once it is found and emphasized the process stops.

… Universality, Abstraction and Truth

Judd (1965) claims: '' The thing as a whole, its quality as a whole, is what is interesting.'' (Judd, 1965, p. 4). For Judd, it is indeed the 'quality as a whole' that matters. According to Judd, 'shape, image, colour and surface' were indeed more 'specific' and 'intense' forms of communications for art. Those entities, pure, clean and simple would communicate in a deeper way and in a more truthful way. As such, in this quest for pure form, three dimensionality and truth of the object, Judd searches, even if unconsciously, the universal aspects of form and abstraction. In his depuration to the 'essence' of the thing, allowing for the real 'truth' of the object to emerge, Judd creates a link with not only Platonism and it's quest for the universal world of 'ideas' (the basic world of ideas and forms that define and sustain the universe) but also with Heidegger's ideas of existence and being at its most primal and basic way. To search for this truth, this universal truth, found through abstraction and pure form, is a way of depurating not only the object but also the being, accentuating basic forms and 'truthful' objects, is a way of reflecting those primal and basic ideas that define our existence as human beings and as a humanity.

… Underlying Poetry, Metaphysics and Spirituality of Space

Judd says: '' The integrity of visual art is not seen.'' (Judd, 1994). With this statement he affirms that there are indeed hidden elements that are invisible to the eye, but not to the other faculties of the human being (emotional, psychological and spiritual faculties). In fact, the real essence of Judd's work is in the underlying poetical and metaphysical qualities that cannot be described like the 'simplification' process or by 'reason'. These are achieved and cared for at other levels: levels of intuition and insight, sensitivity and delicacy. It is these 'hidden' qualities, that make up the real essence of Judd's work. In another interview Judd explains: '' A few people have said to me, and one written, that my work together made space of a room, made architecture, and even that it made a "spiritual" space.'' (Judd, 1994). Weather these qualities were something Judd was trying to achieve, yet he did not speak of, or weather they simply occurred naturally, one can never know. However, the fact is that Judd's works complete space, and add other dimensions and meanings to its presence: they add poetical qualities to the space, and

they add metaphysical and spiritual dimensions to the atmosphere and to the viewer that lives it. This 'poetical', 'metaphysical' and 'spiritual' dimension of space (by making space more meaningful) in turn allows us to understand our own meaning in the world and in the universe.

Ending Remarks:

Judd believed art could be liberated into space and acquire a deeper meaning and significance when it aimed to be a complement to the architectural space in which it will live. As such, the object, freed in space, should strive to use geometrical forms that are pure and simple, using materials, textures, scale, repetitions and colours, to create visual effects, psychological understandings and emotional connections with the viewer that are true and universal. It is through the language of minimal art, defined by Judd, that a synthesis of content and form can be defined and a maximum significance can be achieved through universal principles. In this search and in this quest, lies the deep significance and meaning that is inherent to Judd's work. Another aspect of vital importance in Judd's views and theories is the fact that all art can indeed complement each other, and that a new type of art form should be created: one that combines the vision of painting with the physicality of sculpture and the spatial experience of architecture. In this way, the best of all three could be synthesized in a new creation. By making space more 'spiritual' and more 'metaphysical' Judd makes us understand our own metaphysical and spiritual dimensions a little better.

Summary Notes: Donald Judd

1. *Donald Judd's work is in pursuit of a quality that is true and universal: it is this elusive and evasive quality that grants the work it's meaning and significance.*
2. *Artistic expression should be based on a minimal expression of content.*
3. *The language of minimal art aims to achieve a synthesis of content and form and create maximum significance through universal principles.*
4. *Through the liberation of the artistic object into space, art is able to convey a deeper and more meaningful experience.*
5. *Sculpture and art can indeed complete the architectural space: by adding value and meanings that are not there. In doing so there can be a union of all the arts from different artistic fields.*
6. *Architecture and Art should be in a symbiosis through space.*
7. *A new kind of artistic field can be created: union between sculpture and painting and architecture, in a three dimensionality.*
8. *Through the understanding of the object in itself, qualities and meanings can be communicated: using pure form, geometry, specific materials, vibrant colours, repetitions, and other object transformations.*
9. *The phenomena of art is related to complexity and sensation.*
10. *Art should search for the universal language that is true and meaningful.*
11. *Conceptual Chart:*

Table 25: Donald Judd Conceptual Chart

CREATION			CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Table 26: Donald Judd Synthesis Chart

DONALD JUDD

1. FIELD:
- *Painting, Sculpture, Design and Architecture*

2. EDUCATION/BACKGROUND:
- *Bachelors Degree in Philosophy*
- *Master's Degree in Art Theory*
- *Classes in Art*
- *Art critic*

3. EVOLUTION:
- *Abandonment of painting towards a sculptural and architectural dimension.*
- *Towards Three Dimensionality*
- *Towards Abstraction*

4. CONTEXT:
- *Against Abstract Expressionism: artist's personal expression*
- *Definition of Minimalism*
- *Rejection of labels and contextual movements*
- *Disdain for 'contemporary' architecture:*
- *Led by personal interests*

5. INFLUENCES:
- *Art theory: aesthetics and philosophy*
- *European geometrical abstractions*
- *Bauhaus School*
- *Artists: Mark Rothko, Ad Reinhardt, Frank Stella*
- *Architects: Wright, Mies, Corbusier, Schindler*

6. CREATIVE PROCESS:
- *Rational, Methodological and Scientific*
- *Architectural Process*
- *Conceptualisation as a project*
- *Pre-conceived: follows a method*
- *Follows a process of reduction*

7. PERSONAL COSMOLOGY:
- *Questioning the 'representational' aspects of art tradition*
- *Belief in the freedom of the artistic object*
- *The methods do no matter: what matters is the end result, the artistic object.*
- *New kind of artistic field: union between sculpture and painting, three dimensionality*
- *Devoid of illusions, figurative elements and detracting notions of art*
- *The phenomena of art is related to complexity and sensation.*
- *Art should not represent anything: stand and be on its own.*
- *Art is connected to Architecture (union between both): both should 'make space'.*
- *All forms of art should be devoid of personal interests and focus on principles and truth*

8. EMOTIONS
- *Absence of emotions*
- *Rational understanding*
- *Harmonious Rationality*

9. OBJECTIVES:
- *Minimal Art aims to: achieve a synthesis of content and form and create maximum significance through universal principles*
- *Pursuit of a quality that is true and universal*
- *Liberation of the artistic object into space*
- *Aims to complete the architectural space: adding value and meanings*
- *Purpose of freeing the artistic object*
- *Aim of uniting different artistic fields*
- *Questioning the traditional understanding of art: rejection of traditions and new philosophical understanding of the artistic object*
- *The understanding of the object as a whole: where the interest is*
- *Architecture and Art should be in a symbiosis through space*

10. CHARACTERIZATION:
- *Definition of the minimalist aesthetics: Reduction of means to it's essential elements*
- *Coordination of specific elements: Surface, form, geometry, equality of parts, repetition.*
- *Devoid of compositional effects*
- *Simple geometry, sharp shapes, pure and basic forms*
- *Single elements are transformed: amplified, repeated, altered.*
- *Formation of a vocabulary of forms: boxes and stacks.*
- *Use of colour in a sculptural way*
- *Materials: selected for their properties, physicality and substance.*
- *Avoidance of personal aspects towards a: universality, reproduction and seriality.*
- *Develops a connection with space: three-dimensionality*

11. CONCEPTUAL FRAMEWORK:
- *Form*
- *Repetition*
- *Space*
- *Colour*
- *Freedom*
- *Geometry*
- *Enclosure*
- *Principles*
- *Seriality*
- *Material*
- *Proportion*
- *Symmetry*

12. VALUES
- *Metaphysical, Philosophical, Spiritual and Poetical*

13. MEANING/SIGNIFICANCE
- *Adding spirituality and metaphysical qualities to space, which in turn allows us to understand our own spiritual dimensions.*
- *Levels of truth.*





Photo: James Turrell portrait; Source: http://jamesturrell.com/about/biography; Photo: The Crater's Eye, which is open to the sky; at Roden Crater; Source: http://www.nytimes.com/2013/06/16/magazine/how-james-turrell-knocked-the-art-world-off-its-feet.html?_r=0

PLATE 91: JAMES TURRELL

6.7. JAMES TURRELL

(1) artistic evolution, context and characterization

… Artistic Context and Characterization

Turrell's work is most commonly associated with what is known as the Light and Space movement, which began in Southern California in the mid-1960s; it was related to op art, minimalism and geometric abstraction and is characterized by a focus on light and other perceptual phenomena, and the use of non traditional material such as glass, neon, fluorescent lights or resin *(see Glossary for more information)*. Turrell's art was primarily concerned with light, space and perception: aiming to explore from the very beginning perceptual changes, experiences and impact caused in the human being by light and colour.

… Artistic Evolution

After his studies in mathematics and perception psychology Turrell turned to his art, as a means to explore perceptual phenomena. In 1966 Turrell moved into a building (formerly known as the Mendota Hotel in Ocean Park, California), where he begun working on a series of projects that explore the way by which light can manipulate the perception of space: the experiences (he covered the windows and begun experimenting with small openings of light), created his first light projections. Hylton (2013) for the New York Times, considers that in this way, he also discovered the optical effects of light by two planes in a corner, creating the illusion of a three dimensional cube[530]. These works, include the *Cross Corner Projections series,* an example of which is *Afrum I (White)* (1967), featuring a glowing white light cube floating in the air, defining the corner of a dark room; upon approximation the viewer understands that the volume is not a volume at all, but two planes together, that emit the perceptual illusion of a volume. Turrell created shapes that seem to have mass and weight, though they are created with only light, clarifying what began to be his mains focus: the phenomena of both Light and Perception. For Turrell, these installations were a closer understanding of light as a material that could be manipulated and crafted as a tool and as art. After experimenting with the projection installations, in the 1970s, Turrell began his series of 'skyspaces' beginning his first enclosed spaces open to the sky through a round or square aperture in the roof. He was moving towards architectural situations and experimenting with 'spatial' constructions as a way of exploring perception in a new dimension. Turrell's series of 'skyspaces' today are scattered around the world. In some of the architectural installations Turrell also includes and programmes dynamic colour changes: that shift subtly or drastically and allow the space to become alive. Turrell left Ocean Park in 1974 and moved to Flagstaff, Arizona, where he began his Roden Crater large scale project (on-going project that is still being developed and constructed today). In Arizona he also began to develop his series of light spaces, and continued to develop his smaller scaled light installations for galleries. Turrell also developed more abstract space installations (with his tunnel installations), that

530 '' Turrell had discovered a strange optical effect in one of his projects for grad school. By placing a slide projector in an empty room and pointing its beam toward the corner, he found that he could make a cube of light that seemed to occupy physical space. As he settled into the rooms of the Mendota Hotel, he began to explore variations on the idea. '' (Hylton, 2013).

are stranger in context and content, and possess more intense applications of light and more intense perceptual phenomena. An example is *The Light Inside* (1999), where the installation is composed of a blue flooded tunnel and the intense blue diffuses matter creating a more immaterial presence and a more intense experience. Turrell also began to create various works on paper, including etchings where he also explored the qualities of light. The realistic drawings echo the qualities of the spaces, in a two dimensional creation – using light, shadow and space to create the perceptual experiences desired.

Overall, Turrell's evolution is characterized by this gradual moving towards architectural situations and experimenting with larger space constructions and perceptual experiences and an increase of colour use, through light. Whereas, his earlier work was more monochromatic, as he progressed his installations become more rich and more vibrant in colours. As he grows in scale and in colours, he begins using space itself, rather than limiting light to a specific object.

(2) creative process, methodology, techniques and characteristics

… Creative Process, Methodology and Technique

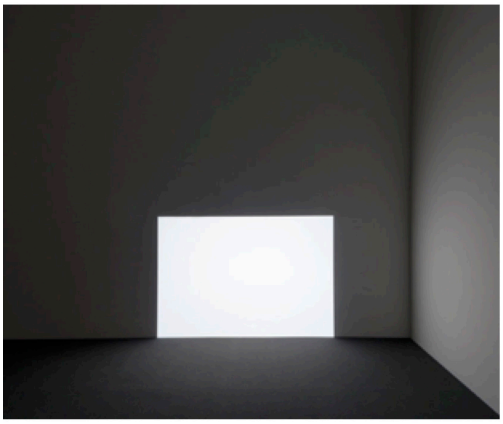
Turrell's work process and artistic technique is, what one might suggest, more similar to an architectural process than it is to an artistic one. First, for Turrell, art is not about a personal expression or a materialization of an 'intangible' idea led by intuition or by the creative impulse; for him, art or architecture, is a manifestation of an experience, in order to adequately create that immersive experience he conceived of the special dimensions and light materialization as a scientist does: with careful measurement, precise configurations and adequate calculations of light intensities and colours. Correspondingly, Turrell's work process is led by rational decision making, using technology as an aid and annihilating every aspect of human creation, both in the space and in the process. In regards to the creative process that leads to the spaces, there is no evidence of sketches or ideas, but instead in seems that each experience leads directly to the next: it is possible to trace an on-going thread of evolution from his earliest works to the latest: where he grows in intention, intensity and increases the perceptual experience for the user. Turrell works as a scientist would: lead by rationality and accuracy.

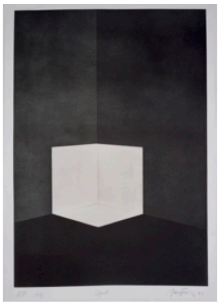
(4) inspiration, influences, conceptual framework and themes:

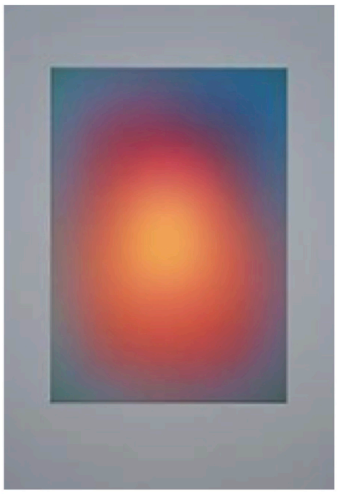
… Influences

Turrell was influenced by his early studies in perceptual psychology, mathematics and optical illusions. These disciplines and studies deeply rooted his quest in art. By his early research into sensory deprivation particularly the Ganzfeld effect[531], this effect influenced him greatly in the way he manipulates both light and space, aiming to create a 'shock' to the system, or a 'perceptual deprivation', by diffusing matter with light.

[531] **The Ganzfeld effect:** The Ganzfeld effect, from the German words that means "complete field", defines a type of perceptual deprivation; it is a phenomenon of perception that is caused by an exposure to a uniform stimulation field; ''The effect is the result of the brain amplifying neural noise in order to look for the missing visual signals. The noise is interpreted in the higher visual cortex, and gives rise to hallucinations.'' ("Ganzfeld effect," 2015)







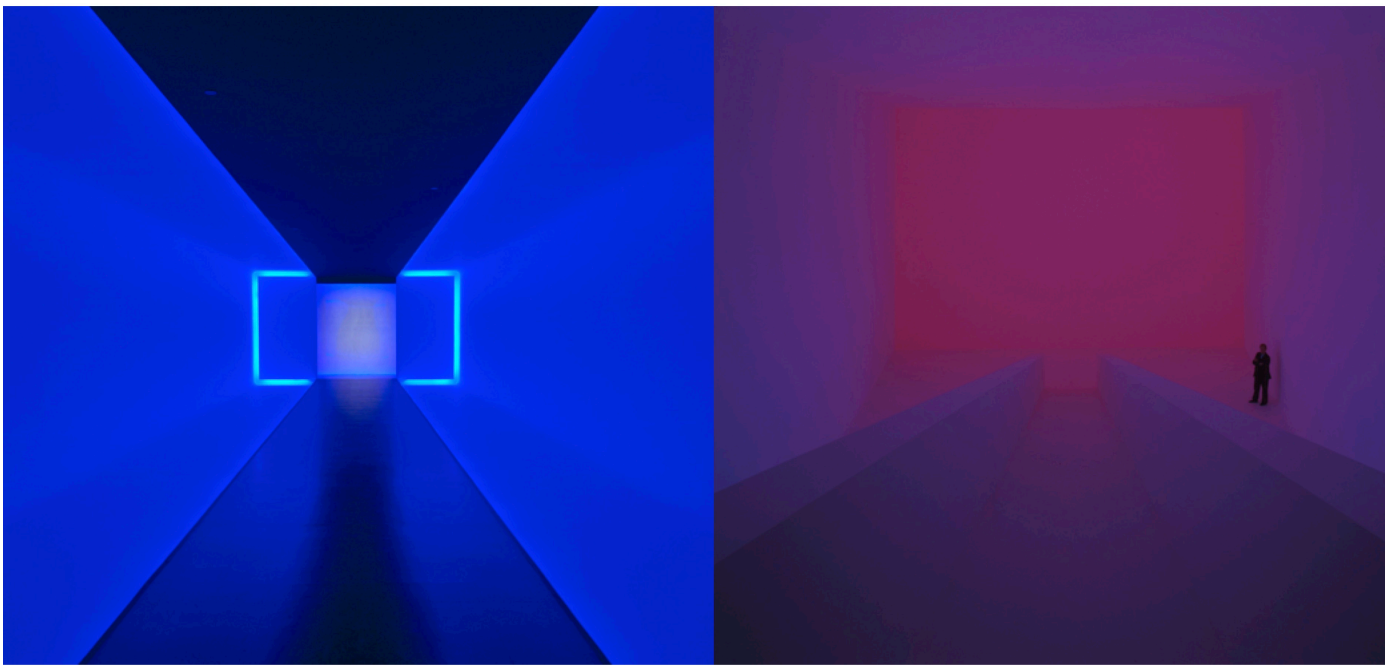


Photo 1: James Turrell, Prado (White), 1967. Projected light, dimensions variable.; Source: http://web.guggenheim.org/exhibitions/turrell/#earlyworks; Photo 2: James Turrell, Ondoe (from the portfolio First Light), 1989–90. Aquatint, plate: 99.4 x 69.1 cm; sheet: 108 x 75.6 cm; Source: http://web.guggenheim.org/exhibitions/turrell/#earlyworks; Photo 3: Sustaining Light, 2007, Wood, computerized neon setting, glass piece; Source: http://www.gagosian.com/artists/james-turrell; Photo 2: James Turrell, The Light Inside, 1999. Neon and ambient light. The Museum of Fine Arts, Houston; Source: http://www.archdaily.com/380911/light-matters-seeing-the-light-with-james-turrell/51a7b5c3b3fc4b10be000379-light-matters-seeing-the-light-with-james-turrell-image; Photo 5: James Turrell: Bridget's Bardo, 2009. Ganzfeld. Installation view at Kunstmuseum Wolfsburg. Germany, 2009. © James Turrell. Photo © Florian Holzherr.; Source: http://www.archdaily.com/380911/light-matters-seeing-the-light-with-james-turrell/51a7b480b3fc4b39ee000362-light-matters-seeing-the-light-with-james-turrell-photo;

PLATE 92: ARTISTIC EVOLUTION: FORMS TO SPACE

He was also shaped by his Quaker faith: with the belief that light is spiritual and acts as a revelation on man. The art critic Hylton (2013), for the New York Times believes that growing up Quaker, ‘’(…) he was always being told to nurture “the light within.”.’’ (Hylton, 2013). The Quaker faith also reflects on the quiet and private sphere of existence that he creates through his art. This connection to spirituality deeply determining his artistic significance. One of the artists that was important to his formation was Mark Rothko and his use specific and intense use of colour in his colour field paintings. Butterfield (1993) enumerating Turrell’s influences, speaks of Malevich and the de Stijl artists led by Mondrian and their attempts to create a ‘new universal language of art’[532], which also made Turrell want to do the same. It is in such a manner possible to understand that the overall contemporary art movement intensely influenced Turrell’s vision of art and the world: his creations succeed the legacy created by all the contemporary artists, and aim to contribute another step to history of Art: the aim to liberate art from the two dimensions into the architectural space.

… Conceptual Framework and Themes

The dominant themes explored by the artist for nearly fifty years, are perception, light, colour, and space. It is important to clarify that for Turrell, colour, light, perception and space are not seen as ‘objects’ or ‘points of focus’ but instead, are perceived and understood as substances, and that these themes or conceptual frameworks are interconnecting and act as one single essence. But, for the analysis purposes, colour and light will be understood and then perception and space. Lastly, another theme explored by Turrell is the idea of a cosmological time.

… (a) Colour and Light

In the first place, there is a very close connection between colour and light: colour is perceived, materialized and understood as a materialization of light. There is another aspect in regards to colour that is deeply important; Jan Butterflield (1993) remarks that right from the very beginning of his work Turrell has been interested in colour in a specific way: colour ‘created’ by the participant. The colour spaces create a profound connection with the viewer; they immerse the viewer in colour in an almost tangible way remaining always fleeting and open ended; it creates a sort of illusion of colour: ‘’ You see it, think you could touch it, even inhale it, yet in reality it isn’t there.’’ (Butterfield, 1993, p. 77), that is both tangible and intangible. And lastly colour is used at it’s most vibrant and intense ways.

The intangibility of colour is also a property that Turrell tries to echo through the light. His architectural atmospheres or installations create optical and emotional effects of colour and luminosity. Butterflield (1993) explains that in Turrell’s work, light is used ‘as revelation’. Turrell himself said: ‘’ My art deals with light itself. It’s not the bearer of revelation – it is revelation.’’ (Butterfield, 1993, p. 74) or ‘’Light itself is becoming the revelation,” (…).’’ (Schielke, 2013, p. 1). For Turrell, light is not only a property of the physical world, but something that bears within it the possibilities of revelation: through its

[532] In his words: ‘’ Each group was utopian in its beliefs, and each attempted to integrate art into all aspects of life. Out of these attitudes evolved the room environments that are the antecedents, philosophically at least, of many of the Light and Space installations.’’ (Butterfield, 1993, p. 10).

experience. Turrell, believes the essence of light establishes a primal connections[533]. This explanation on the use of light was part of his interviews about *'Aten Reign',* an exhibition where he transformed Frank Lloyd Wright's iconic Guggenheim Museum into a kind of 'Skyspace'. The architectural space of the museum is illuminated with brightly coloured experiences that change in colour. His aim, like in most of his work, was to create a 'dymanic perceptual experience' by exposing 'light'[534]. The rotunda, or the central void, during the exhibition, had to be viewed from below, as a distanced volume of floating space. The space was left empty in order to amplify the intensity of the light changes and the perceptual intentions designed by Turrell. 'Aten Reign' creates an entirely new experience with the building. One issue that is important of further clarification in the fact that Turrell is not interested in light and colour, as individual presences but together, as created by nature and understood by science. For him, colour and light represent two sides of the same thing, and they should go hand in hand.

… (b) Perception and Space

Turrell explores perception in different visual experiences, where light (in its multiple facets) is turned into an object of contemplation (not a tool to enable vision but a subject in itself) that allows the 'viewers' to extend and enhance their own perceptual fields through those 'immersive' experiences. ''"My art is about your seeing."'' (Schielke, 2013, p. 1) he clarifies and highlights. Some of his installations provoke a disorienting perceptual effect: for some experts, a high degree of surrender is necessary in order to appreciate the work adequately, but for others the experience is merely disturbing. In either case, perception is used as a tool for the creation of an atmospheric experience, and of meaning. Through the perceptual experiences the viewers become immersed into the work. Jones (1999) writes that '' Turrell shows that we can still have our sense of reality transformed by the way an artist captures light. But instead of canvas, he uses space.'' (Jones, 1999).

A good example of colour, light and perception being used in sync, is 'Sustaining Light' (2010); it is a glass modulated light piece programmed (computerized neon settings) to create shifts of colour over time; these subtle shifts, allow the viewer to perceive only a 'floating' like effect of space enhancing small perceptual changes. Turrell creates an atmosphere that is free from other elements confusing and shaping perception so that the space, as light and colour is presented as an immaterial and intangible experience. For this, the spaces are simplified to their minimum essence and the systems that create the light effects are hidden from view, allowing the viewer to become fully immersed in the space and in the atmosphere, creating a realm of pure perceptual experience.

Consequently, Turrell uses light, colour and space, in a unified and immersive way in order to extend and enhance perception. The way he does this is by creating an atmosphere that disorients the viewer, and removes all frames of reference from the experience: allowing light and colour to be the only elements in a unified field of space, and so creating shifts of perception.

[533] **The use of Light:** on light as a tool for perception and meaning, it is also crucial Turrell's remarks, as cited by author Rosenfield (2013): '' "Light is a powerful substance," Turrell explains. "We have a primal connection to it. (...) I like to work with it so that you feel it physically, so you feel the presence of light inhabiting a space," (…) '' (Rosenfield, 2013, p. 1).
[534] Reference to: '' This presents a dynamic perceptual experience in which the materiality of light is exposed.'' (Rosenfield, 2013, p. 1).

… (c) Geological Time and Astrology

Turrell accentuates that one other theme and aspect he is interested in is the idea of a geological time (time in relation to whole existence of the universe). This is explained in the documentary produced and edited by LACMA for "James Turrell: A Retrospective" exhibition on view at LACMA from May 26, 2013, Turrell claims that he is influenced by the idea of Geological time: '' (…) so that we are out of the time set of the man made construction of time. That way we are already on the way of getting connected with astronomical time and things above. '' (LACMA, 2014). This geological time connects him to the aspects and principles he wishes to incorporate in his art: absence of human relations, abstraction, universality, astrology, etc. It is this deep search for that which is cosmological, universal and 'never changing' (such as the stars and other astrological events) that Turrell incorporates with his other themes in Roden Crater (analysed bellow).

(4) underlying theories and ideals

… personal cosmology and art beliefs

The main driving idea that conveys Turrell's vision and goals about his own art is the idea that the work has no object, no image, no form, no point of focus and no representation of anything. The work is about creating space: '' My interest is in plumbing the space." (Schielke, 2013, p. 1). Space for him is the essence of his work: with the underlying aim of changing the way we understand space, the way we perceive it and the way we live in it. Space is the main driving essence of his art[535]. Therefore, with the on-going desire to make his artworks about space itself, he liberates his creation from the two dimensional creation into the architectural and spatial space.

Another aspect that defends his overall views of his own art, is the idea that his art, although being all about space, is more connected to painting than it is to sculpture or architecture[536] because of the creation of what he calls the 'fourth dimension'. For him, this is what painting is about: the creation of this fourth dimension of meaning and existence. As such, the use of the architectural space is just a means to an end, however the essence of 'painting' is still there.

Another point of importance is the desire to make the observer be apart of the art itself, instead of being a passive on-looker. Further, Turrell's work is wanting to allow us to see ourselves 'seeing', his work acts as a metaphorical mirror of ourselves; in seeing ourselves seeing, we are liberated from our own life and become observers of ourselves, as outsiders for our own life. In doing so, through the artistic experience Turrell allows the viewer to become deeply aware of his existence, in a cosmological and

[535] **Turrell's Art as Space:** Turrell (2013), about his own work claims: "There is no object in my work. There never was. There is not image within it. I have: no object, no image, no point of focus.'' (Schielke, 2013, p. 1). His desire is not to create an art that is an image, or that acts as an image, but that is about space and light itself. In another circumstance he further emphasizes his interest in space; Turrell (2013) claims: "Let me make this very clear: the main thing is that I am totally interested in space and not in form." (Schielke, 2013, p. 1).

[536] Reference to: " This work was about taking three-dimensional space and making the same kind of allusions to the space beyond that – you don´t need to call it fourth dimension but just one that does not solve up in three. So in that way, my work does have a lot more to do with painting than it does with sculptural or architectural senses, because the first thing that is important is that the light is used as material, and that it has a physical presence as such, and that space is solid and filled and never empty." (Schielke, 2013, p. 1).

existential way. On this issue, Turrell (2014) says: "What are you looking at? You are looking at you looking. What is important to me is to create an experience of wordless thought." (Turrell, 2014).

In his own words, Turrell uses Plato's Parable of the Cave, to contextualize the significance of his art. For him, the parable explains that we live in our own creation of reality: '' (…) subject to our human sensory limitations as well as contextual and cultural norms.'' (Turrell, 2014). So, underlying his artistic pursuits is the deep desire to make us understand our own reality and our place in the universe, just like in Plato's cave, the men were observing illusions, shadows, and had to be led towards the light. So too, Turrell, through his artwork, aims to guide us towards the light, helping us get a clearer understanding of ourselves, the world and our place in the universe. Likewise, as such, his on-going fascination with the phenomena of light and colour is ultimately connected to a search for mankind's place in the universe. Both his subjects and his art aims to be a bridge to ourselves, towards a more deeper state of existence and understanding.

Oliver Wick (1991), on Turrell's artistic meaning summarizes: '' This art, whose medium is purely and simply light, is clearly not about overturning the classical conception of art. (…) Rather, in its focusing on the act of perception, the ultimate origin of all visualization, it embodies the very essence of art as pure image.'' (Butterfield, 1993, p. 81).

(5) specific work analysis, examples and key features

… (a) Perceptual Cells

The Perceptual Cells are considered to be Turrell's most extreme work, the art critic Hylton (2013), for the New York Times clarifies that '' The visitor approaches a giant sphere that looks like an oversize Ping-Pong ball and lies down on something like a morgue drawer to be pushed inside.'' (Hylton, 2013). The lights come on, once the door is shut, and colour begin to shift: '' As the colours shift and morph, you begin to see things that aren't there, like tiny rainbows floating in space and crisp geometric forms. It turns out that what you're seeing is the biological structure of your own eye, which, in the blinding intensity, has turned on itself.'' (Hylton, 2013). Turrell himself, the author continues, described these Cells as 'invasive' and 'oppressive'. The Wolfsburg Bridget's Bardo installation, used 'spiritual' like colours (pink and purples, blues and magentas) and dissolved materials edges with the flooding of soft transitions of light and colour, creating this immaterial floating like special atmosphere that mirrors what appears to be a 'a spiritual passageway to heaven' (an expression coined by Schielke).

… (b) Skyspaces

Skyspaces are installations, composed of an enclosed space (large enough for about 15 people), with an opening at the top towards the heavens and benches along the edges. In some of them, light is further manipulated to provoke a certain 'perceptual' experience in the viewer, thus, transforming the traditional 'sense of reality'.



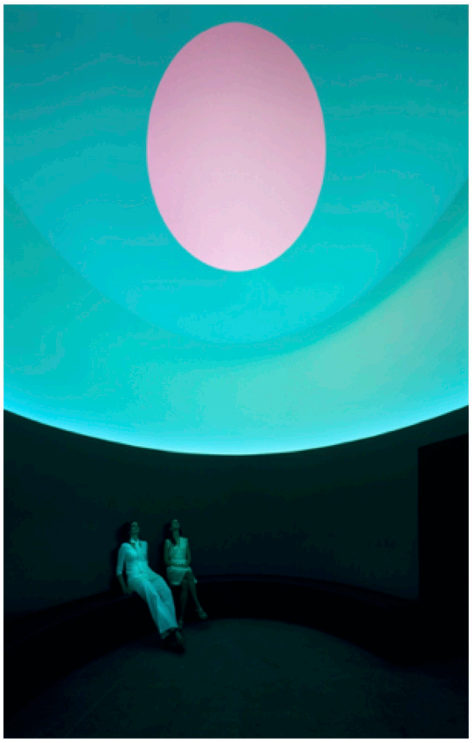




Photo 1 and 2: University of Texas at austin skyspace, 'the color inside' by James Turrell; Source: http://www.designboom.com/art/james-turrell-projects-the-color-inside-at-ut-austins-roof-01-06-2014/; Photo 3, 4 and 5: University of Texas at austin skyspace, 'the color inside' by James Turrell; Source: http://www.designboom.com/art/james-turrell-projects-the-color-inside-at-ut-austins-roof-01-06-2014/

PLATE 93: SKYSPACES

Turrell has created about 80 different 'Skyspaces', scattered around the globe. Each 'skyscape' is endowed with its own atmosphere, form, mood, and 'type of light' as well as the 'type of colour' projected and evoked. In all of his 'space' works / installations, no colour is ever applied to the space itself, but instead is 'projected' as 'coloured light'; this is because Turrell believes that if the colour is painted, the colour 'rides' the walls, however, if the walls are white, '' " (…) the light is allowed to enter the space riding on the light, and that colour has the possibility of inhabiting the space and holding that volume rather than being on the wall."'' (Schielke, 2013, p. 1). Within and Without' (2010), a 'skyspace' lighting installation at National Gallery of Australia, Canberra, uses concrete, basalt stupa, water, earth, and landscaping to provoke perceptual changes and complex 'experiences'. The roof opens to the sky (like most of his Skyscapes) in a circular oculus; the structure is composed of a simple domed interior space, with a bench all the way around; the pavement echoes the aperture at the top, with a moonstone, right at the centre of the room. The circular 'room' intensifies sounds, and the movements of the 'heavens' are reflected back to the ground. This space reaches its most intensive moment at dawn and dusk. Another example of a ''Skyspace'' is presented below: called 'The Colour Inside', it is located in the University of Texas at Austin.

… (c) Roder Crater: A perceptual and Metaphysical Experience

Roden Crater is an extinct volcanic cone located northeast of Flagstaff in the desert of Arizona, about 182 meters above the surrounding desert, in the San Francisco Volcanic Field (near Arizona's Painted Desert and the Grand Canyon) and about 1645 meters elevated from sea level. Roden Crater is about 400,000 year old, and is the site for James Turrell's on-going life 'masterpiece' and legacy. Turrell discovered the site in 1974, when searching for a natural landscape for a massive new project. A few years later construction begun, and the first series of subterranean tunnels, chambers and passageways were carved out. The site is still being transformed into a work of art, architecture and a naked eye observatory. The project has been undergoing for the past 30 years: organized by independent stages, and even today, only phase one has been completed. Because of this on-going construction, the site is still closed to public and no date for its 'opening' is predicted. In 1979 Turrell began creating a project that would occupy the centre of the Roden Crater: the project is composed of a series of interconnected complex spaces, subterranean chambers and passageways, oriented towards the celestial events. Each space enables a specific experience of the celestial bodies (sun, moon, and stars), linking the visitors/users to the celestial events, planets and the heavenly movements. It is also positioned to accept and amplify the light from the environment. For this, the light of the heavens is projected and captured into each space. It serves, in this way, as a massive naked-eye observatory.

Roden Crater, combines all the elements that define James Turrell's work: the 'light' spaces, colour, perception and places of visual perception that enhance the user experience by provoking a new 'perceptual' experience. When complete, the project will contain about twenty individual spaces (some with more than one viewing space), where each chamber has its own specific 'function' and its specific connection to the stars and the planets: one of them for example, will allow the visitor to see their own

shadow reflected by planet venus[537] or another that will be directed to watch the sunrise. Furthermore: « Turrell even plans a lunar bathing chamber. He will use solar and lunar tracking devices to create some of the works; others will be created from natural light and atmospheric conditions alone. » (Butterfield, 1993, p. 85). In this way, each space has it's own specific connection to one specific celestial event. Various strategies were employed to create a specific and unique experience within each space. To enhance the experience of the uniform blue sky, Turrell says he 'eliminates' the whiter gradations of colour near the horizon, and that is how he captures the ''incredible colour''[538]. Also, to intensify the 'experience' of light, Turrell uses 'specific isolation' and 'occluding' strategies, so for one specific space, is selected one event and one portion of the sky[539]. But that is only one of its 'architectural' and 'artistic' functions. Roden Crater celebrates celestial events; Turrell notes: '' (…) there are many events that happen each day, some happen once a year or twice a year, centred on the solstice. '' (LACMA, 2014). It is the making of events that make us who we are: these events 'form us', Turrell accentuates. Besides this connection to the cosmos, nature and universe, the complex, will house multiple works of Turrell's, each within its own space, forming an expansive museum like space, that is in itself an artistic and architectural piece. When complete, the project will define a naked-eye observatory, 'light observatories', a museum (showcasing examples of Turrell's works), a sanctuary (a site for pilgrimage and contemplation) and a monument. The 'Crater' is a never ending, open, Art Installation that changes and responds according to the celestial movements.

The complex of spaces, is 'inspired' by the 'ancient' observatories and the classical tradition of the temple and the pyramid that survive still today as monuments for humanity. Turrell explains the admiration for the Egyptian pyramids, the Angkor Wat and the Mayan pyramids and how they had a direct influence on the project [540]. His overall objective is to create the same kind of monument like complex for the contemporary world. Besides this inspiration in the classical timeless temples and the desire to create a modern day monument, Turrell also upholds that, his interest and purpose was to create a space that allowed for the echo of 'the music of the spheres'[541]. In order to do so, he draws attention to the importance of the 'geology' and location of the site: an open and expansive site[542] was crucial in order to allow for the right type of artistic, poetical and metaphysical 'experience' to emerge. By turning to the heavens, Turrell aims to create a new metaphysical sense of existence, and a new sense of time and place. The experience of the different chambers and passageways allows for a new understanding of human consciousness be brought up within each user, and with it, a new understanding of 'man's' place, as a human being and our place in the cosmos. In order to do so, Roden Crater allows for different emotions

[537] Reference to: '' There's one chamber in Roden Crater that will allow visitors to see their own shadow generated solely by light reflected off the planet Venus, and there are others that will fill up with light from the most distant stars.'' (Jones, 1999)

[538] Reference to: '' (…) With Roden Crater I have taken out the first fifteen degrees of height by aiming the tunnel sight lines above that level. At that point you see thirty degrees less than one hundred eighty degrees. That is how you get that incredible colour – by eliminating all of the white at the horizon."'' (Schielke, 2013, p. 1)

[539] Reference to: ''The work I do intensifies the experience of light by isolating it and occluding light from events not looked at. I have selected different portions of the sky and a limited number of events for each of the spaces.'' ("Roden Crater Webpage," 2010)

[540] Reference to: '' I admire Borobudur, Angkor Wat, Pagan, Machu Picchu, the Mayan pyramids, the Egyptian pyramids, Herodium, Old Sarum, Newgrange and the Maes Howe. These places and structures have certainly influenced my thinking. These thoughts will find concurrence in Roden Crater.'' ("Roden Crater Webpage," 2010)

[541] In his words: '' (…) I wanted to make spaces that engaged celestial events in light so that the spaces performed a "music of the spheres" in light.'' ("Roden Crater Webpage," 2010).

[542] Reference to: '' I wanted an area where you had a sense of standing on the planet. I wanted an area of exposed geology like the Grand Canyon or the Painted Desert, where you could feel geologic time.'' ("Roden Crater Webpage," 2010).

and 'perceptual changes' to emerge and to be triggered in each individual space and in each passage way; as such, each individual element and space gives way to its own deep connection with the world and with the self, and altogether, they act as a continuum: like lines that compose a poem. As a whole, the complex aims to create a new understanding of the place of human consciousness and existence, within the world, the cosmos and the universe. A unique and timeless experience, one that echoes the universe itself, is thus manifested on earth; one that aims at leaving a legacy, not only in the 'souls' of man, but also standing the tests of time and surviving in the land as a 'monument' of our time.

(7) Key principles, concepts and values

… Open Ended Spaces as Messages and Wisdom

Turrell in the LACMA documentary explains that the each space communicates specific ideas and messages: '' (…) the idea that we start to understand and feel things with the body that we intellectually already knew. '' (LACMA, 2014). However, Turrell underlines: '' (…) you have to discover and complete that yourself. '' (LACMA, 2014). It is the viewer and the user of the space that can feel, live, apprehend and understand those messages. The space, the art, offers itself for understanding and completion and it is up to the observer to complete it. It is an open artwork… that only the viewer can finalize. Within each space then, is one of the Turrell's central themes: messages and wisdom that offer themselves up for interpretation and understanding.

… The Perceptual Transformative Experience: Plato's Cave

For Turrell creating a perceptual experience is creating a perceptual and existential deep transformative experience for the viewer. The impact of the experience 'awakens' the viewer from his usual day-to-day condition, 'shaking' him into another reality. This shift of both perception and experience would have a deep impact in the being at other levels of existence: such as psychological, emotional and spiritual levels. In other words, shifts of physical perception 'jolt' the being awake and transform him at his own core. This idea of a transformative experience that awakens the being into a realm of 'truth' has a parallel with Plato's cave allegory.

… Contemplative Meditation, Isolation and The Immersive experience

The installations create visual illusions and symbolic references that immerse the viewer and create the illusion of openings in walls or walls into another space, time or another dimension. This is an immersive experience that engages all the senses and mental capacities of the viewer. This immersive atmosphere, simultaneously promotes a state of meditative contemplation: an immersive experience that allows for an observation of the self, and a contemplative understanding of the world. Through the experience, the user is transposed to this type of four dimensions, but instead of observing it (as in two dimensional type of painting) he is immersed in it and an active participator of the artwork. The colours systems, the pure space, the intangible essence, the immaterial type of presence, all contribute to the overall contemplative meditation of the space. He allows for a greater self-awareness through an environment that echoes silent contemplation, patience, and meditation.



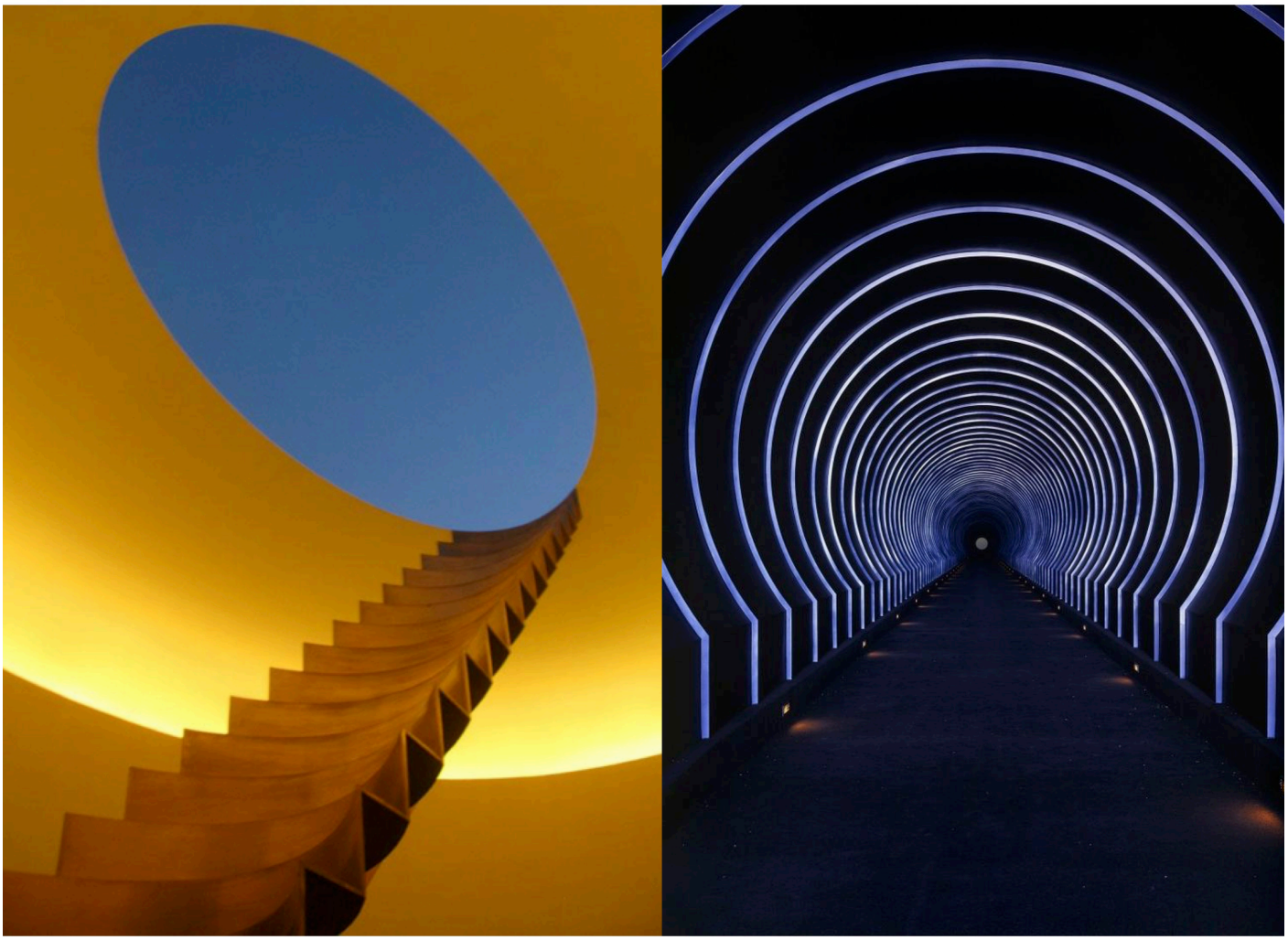


Photo 1 and 2: Roden Crater location and atmosphere; Source: http://web.guggenheim.org/exhibitions/turrell/; Source 2: http://rodencrater.com/spaces/east-portal/; Photo 3: James Turrell, Aqua De Luz, Tixcacaltuyub, Yucatan; Source: http://talbotspy.org/academy-art-museum-hosts-james-terrells-perspectives/; Photo 4: James Turrell Tunel at Roden Crater; Source: http://cargocollective.com/flatsurface/following/flatsurface/Roden-Crater-James-Turrell

PLATE 94: RODEN CRATER

This is achieved partly, also, because of his creation of solitude. Each space is like an envelope that shelters and encapsulates the 'being' from the outside world in a completely independent and different experience. Like a cocoon, the spaces embrace and protect, inviting for contemplation, but also creating another reality altogether.

… Poetical and Metaphysical Understanding

Underlying both the transformative experience and the contemplative meditation experience is a metaphysical and cosmological idea that it also has a poetical dimension attached to it. Turrell believes in a universal order, of the universe and of the world, and as such, all his creations aim to be a contribution to this universal order: either by creating a transformative experience that 'awakens' the viewer into 'reality', or by creating an artistic statement that manages to accentuate that cosmological and universal harmony and balance (as is the case for example, with the multiple spaces of Roden Crater). For Turrell the universe and life is not described by the day-to-day experiences, or by our 'ordinary' moments of life, but by all the extraordinary events that happen in the heavens: the celestial bodies that surround our existence. As such, as humans living in this 'broad' and 'infinite' universe, we should be more in-tuned to this metaphysical side of our existence. Art, then, for Turrell, embraces this and creates this special experiences that allow us to understand our space in the world, in ourselves and in this vast universe. Turrell, just like the ancient civilizations, believes that our lives are part of this something that is much broader, more timeless, more eternal and more ever lasting that our short life spans. And so, his art aspires to create a legacy in this vast time, rather than just creating one for today. It is a deep metaphysical and cosmological understand that sustains his creations. But accompanying this deep metaphysical understanding of the universe and of the self is also another dimension that is equally of value. Perhaps, this other dimension is simply a part of the metaphysical one: it is the poetical dimension. Turrell's work are filled and infused with this poetical understanding of life: it is not only that life can be poetical, but that to create poetical encounters, is to give the being part of his self: his own place in the universe. Through poetry, (gazing at stars, shades of blue, creating a 'space' in the midst of 'nowhere', specific angles and colours, specific accents and materials), Turrell tries to echo that transcendental harmony of the universe.

Ending Remarks:

Turrell's meaning arises from a metaphysical and poetical encounter. With his subject being perception itself, and the means by which he achieves it, being the study and isolation of light and colour, experiences occur that transform the human being at a deeper level of his existence. Shifting perceptions aims at creating a re-discovery of truths that are innate to our existence. In doing so, the 'art spaces' offer themselves up for completion. It's meaning, it's significance, and it's messages needs to be discovered in an active process by the user. This involves actual time, for the experiences unravel gradually, and part of the experience is precisely to understand the shifting of the world around us. Turrell creates spaces that allow us to re-discover, our own place in the world, and in the universe; in order to do so he uses a deep connection to perception itself (shifting out perceptions), astrological events, cosmological time (implying a forsaking of man made 'time'), poetical forms and metaphors, using only space, light and colour (in all its subtlest and most infinite gradations).

Summary Notes: James Turrell

1. *Although Turrell uses architectural space, for him, his work is more connected to painting than it is to architecture, because of the creation of what he calls the 'fourth dimension'.*

2. *Spaces are simplified to their minimum essence allowing the viewer to become fully immersed in the space and in the atmosphere, creating a realm of pure perceptual experience.*

3. *Light is spiritual and acts as a revelation on man and should be used as such.*

4. *Perception is used as a tool for the creation of an atmospheric experience and of meaning.*

5. *Colour, light and space are not seen as 'objects' or 'points of focus' but instead are perceived and understood as substances.*

6. *Space is the essence: changing the way we understand space, the way we perceive it and live in it.*

7. *The observer is not a passive onlooker, but instead, he creates the artwork by being involved in it, by being a part of it.*

8. *Art should create an experience of wordless thought.*

9. *Art should be fuelled by the deep desire to make us understand our own reality and our place in the universe.*

10. *The aim of art should be to create a new understanding of the place of human consciousness and existence, within the world, the cosmos and the universe. To generate a unique and timeless experience, one that echoes the universe itself.*

11. *Turrell 's meaning arises from a metaphysical and poetical encounter.*

12. *Conceptual Chart:*

Table 27 : James Turrell Conceptual Chart

CREATION			CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Chart 28: James Turrell Synthesis Chart

JAMES TURRELL

1. FIELD:
- *Sculpture, Painting and Architecture*

2. EDUCATION/BACKGROUND:
- *Bachelors Degree: Perceptual psychology and Mathematics*
- *Master's Degree: Art*

3. EVOLUTION:
- *Towards Three Dimensionality: Architectural Space is used to create the experience*
- *Gradual experimenting with larger space constructions and perceptual experiences*
- *An increase of colour use through light*

4. CONTEXT:
- *Light and Space Movement:*
- *Op Art Minimalism*
- *Geometric Abstraction*
- *Volume, Scale and Geometry*
- *Non traditional Materials*

5. INFLUENCES:
- *Perceptual Psychology*
- *Mathematics*
- *Optical Illusions*
- *Op Art*
- *Quaker Faith*
- *Use of Colour: De Stijl, Mondrian and Colour Field Painting.*
- *Classical architecture: Temples and Monuments.*

6. CREATIVE PROCESS:
- *Rational, Methodological and Scientific*
- *Architectural Process*
- *Method of a scientist: with careful measurement, precise configurations and adequate calculations of light intensities and colours.*
- *Rational decision making, using technology as an aid*
- *The Ganzfeld effect*

7. PERSONAL COSMOLOGY:
- *There is no object and no image*
- *Essences are understood as substances*
- *Generate visual illusions and symbolic references*
- *Art can make us understand our own reality: Plato's Cave*
- *Art is an echo of man's search for his place in the universe*
- *Experiences are Metaphysical encounters*
- *Art is not about a personal expression or a materialisation of an 'intangible' idea led by intuition or by the creative impulse.*
- *Art or architecture, is a manifestation of an experience*
- *The belief that light is spiritual and acts as a revelation*

8. EMOTIONS
- *Immersion*
- *Disorientation*
- *Awe*

9. OBJECTIVES:
- *Expand and Enhance Perception*
- *Create a pure immersive Perceptual Experience*
- *Change the way we understand space*
- *Create an existential metaphorical mirror*
- *Generate a collaboration from the viewer: active participator*
- *Experience of Wordless thought*
- *Create a fourth dimension (meaning)*
- *«"My art is about your seeing."» (Schielke, 2013, p. 1)*
- *Allow the 'viewers' to extend and enhance their own perceptual fields through those 'immersive' experiences*
- *To create this immersive and pure experience of light and colour*
- *Desire to create instead of an art that is an image, or that acts as an image, to create space and light itself.*
- *To make the observer become an active participant of the work.*
- *To create an experience of wordless thought*
- *The deep desire to make us understand our own reality and our place in the universe*

10. CHARACTERIZATION:
- *Use of high contrasts: light and darkness*
- *Use of intense colour as a perceptual tool*
- *Spaces are devoid of elements that detract from perceptual emphasis*
- *Art as Architecture: Spacial understandings and experiences*
- *Based on the exploration of: light, colour, form and space.*
- *Interested in colour in a specific way: colour 'created' by the participant*
- *Exploration of perception in different visual experiences, where light (in its multiple facets) is turned into an object of contemplation*
- *Interested in light and colour together, as created by nature and understood by science.*
- *Space is the essence of the work*

11. CONCEPTUAL FRAMEWORK:
- *Perception*
- *Light*
- *Space*
- *Colour*
- *Atmosphere*

12. VALUES
- *Metaphysical, Philosophical, Sustainable, Spiritual, Emotional and Poetical*

13. MEANING/SIGNIFICANCE
- *Create a unique and timeless experience*
- *Echo of human consciousness and the understanding of our place within the universe.*
- *Metaphysical and spiritual understanding.*

Bipgraphy Notes:

Biography: William Turner

Turner was a British 'Romantic' Landscape Painter; commonly known as "the painter of light", his work is regarded as a 'romantic' preface to Impressionism and also an example of the first type of 'Abstract Art'. He was a controversial figure in his days, but today he is known as '' (…) the artist who elevated landscape painting to an eminence rivalling history painting.'' ("J. M. W. Turner," 2014), and his vision and artistic quest is unquestionable. Turner although well known for his oil paintings, is also considered one of the greatest masters of British 'watercolour landscape painting'. Some of his famous works include Dido Building Carthage (1815), The Grand Canal, Venice (1835), Peace - Burial at Sea (1842) and Rain, Steam and Speed (1844). His paintings are held in multiple international collections and museums all over the world, for example at the Tate Gallery (London, UK), the Metropolitan Museum of Art (New York City, US) and the Dunedin Public Art Gallery (New Zealand). Joseph Mallord William Turner (or simply referred to as J.M.W. Turner) was baptized on 14 May 1775 (birth date unknown) and died on 19 December 1851. Joseph Mallord William Turner was born circa April 23, 1775, in Covent Garden, London, England. He was the eldest of three children (had two younger sisters). His father was a wig maker and barber, and his mother a housewife who, early in Turner's life, had signs of emotional instability and was later admitted to an asylum, where she died in 1804. Her instability was exacerbated by the fatal illness of Turner's younger sister, who died in 1786. During this time, in 1785 Turner was sent to stay with an uncle in Brentford, where he went to school for the first time in Margate. By the late 1780's Turner went back to London and begun working with various architects or architectural topographers. Turner throughout his life became very close to his father until his father's death in 1829. At a very young age, J.M.W. Turner (1775 - 1851), around 12 years old, started exhibiting and selling his drawings in his father's shop window in London, and entered the Royal Academy of Art school in 1789, when he was 14 years old, and since then, he exhibited there every year for the rest of his life. At the same age, he begun working for the architectural draughtsman Thomas Malton, whom he later described as his 'real master'. In 1793, the Royal Society of Arts awarded the then 17-year-old Turner, the "Great Silver Pallet" for landscape drawing. Turner exhibited his first oil painting at the academy in 1796, Fishermen at Sea; in 1802, Turner studied in the Louvre and travelled through various countries in Europe (France, Switzerland and Venice) where he spent his time drawing on his notebooks and gathering 'inspiration', but all the while he was based in London. He also found great inspiration in Margate, UK. In about 1797 Turner was employed to make reproductions of the unfinished work of the work of the landscapist and fellow English romantic painter, John Robert Cozens (an artist that deeply influenced him). He was a highly sought-after artist, and he lived well and abundantly from his commissions. In 1807, Turner accepted a position as professor of perspective at the Royal Academy, where he lectured until 1828, however, throughout his whole life, he remained active and participant at the Academy, later serving in governing roles and a brief tenure as acting president in 1845. Turner opened a gallery in 1804 in a building attached to his house in West London because he wanted to have more control on the way his paintings were shown. The gallery as very successful and he expanded it in 1822. As he grew older he grew more and more isolated, and didn't like selling his paintings. His last exhibition at the Royal Academy was in 1850. It is said that he died in the house of his mistress Sophia Caroline Booth in Cheyne Walk, Chelsea, on 19th of December 1851 and that he uttered as his last words 'The sun is God'. At his request, all of his collection of works were donated to the British Nation, over 300 oil paintings and more than 20,000 works on paper and he was buried in St Paul's Cathedral.

Biography: Edward Hopper

Edward Hopper (1882 – 1967), was an American painter, that worked primarily in oils (he was also a water-colourist and a printmaker) and is known for his portrayal of the American culture. Hopper (1882 – 1967) was born in 1881, into a typical middle class American Family of merchants, in Upper Nyack, a shipbuilding town located in the north of New York City. Hopper's parents encouraged the arts from early childhood, and by his teenage years, Hopper was painting and drawing with multiple techniques (pen-and-ink, charcoal, watercolor, and oil). After high school he had intentions of further pursuing fine arts, however, wanting him to have a secure financial future, his parents insisted that he should follow commercial art instead. Hopper went on to study in the New York School of Art and Design, for six years, where he developed a new idea of art that deeply influenced him: one that was connected to capturing the emotion of the artist. Hopper worked as an illustrator in an advertising agency for some years, a job he deeply hated. He found comfort and satisfaction by escaping in journeys and travels: he travelled three times to Europe, mainly to Paris, to study and understand the European art scene. While he was there, he spent much of his time drawing streets and café scenes. After his last trip to Europe, upon his return to the United States, Hopper entered what is known as his 'struggle years': he rented a studio in New York City, where he struggled to find his own style of art. He found it hard to find subjects to depict and also found himself in a kind of 'depressed emotional state', overall helplessness and unhappiness. Hopper sold his first painting,

Sailing (1911), in that same year (he was 31 years old at the time), but selling his work was hard and not recurrent. In 1912, in one of his travels, he painted the first outdoor paintings that changed his outlook on his subjects. In 1913, when he was thirty-one, he moved to Greenwich Village in New York City, where he remained until his death. In the 20's, he had already defined his own artistic style, which he kept developing and exploring. In 1924 Hopper married Josephine Nivison, also an artist. Josephine helped Hopper in his art connections and exhibitions and was his life long partner. In 1931 his paintings begun to sell widely and were bought by the Metropolitan Museum of Art and the Whitney Museum of Art (that later became the repository of Hopper's estate). Hopper continued to find inspiration in trips that he took constantly with his wife: either to Cape Cod (where they owned a summer house), or driving trips across the country. Author Tom Slater (2002) about Hopper's psychological nature claims: '' Hopper was also a man of great intellect, somewhat of a recluse who spent a lifetime reading poetry, literature, drama and philosophy, absorbing what he learned from books and observed from life, and applying it to canvas.'' (Slater, 2002, p. 140). Hopper continued painting for all of his life, and died in his studio in 1967.

Biography: Joseph Albers

Josef Albers (1888-1976) was born in Bottrop, Germany in 1888, and raised in a family of craftsmen. He was first a student and then a teacher at the Bauhaus during the 1920s (stayed at the Bauhaus for 15 years, where he taught design and drawing). It was his making of stained glass that led Walter Gropius in 1923 to teach in the department of design, the principles of 'handicrafts'. When the school moved to Dessau, in 1925, Albers was promoted to Professor; in the same year, he married Anni Albers, a student. His work at the school expanded and he worked designing furniture, typography and working with glass (crafts master, where Paul Klee was the master of form). He left Germany in 1933, when the Bauhaus closed during the rise of Hitler. He then moved to the States with his wife Annie, where he would head the art department of Black Mountain College in North Carolina, (he remained the head of the painting program until 1949). His students there include, Cy Twombly, Susan Weil and Robert Rauschenberg. His travels took him to Mexico, for the first time in 1935, and further returned regularly in the next decades staying for months in a row. The Alberses had a solid and profound relationship: they shared values, ideals and artistic visions[543]. They remained at Black Mountain until 1949, where he also taught both design and drawing, as well as painting and colour. In 1950, he was hired by Yale University to head their Department of Design, and the couple moved to Connecticut. Some of his students there include, Eva Hesse, Robert Mangold, Chuck Close, Richard Serra and others. He remained there until he retired from teaching in 1958. In 1963, Albers published his *Interaction of Colours*. In 1971 Albers was given a solo retrospective at The Metropolitan Museum of Art in New York, becoming the first living artist to do so. In 1976, in Connecticut, Albers died; at the time he was still working on both the 'Homage to the Squares' and the 'Structural Constellations' series. His theories of Art and Colour deeply influenced the arts movements that followed: geometric Abstraction, Colour Field Painting, Pop Art and others.

Biography: Mark Rothko

Born as Markus Yakovlevich Rotkovich (1903 –1970), in Russia (in a region that is today Latvia) in a Jewish family, in the midst of the environment of fear and neglect the fell upon the Jews in Russia at the time. His family was modest but educated; his father a pharmacist and an intellectual, raised his son to understand politics, knowledge and religion. The family moved to the United States in the attempts of giving their children a better life, far away from army enlistment and the hardships or Russia, when Markus was ten years old. There, Markus completed his high school, qualifying with distinction and honors, when he was seventeen, in 1921, after which, he received a scholarship to attend Yale university, which he dropped out of after the second year, not finding in Yale the environment he desired. Markus started searching for his own way of life, away from stereotypes and conditions from his early twenties. In 1923, while working, he discovered art lessons which greatly appealed to him, and led him to enroll at the New York School of Design, where he was acquainted with the American Art School that was growing at the time. In January 1924, Rothko enrolled at the Art Students League and began taking anatomy courses with George Bridgman. His family didn't understand his devotion to art and to a life of poverty and struggle. He begun the life of an artist, and was very interested by Surrealism and myth, paintings in a figurative way. He interrupted his studies to visit his family in Portland, where he attended drama and acting classes, which led to him experiencing painting stage sets in Portland. Early in 1925, Rothko returned to New York and took one class from Arshile Gorky. Rothko studied with Max Weber during the fall semester of 1925 and again in the spring of 1926, that conveyed to him the modernists ideals. In 1929 Rothko started teaching at the Center Academy of the Brooklyn Jewish Center, teaching children. In July 1932, Rothko met Edith Sachar, and they married in November of that year. In 1933, Rothko's art was shown in solo exhibitions at the

[543] In the Albers Foundation website, on their relationship, it claims: they ''(…) fostered one another's creativity and shared their profound conviction that art was central to human existence and that morality and creativity were aligned.'' ("Albers Foundation," 2015).

Museum of Art in Portland and the Contemporary Arts Gallery in New York; during that time Rothko also joined and exhibited with an artists group entitled 'The Ten'. In the 1940s, Rothko's style began to change. On June 13, 1943, Rothko and Sachar divorced, contributing to Rothko's depressive mood. He then returned to Portland, travelled to Berkeley, where he met the artist Clifford Sill that would become a close friend. In the autumn of 1943, Rothko returned to New York, where he met the collector Peggy Guggenheim, resulting in a solo show at Guggenheim's gallery, in late 1945. He met Mary Ellen Beistle, in 1944, and married her in the spring of 1945, his second wife. During these mid 40's years, Rothko had arrived at his mature style. In 1949 Rothko exhibited the series of 'multiform' works at the Betty Parsons Gallery that were well received by critics and public. Rothko and his wife visited Europe (England, France and Italy) for five months in early 1950, where she became pregnant, and where they visited the various museums, and Rothko saw the work of artists he admired such as the frescoes of Fra Angelico in Florence. In 1954, he exhibited in a solo show at the Art Institute of Chicago, where he begun to have prolific success. In 1958, Rothko was commissioned for a set of murals for the new luxury restaurant for the Seagram Building (designed by architects Mies Van der Rohe and Philip Johnson). After completing a series of 40 paintings for the restaurant and visiting the location, he decided that it was inadequate for their display and returned the advance money to the owners, refusing to hand over the works. He kept the paintings in storage until 1968, when he donated them to museums; today they hang in the London's Tate Modern, Japan's Kawamura Memorial Museum and the National Gallery of Art in Washington. By that time, Rothko's health was not at its best: a result of drinking and of an aneurysm of the aorta, which led him to painting smaller works on paper, to avoid physical strains. Rothko was 67 years old, and in his studio when he committed suicide, with sharp razors to his wrists. Today he is recognized as '' (…) as one of the most influential and important artists of the twentieth century.'' (Rothko and López-Remiro, 2006, p. ix)[544]

Biography: Anselm Kiefer

Many art historians and critiques consider Anselm Kiefer as "our greatest living artist"[545]. Anselm Kiefer was born on March 8 in 1945, in Donaueschingen, Baden-Württemburg, Germany, a few months before the end of the war. Raised near the region of the Black Forest, in the east bank of the Rhine, Kiefer was raised as a catholic, in a small village in Germany; the town was a regular target for bombings during the war. Kiefer begun studying law, because he believed he didn't need art school; law was organized and he was interested in the constitution, however he abandoned his studies in 1966 to study in an art academy in Dusseldorf, where he studied under Peter Dreher (a realist and figurative artist). Kiefer went on to study with Joseph Beuys during the late 60's and 70s, an artist that deeply influenced his views on art. Kiefer's early work was focused exclusively on German History; covered with references to German heroes, and was deeply criticized by art critics and accused of being a Fascist. One of his first art series, Occupations, with a series of photographs about controversial political actions, was presented at his first solo exhibition. In 1971 Kiefer produced his first large-scale landscape paintings. Besides paintings and sculptures, Kiefer also creates watercolours, woodcuts, and works with photographs. It was in the 1980's that his first success occurred; with that money he bought a factory in Germany and used it for his studio; this is when he begun expanding into sculpture and installation, and started defining his own 'views' and finding his own artistic expression. Kiefer then moved to France, and has been living there ever since 1991. Since 2008, he has worked primarily in Paris and also worked for a period of time in Alcácer do Sal, Portugal. He has had numerous solo exhibitions in various prestigious art galleries and museums: at MoMA, New York (1987); Neue Nationalgalerie, Berlin (1991); The Metropolitan Museum, New York (1998); Royal Academy, London (2001); Fort Worth Museum of Art (2005); the San Francisco Museum of Modern Art (2006); Guggenheim Museum, Bilbao; the Grand Palais, Paris and the Royal Academy of Arts, London (2007); Louisiana Museum of Modern Art, Denmark (2010) and the Rijksmuseum, Amsterdam (2011). In 2007 Kiefer became the first artist to be commissioned to install a permanent work at the Louvre. In 2014 Kiefer was given the first retrospective exhibition in the Royal Academy of London.

Biography: Donald Judd

Donald Judd (1928-1994), is generally considered one of the most important 20th century artists; he is an American artist, known as the leading exponent of minimalism (a term he discouraged). Mostly a sculptural artist, Judd begun as a painter and later also expanded on to architecture and design. Donald Judd was born in Missouri in 1928. From 1946 to 1947 he served in the army as an engineer and in 1948 began his studies in philosophy (later transferring to Columbia University). After attaining his degree in philosophy, in 1953, he began his masters in art theory (with Rudolf Wittkower) while simultaneously studying art in night classes in Art School in New York. His first art exhibition, a collection of abstract expressionist painting,

[544] Cited: Miguel Lopez-Remiro, in the preface to the book *Writings on Art*, by Mark Rothko (2006).
[545] Reference to: '' (...) described by the curator of a major retrospective of his work at the Royal Academy in London, opening this month, as "our greatest living artist".'' (Pritchard, 2014)

was in 1957 in New York City in the Panoramas Gallery. Between 1959 and 1965, he supported himself writing art reviews for leading art magazines at the time, while developing his art that was changing from painting to sculpture. In the 60s Judd had several exhibitions in America, Europe and Japan and received numerous international awards. Judd was married to the dancer Julie Finch in 1964, with whom he had two children; they were later divorced. In 1968, Judd bought a five-story building in New York, where he started to house his works, use it as an art studio and his own residence. In the early seventies Judd started making annual trips to Baja California, where he was influenced by the strong attachment to the land and the clean and empty desert. He moved to Marfa, Texas, in 1972, where he stayed and worked until he died in 1994. There he found the quiet life of the countryside as opposition to the hectic life of NY city. From a small house he later purchased numerous buildings and a 60,000 acre (243 km²) currently maintained by the Judd foundation. When he died in 1994, Manhattan, he was working on designs for a fountain commissioned by the city of Winterthur. Judd's work is currently represented by numerous art collections across the globe, such as the Tate Modern and the Tate Britain in London and the Museum of Contemporary Art in Chicago.

Biography: James Turrell

James Turrell was born in 1943 in Los Angeles, to traditionalist parents and education (his father who was an aeronautical engineer and a school administrator and his mother trained as a medical doctor), with a Quaker religious upbringing. Turrell attended Pomona College, studying mostly perceptual psychology and mathematics, from which he got his BA (other subjects that he studied that later influenced his views were astrology and geology). He then went on to study art, at Claremont Graduate School, and got a masters degree in Art in 1973. Turrell began experimenting with light in his Santa Monica studio, the Mendota Hotel, in 1966 and his first exhibition was at the Pasadena Art Museum, the following year, in 1967, established him as a pioneer in the Light and Space movement. The first Skyscape was created in 1974, for Count Giuseppe Panza di Biumo (for his home in Varese, Italy), and since then he has created about 80 of them, spread out all over the world. Since 1972, he has been transforming Roden Crater, a natural cinder volcano situated in Arizona's Painted Desert, into a large-scale artwork and has been acknowledged that will be his architectural and artistic masterpiece once it is concluded. Since 1999, he has been awarded multiple honorary doctorates of art by various universities such as the Haverford College, in Haverford, Pennsylvania, (2004) and by the Royal Academy of Art, in London, England (2002) to name a couple. Turrell has also been granted a series of awards in both art and architecture. Awards in architecture include: Grand Medailles d'Argent, Fondation Academie d'Architecture, Paris, France, 2000 and the Jefferson Medal in Architecture, University of Virginia, Charlottesville, Virginia, 2002. Awards in art include the National Endowments for the Arts, 1968, the Guggenheim Fellowship in 1974, or the National Endowments for the Arts, Matching Grant in 1975. His work is currently represented in numerous public collections including the Tate Modern, London; Los Angeles County Museum of Art; the Solomon R. Guggenheim Museum, New York and the Israel Museum Jerusalem and has been presented at countless museums all over the world such as Stedelijk Museum, Amsterdam (1976); the Whitney Museum of American Art,New York (1980); the Israel Museum, Jerusalem (1982); the Museum of Contemporary Art, Los Angeles (1984).

Summary Chapter 7:

- ***William Turner's (1789 – 1862)*** *landscapes create (through the use of 'abstraction' qualities, colour, form, content and values) an emotional understanding of the artistic creation that uses nature as inspiration (based on universal ideals) but also, in association with the imagination and the intuition, gives us a broader and more universal ideal, that allows man to understand his own innate conditions.*

- ***Edward Hopper (1882 – 1967)*** *determined emotionally charged atmospheres (through his use of composition and colour), that engages the viewer in understanding sides of himself that were otherwise neglected, allowing him to experience unique emotions such as those of melancholy and solitude.*

- ***Joseph Albers (1888 -1978)*** *specified a specific rational use of colour and geometry as a search for archetypal connections through art, defining an artistic understanding that derived from intuition and rational observation; artistic compositions, through geometry and colour, could communicate universal ideals.*

- ***Mark Rothko (1903 – 1970)*** *shows us a more intuitive and emotional understanding of artistic creation; for him, art should be rooted in the desire to create and provoke emotive and spiritual forces. Art should also be a form of tragedy that would cater for the hearts of people, by allowing them to feel deep emotions. Art expresses a 'metaphysical meaning', in a synthesis that is both physical and spiritual, and its subject should always be the tragic and the timeless.*

- ***Anselm Kiefer's (1945 -)*** *composed a complex system of artistic significance, that merges multiple fields and influences, in order to define a more intense, universal, cosmological, metaphysical and timeless type of communication between the artistic object and the self. Through mythology, art becomes like religion, expanding human understanding and allowing a connection between all the elements to become whole. Art, then, is an exploration of universal questions, searching for identity and a sense of self in the world and in the universe.*

- ***With Donald Judd (1928 – 1994),*** *it was characterized a new type of artistic object, that merges multiple fields, and defines the object for the object's sake: the significance of art, then, is in the incorporation of principles within the artistic object, which becomes valid in itself. Through the understanding of the object in itself, qualities and meanings can be communicated: using pure form, geometry, specific materials, vibrant colours, repetitions, and other object transformations. The phenomena of art is related to complexity and sensation and art should search for the universal language that is true and meaningful.*

- ***James Turrell (1943 -)*** *it was understood that meaning and significance arises in art and architecture from a metaphysical and poetical type encounter. Through blending artistic realms through colour, space and light, these metaphysical and poetical encounters can emerge in a deeper and more significant way, using the forms of light and space as primordial essences that define and engage the human being in deeper occurrences. Art should create an experience of wordless thought.*

BIBLIOGRAPHIC REFERENCES: Chapter 7

Albers Foundation (2015). *Josef Albers* [online]. Available at: http://albersfoundation.org/artists/biographies/ [Accessed 12 Nov. 2015]

Albers, J., Weber, N.F. (2006). *Interaction of Color: Revised and Expanded Edition*. New Haven, Connecticut: Yale University Press.

Alteveer, I. (2000). Anselm Kiefer (born 1945), in: *Heilbrunn Timeline of Art History*. New York: The Metropolitan Museum of Art. Available at: http://www.metmuseum.org/toah/hd/kief/hd_kief.htm [Accessed 26 Apr. 2015]

Araujo, P.R.M. (2012). Edward Hopper and Heidegger: The Unveiling of Solitude, in: *KARPA, Journal of Theatricalities and Visual Culture,* 5.1-5.2, pp. 1–6. Available at: http://web.calstatela.edu/misc/karpa/Karpa5.1/Site%20Folder/Resources/araujo.pdf [Accessed 29 Jan. 2016]

Bacigalupi, D. (2013). Donald Judd's Specific Objects and the Art of Installation, in: *The Huffington Post* [online]. Available at: http://www.huffingtonpost.com/don-bacigalupi/donald-judds-specific-obj_b_3451022.html [Accessed 24 Jun. 2015]

Baker, E.E. (2004). Joseph Mallord William Turner (1775–1851), in: *Heilbrunn Timeline of Art History, The Metropolitan Museum of Art* [online]. Available at: http://www.metmuseum.org/toah/hd/roma/hd_roma.htm [Accessed 19 Nov. 2015]

Battcock, G. (1995). *Minimal Art: A Critical Anthology*. California: University of California Press.

Birren, F. (1986). *Color Perception in Ar*t. West Chester, Pa.: Schiffer Publishing,

Bockemuhl, M. (1994). *J.M.W. Turner, 1775-1851: The World of Light and Colour.* London and New York: Taschen.

Breslin, J.E.B. (2012). *Mark Rothko: A Biography*. Chicago, United States of America: University of Chicago Press.

Brown, D.B. (2012). Draughtsman and Watercolourist, in: *Tate, United Kingdom* [online]. Available at: http://www.tate.org.uk/art/research-publications/jmw-turner/essays-g2010028 [Accessed 19 Nov. 2015]

Butterfield, J. (1993). *The Art of Light + Space.* New York: Abbeville modern art movements.

Clericuzio, P. (2011). *Edward Hopper's Architecture, Antimodernism, and Nostalgia* [online]. Available at: http://www.academia.edu/2601958/Edward_Hopper_s_Architecture_Antimodernism_and_Nostalgia [Accessed 13 Apr. 2015]

Cotter, H. (2012). "Josef Albers in America: Painting on Paper," at the Morgan, in: *The New York Times* [online]. Available at: http://www.nytimes.com/2012/07/27/arts/design/josef-albers-in-america-painting-on-paper-at-the-morgan.html [Accessed 26 Jul. 2013]

Davis, J. (2013). The White Border on Rothko's Untitled (Black on Gray), in: *Guggenheim Blogs* [online]. Available at: http://blogs.guggenheim.org/checklist/inside-the-collection-untitled-black-on-gray/ [Accessed 7 Oct. 2015]

Dorment, R. (2008). Tate Modern's Rothko exhibition asks us to ditch the mumbo jumbo, in: *The Telegraph* [online]. Available at: http://www.telegraph.co.uk/culture/art/3561169/Tate-Moderns-Rothko-exhibition-asks-us-to-ditch-the-mumbo-jumbo.html [Accessed 19 Dec. 2015]

Gage, J. (1999a). *Color and Meaning: Art, Science, and Symbolism*. California: University of California Press.

Gage, J. (1999b). *Color and Culture: Practice and Meaning from Antiquity to Abstraction*. Berkeley: University of California Press.

Galitz, K.C. (2000). Romanticism: a Thematic Essay, in: *Heilbrunn Timeline of Art History, The Metropolitan Museum of Art* [online]. Available at: http://www.metmuseum.org/toah/hd/roma/hd_roma.htm [Accessed 19 Nov. 2015]

Ganzfeld effect (2015). *Wikipedia, the free encyclopedia* [online]. Available at: https://en.wikipedia.org/w/index.php?title=Ganzfeld_effect&oldid=679686891 [Accessed 25 Oct. 2015]

Garland, P.S., 1983. Josef Albers: his paintings, their materials, technique and treatment, in: *Journal of American Institute for Conservation* 22, pp. 62 – 67. Available at: http://cool.conservation-us.org/coolaic/jaic/articles/jaic22-02-002.html [Accessed 25 May 2015]

Goodrich, L. (1964). *Edward Hopper.* New York: Whitney Museum of American Art.

Hylton, W.S. (2013). How James Turrell Knocked the Art World Off Its Feet, in: *The New York Times* [online]. Available at: http://www.nytimes.com/2013/06/16/magazine/how-james-turrell-knocked-the-art-world-off-its-feet.html [Accessed 11 May 2014]

Imagine Anselm Kiefer Remembering the Future (2014), [documentary]. Available at: https://www.youtube.com/watch?v=CK9N2NbSehE&feature=youtube_gdata_player [Accessed 16 Apr. 2015]

Imms, M. (2013). Colour Studies, in: *Tate* [online]. Available at: http://www.tate.org.uk/art/research-publications/jmw-turner/colour-studies-relating-to-picturesque-views-in-england-and-wales-r1144233#synopsis [Accessed 19 Oct. 2015]

J. M. W. Turner (2014). *Wikipedia, the free encyclopedia* [online]. Available at: http://en.wikipedia.org/w/index.php?title=J._M._W._Turner&oldid=607239468 [Accessed 11 May 2014]

Jones, J. (1999). Immortal longings, in: *The Guardian* [online]. Available at: http://www.theguardian.com/culture/1999/jul/08/artsfeatures2 [Accessed 11 May 2015]

Judd, D. (1994). *Some Aspects of Color in General and Red and Black in Particular*. Available at: http://newcomplexity.com/post/3035630628/donald-judd [Accessed 25 May 2015]

Judd, D. (1965). *Specific Objects*. Originally published in *Arts Yearbook*, 8. Available at: http://atc.berkeley.edu/201/readings/judd-so.pdf [Accessed 3 Jun. 2015]

Kohn, A., 2007. Judd on Phenomena, in: *Rutgers Art Review, The journal of Graduate Research in Art History,* 25 (1). Available at: https://www.google.pt/url?sa=t&rct=j&q=&esrc=s&source=web&cd=11&cad=rja&uact=8&ved=0CB4QFjAAOAo&url=http%3A%2F%2Fwww.massart.edu%2Fdocuments%2Fwww.massart.edu%2Ffaculty_bios%2Fjuddonphenomena.pdf&ei=QnKKVfr3CabmywPbl57gBQ&usg=AFQjCNGf5zuo82ZDGhcQCfEfhzSUNlQc4Q&sig2=3IX45_JAOlVhs-ElWIzXVQ&bvm=bv.96339352,d.bGg [Accessed 24 Jun. 2015]

Kueber, P. (2013). *Josef Albers Homage to the Square studies - at The Morgan through Oct. 14. Retro Renovation*. Available at: http://retrorenovation.com/2012/09/19/josef-albers-homage-to-the-square-studies-at-the-morgan-through-oct-14/ [Accessed 20 Jan. 2016]

LACMA (2014). *James Turrell's Roden Crater* [documentary]. Texas, United States of America. Available at: https://vimeo.com/67926427 [Accessed 24 Jun. 2015]

Levin, G. (1998). *Edward Hopper: An Intimate Biography*. California: University of California Press.

Loius, S. (2011). *The window and the void' in the work of Edward Hopper.* Dissertation submitted for the Degree of B.A. Honours in History of Art. University of Bristol, Department of Historical Studies, Bristol.

Mark Rothko Biography (2015). *Mark Rothko - paintings, prints, biography and quotes of Mark Rothko* [website] http://www.markrothko.org/biography/ [Accessed 21 Jan. 2016]

Marlow, T. (2014). *Anselm Kiefer in Conversation with Tim Marlow* [interview]. Available at: https://www.youtube.com/watch?v=vlm5tgistqA [Accessed 16 Apr. 2015]

Marlow, T. (2014). *Kiefer and Chipperfield talk space and creativity* [online video recording]. Royal Academy of Arts, London. Available at: http://www.royalacademy.org.uk/article/kiefer-and-chipperfield-talk-space [Accessed 18 Aug. 2016].

Messina, J. (2008). Principle and Practice: The Ethic and Efficacy of Donald Judd's Interventions at La Mansana de Chinati, in: *Association of Collegiate Schools of Architecture Conference Proceedings. Presented at the Association of Collegiate Schools of Architecture Conference,* pp. 533 – 539.

Paul, S., 2004. Abstract Expressionism, in: *The Met's Heilbrunn Timeline of Art History, The Metropolitan Museum of Art* [online]. Available at: http://sdwstoah00/toahadmin/essays/abstract-expressionism/ [Accessed 21 Jan. 2016]

Phillips, G., Ashton, D., Crow, T. (2005). *Seeing Rothko.* New York: Getty Publications.

Pritchard, C. (2014). Anselm Kiefer, Royal Academy, preview: Is he our greatest living artist?, in: *The Independent* [online]. Available at: http://www.independent.co.uk/arts-entertainment/art/reviews/anselm-kiefer-royal-academy-preview-is-he-our-greatest-living-artist-9729789.html [Accessed 18 Apr. 2015]

Prodger, M. (2014). Inside Anselm Kiefer's astonishing 200-acre art studio, in: *the Guardian* [online]. Available at: http://www.theguardian.com/artanddesign/2014/sep/12/anselm-kiefer-royal-academy-retrospective-german-painter-sculptor [Accessed 18 Apr. 2015]

Rampley, M. (2000). Anselm Kiefer and the Ambivalence of Modernism, in: *Oxford Art Journal,* 23, pp. 79–96.

Roden Crater Webpage (2010). *Roden Crater description* [online]. Available at: http://rodencrater.com/about [Accessed 11 May 2014]

Rosenfield, K. (2013). James Turrell Transforms the Guggenheim, in: *ArchDaily* [online]. Available at: http://www.archdaily.com/394484/james-turrell-transforms-the-guggenheim/ [Accessed 11 May 2014]

Rothko, M., López-Remiro, M. (2006). *Writings on Art*. United States of America: Yale University Press.

Rothko, M., Waldman, D.S. (1978). *Mark Rothko, 1903-1970 : A Retrospective.* New York: H. N. Abrams.

Schielke, T. (2013). Light Matters: Seeing the Light with James Turrell, in: *ArchDaily* [online]. Available at: http://www.archdaily.com/380911/light-matters-seeing-the-light-with-james-turrell/ [Accessed 11 May. 2015]

Shanes, E. (2004). *Turner.* London: Parkstone Press.

Slater, T. (2002). Fear of the city 1882–1967: Edward Hopper and the discourse of anti-urbanism, in: *Social & Cultural Geography*. United Kingdom: Routledge, Taylor & Francis Group, pp. 135–154. DOI:10.1080/14649360220133916

Turrell, J. (2014). *James Turrell* [online]. Available at: http://jamesturrell.com/about/introduction/ [Accessed 25 Oct. 2015]

Von Goethe, J.W. (1840). *Theory of colours*. Cambridge, Massachusetts: The MIT Press.

Wolf, J. (2015). Color Field Painting Movement, Artists and Major Works, in: *The Art Story* [online]. Available at: http://www.theartstory.org/movement-color-field-painting.htm [Accessed 21 Jan. 2016]

Wood, G., 2004. Edward Hopper's wife and muse, in: *the Guardian* [online]. Available at: http://www.theguardian.com/artanddesign/2004/apr/25/art1 [Accessed 11 Apr. 2015]

Wullschlager, J. (2014). Interview with Anselm Kiefer, ahead of his Royal Academy show, in: *The Financial Times* [online]. Available at: http://www.theartstory.org/movement-color-field-painting.htm [Accessed 26 Apr. 2015]

CHAPTER 8

COMPARATIVE ANALYSIS

Introduction:

In the present chapter a comparative analysis of the various case studies is undertaken, in order to arrive at an understanding of the main driving principles and values that define a common ground between them. Firstly, an overview of chronology, geographies and influences (8.1.) is defined, secondly a comparative analysis of the creation principles, conceptual frameworks, emotions, and values (that are present in each case study, with the aim of defining an overall definition of both value in it's general sense, and of the specific type of values used) is composed, (8.2.) and lastly an analysis of the theoretical ideas and common principles. For this analysis multiple methodologies were used such as: the Social Network Analysis, graphics, and coding, which led to the definition of the values and the principles.

8.1. TIME, PLACE AND MUTUAL INFLUENCES

At a first instance, and prior to any other analysis, it is important to understand the case studies in a chronological and geographical way in order to completely contextualize them.

How do they relate chronologically?

(a) Chronological comparison/understanding…

Firstly, it is necessary to understand the case studies in a chronological map where an overall comparison/understanding can be established. (See Image presented below). In the first place, of relevance, is the fact that there is one Architectural case study that belongs to the Renaissance, Andrea Palladio (1508 – 1580) and another Artistic case study that belongs to the late 1700's, or the XVIII century which is William Turner's (1775 – 1851). Apart from these two more classical examples, all the other case studies belong to the 'modern' era, beginning in the late 1800's with Frank Lloyd Wright (1867-1959) and Le Corbusier (1887 -1965) in architecture and with Edward Hopper (1882 – 1967) and Josef Albers (1888 - 1976) in Plastic Arts. These more contemporary case studies, continue until the current date, with for example, Peter Zumthor (1943 -) in architecture and Anselm Kiefer (1945 -) in art. Therefore, three main groups can be created: (1) the classical examples defined by Andrea Palladio (1508 – 1580) and William Turner (1775 – 1851), (2) the modern examples defined by Frank Lloyd Wright (1867-1959) and Le Corbusier (1887 -1965), Luis Barragan (1902-1988), Edward Hopper (1882 – 1967), Josef Albers (1888 - 1976) and Mark Rothko (1903-1970) and thirdly, the contemporary examples presented by Donald Judd (1928-1994), Tadao Ando (1941 -), Peter Zumthor (1943 -), John Pawson (1949 -), James Turrell (1943 -) and Anselm Kiefer (1945 -). This division validates the overall thesis in terms of presenting chronological diversity, both in architecture and in plastic artists. The diversity allows, for a cross-chronological analysis, which, as the research shows, have the same principles and overall search for meaning at their core.

(b) Geographical comparison/understanding…

Secondly, it is important to understand the case studies in a geographical map where an overall comparison/understanding can be established in regards to place of origin and overall geographical influences. Three main areas from which the case studies originate in, these are: Europe (six case studies), North America (seven case studies), and one of the case studies from the Orient. The European case studies are: from Italy (Venetto), Andrea Palladio (1508 – 1580), from England, London, William Turner (1775 – 1851) and John Pawson (1949 -), from France, Paris and Switzerland, Le Corbusier (1887 -1965), from Switzerland Peter Zumthor (1943 -), Josef Albers (1888 - 1976) and Anselm Kiefer (1945 -) from Germany and Mark Rothko (1903-1970) from Russia. However, Mark Rothko (1903-1970) moved to New York, at a very young age and Josef Albers (1888 - 1976) moved to North Carolina when in his thirties, and so these two examples are considered to belong to both places. The North American case studies are: Frank Lloyd Wright (1867-1959), Luis Barragan (1902-1988), Edward Hopper (1882 – 1967), Donald Judd (1928-1994) and James Turrell (1943 -). The Oriental case study is Tadao Ando (1941 -),

from Japan. Another geographical reference worth mentioning is that John Pawson lived in Japan for a few years, and so he was deeply influenced by their culture. Besides these three different contextual locations of origins, it is important to clarify that the Eastern world is deeply influenced by each other: American culture has profound roots in the traditional classical European culture, and European culture absorbed/observed the novelty of American culture. Therefore, although the case studies can be organized geographically, they all were deeply influenced by each other's cultures. Even in the Orient, and the case of Tadao Ando, it is possible to define a direct influence of both American and European culture in his way of being and in his architecture. Therefore, it is crucial to keep present the point that it is indeed one single world, and this is one of the present conclusions of this geographical analysis: the fact that each case study is deeply influenced by each other's cultures.

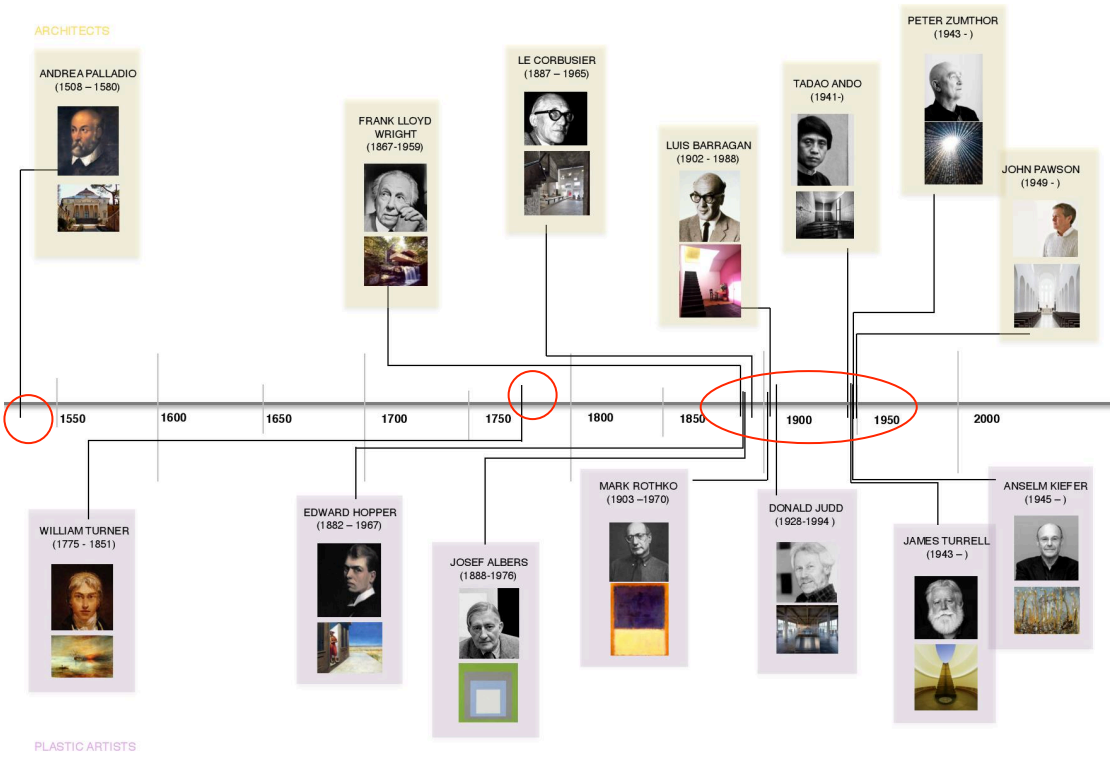


Figure 8: Chronological map/diagram of case studies.

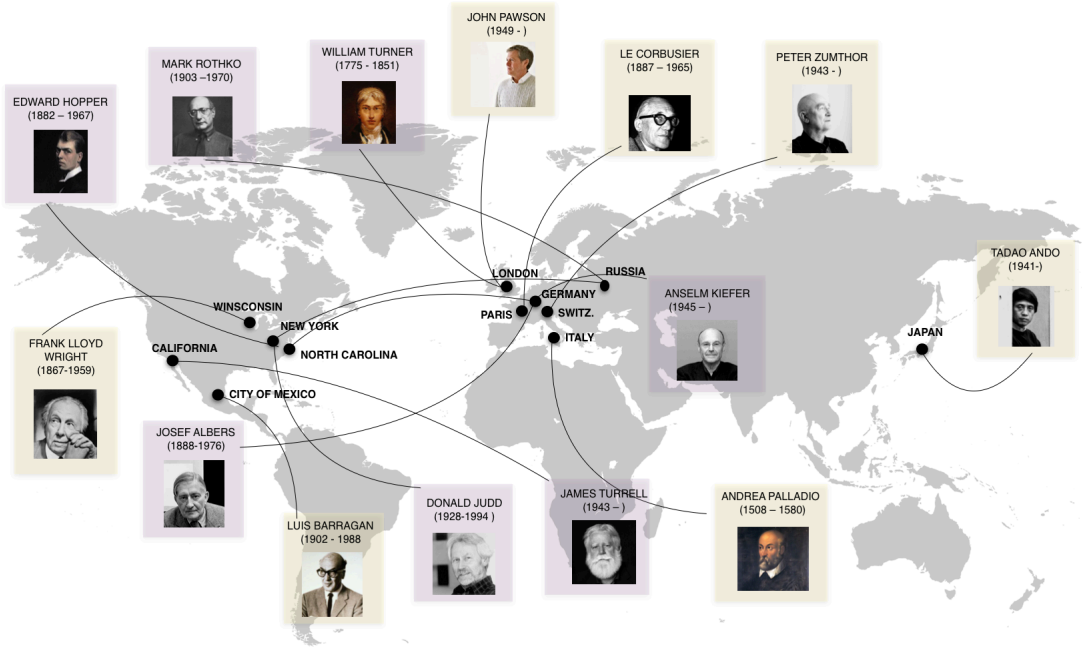


Figure 9: Geographical map/diagram of case studies.

How did they influence one another?

(c) Connections/Influences between the individual Elements/Case Studies

As a third point, it is crucial to know the case studies connections to each other: if and which case studies connect to each other, or in other words, who influenced who? As such, an SNA diagram was created to define the connections/influences between the different case studies. See Figure below.

The lines between the nodes establish a connection that only exists if there was indeed a direct influence between the nodes or elements. These influences were drawn from each of the case studies previously analysed: as announced by each of the case studies, in terms of movements, ideas or principles. To this end, the network establishes the connections between all the elements in a holistic way, allowing a number of conclusions to be drawn. The conclusions from the overall network are as follows:

One conclusion that can immediately be drawn is the fact that it is mostly architects that establish a central position in the network; this position is a direct result of the number of connections towards other elements. Which means that architects connect more (as influences) to both painters, sculptors and architects, where as the painters and sculptors seem to have a position that is more isolated and independent. The exception to this rule is Donald Judd, that has a central position in the network. This fact can be explained by his creation of minimalism as a theory and as aesthetical criteria, which deeply influenced both the arts and architecture.

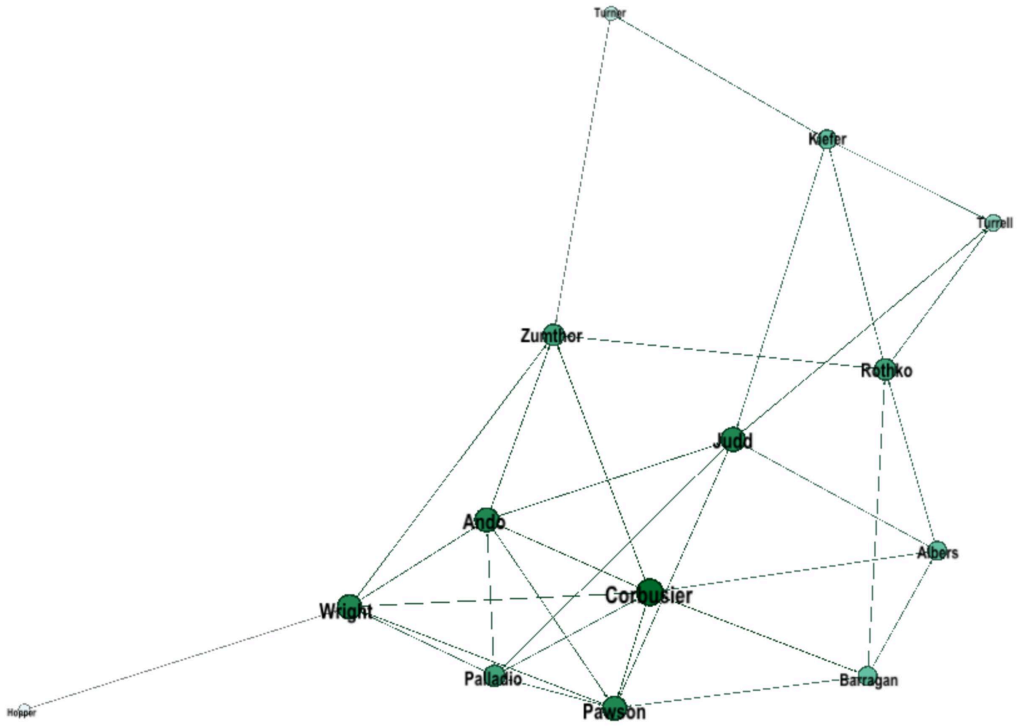


Figure 10: SNA diagram of the influences between case studies.

In regards to the number of connections themselves, a few other notes are of relevance.

The case study that possesses most connections is Le Corbusier (seven connections), establishing a central position in the overall network. This position clarifies that Le Corbusier is indeed the architect that most influenced more artists and architects that followed him and that was also himself influenced by various architects and artists, that came before him such as Palladio. In regards to the second most number of connections (six connections) there are three case studies that share this equal position; they are John Pawson, Donald Judd and Tadao Ando. These three case studies, possess a distributing intermediate position in the whole network. This fact is indeed of pertinence and relevance because these three case studies sustain simplicity, minimalism, depuration and spirituality as core values.

The diagram (figure 12) segments the case studies connections between artists and architects; it clearly shows that the architects have a more central position in regards to the artists that occupy a more peripheral, which means that most of the architects were more influenced by each other, than the artists that establish a more independent view. Of course this conclusion depends on these case studies and cannot be drawn to a general idea.

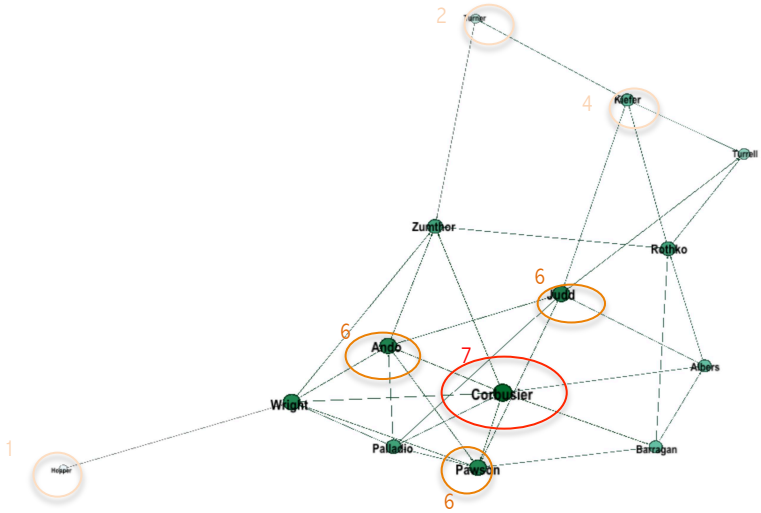


Figure 11: SNA diagram of the influences: number of connections.

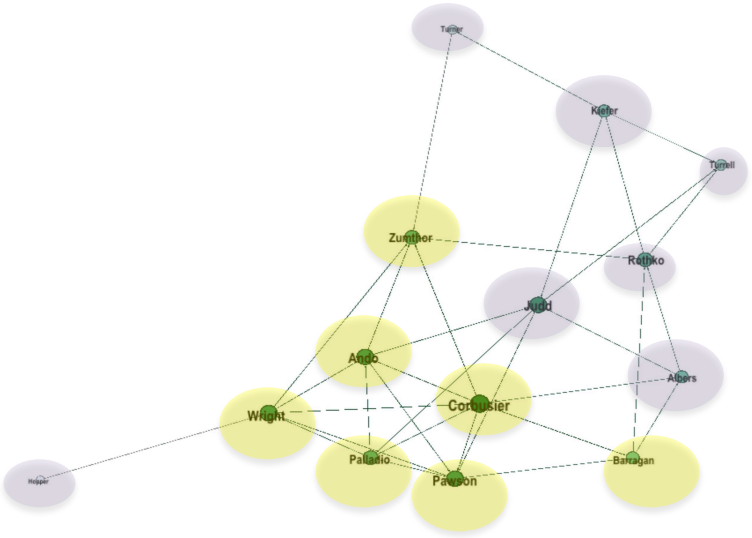


Figure 12: SNA diagram of the influences: location of architects and artists.

8.2. COMPARATIVE ANALYSIS OF CONCEPTUAL AND VALUES CHARTS:

For the general comparative analysis multiple elements were taken into account. These elements were derived from the coding process which led to the establishment of the summary analytical grid defined at the end of each case study. These analytical grids focus mainly on four focus points (which will be examined individually): the creation principles (how the artists and architects create), the conceptual frameworks used (what ideas and concepts do they use), emotions (what emotions do they desire to provoke), and lastly the values used.

These four aspects will be analysed individually and comparatively, in order to draw comparative conclusions between the case studies in regards to each of those aspects. For this, for each case study, the aspects that are used are highlighted in a brighter colour. These tables are presented below. Following that, is the individual analysis: the creation principles and methods is analysed in 8.2.1., clarifying the different creative approaches used by each case study in a comparative way, firstly between the architectural case studies, the painting and sculpture case studies and lastly between both; 8.2.2. clarifies the emotions used, in the same approach, 8.2.3., the conceptual frameworks, and lastly, the values used. In order to enhance the above analysis and make it clearer in yet another way, the Social Analysis Network technique was also used in regards to the conceptual framework explored, and in regards to the values used. The SNA clearly corroborates the chart analysis, as the analysis will thus show.

But before looking at each individual chart (that was also presented at the end of each case study) it is important to clarify the concepts and frameworks selected and used. These were selected from an individual analysis of each case study, which led to extracting these common driving ideas. As for the creation aspects the ones selected were the use of Rules/Principles, the use of rationality, the importance of freedom, intuition and imagination, the idea of expression and lastly of representation. These concepts although used in different ways, were present in all of the case studies, in different combinations (see charts that follow). As for the driving concepts and explored frameworks, the work selected the main aspects announced as: the use and focus on colour, light, substance, materiality, space and time (substances); the idea of complexity, simplicity, purity, essence, atmosphere and sprituality (concepts and important factors); the influences of human, memory/culture, nature and abstraction (frameworks that deeply guided and influenced the creation process): the formal ideas of geometry, order, form, rhythm, proportions and seriality (defining aspects used to articulate the final creation) and lastly aspects related to phenomenology, the senses, sentivity, experience, movement, perception and tactility. These all define driving concepts and frameworks that compose, influence and articulate the creation of significance for the case studies. In regards to emotions, the emotions announced were: the idea of harmony, tranquillity, stillness, contemplation, emptiness and the creation of depth. Lastly, the guiding values announced as core values that sustained the creation of significance were: metaphysical, philosophical, sustainable, symbolical, spiritual, emotional, metaphorical and poetical.

It is important to explain that some aspects were used and analysed in specific ways (as analysed individually by each of the case studies in the previous chapters). It is also important to clarify that some ideas, concepts and frameworks, were not contemplated in the chart below, because they were not

described by the case studies as being a component that creates significance or of being of vital importance for the creation. Such an example is the understanding of architecture of dwelling, which the case studies simply do not describe or talk about because it is considered as a given (it is a primary function and consideration of architecture) rather that a driving aspects that composes significance; another example is the idea of function, which in the same way, was not considered as a driving aspects: the same goes for the ideas of scale (which was contemplated and analysed more as proportions) and of money (finantial values). These aspects, although very important for the creation fo architecture, are not driving aspects in the definition of significance. Another important clarification, is that for example, all architecture is in itself complex, however, not all case studies define complexity as a main operating framework for creation, but rather it's opposite is true: some case studies, as the work will show, announce simplicity as the main driving aim (however these two ideas do not oppose each other, but rather complexity might define the background from which a simplification process is the core motor of the creation). The concept of order, another example, although it is a classical concept, it was announced by the case studies in a different way: for some of them, order drives the creation of significance in an abstract way.

(a) Individual Analytical Charts

(a1) The Architectural Case Studies

Andrea Palladio…

Table 1: Andrea Palladio Conceptual Chart

CREATION			CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Frank Lloyd Wright…

Table 3: Frank Lloyd Wright Conceptual Chart

CREATION	CONCEPTS / EXPLORED FRAMEWORKS					EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Luis Barragan…

Table 5: Barragan Conceptual Chart

CREATION	CONCEPTS / EXPLORED FRAMEWORKS					EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Le Corbusier…

Table 7: Le Corbusier Conceptual Chart

CREATION	CONCEPTS / EXPLORED FRAMEWORKS					EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Tadao Ando…

Table 9: Tadao Ando Conceptual Chart

CREATION		CONCEPTS / EXPLORED FRAMEWORKS				EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

John Pawson…

Chart 11: John Pawson Conceptual Chart

CREATION		CONCEPTS / EXPLORED FRAMEWORKS				EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Peter Zumthor…

Chart 13: Peter Zumthor Conceptual Chart

CREATION		CONCEPTS / EXPLORED FRAMEWORKS				EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

(a2) The Painting and Sculpture Case Studies

William Turner…

Chart 15: William Turner Conceptual Chart

CREATION		CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
						METAPHY.
RULES/PRINC.						PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Edward Hopper…

Table 17: Edward Hopper's Conceptual Chart

CREATION		CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
						METAPHY.
RULES/PRINC.						PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Josef Albers…

Table 19: Josef Albers Conceptual Chart

CREATION		CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
						METAPHY.
RULES/PRINC.						PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Mark Rothko…

Table 21: Mark Rothko Conceptual Chart

CREATION	CONCEPTS / EXPLORED FRAMEWORKS					EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Anselm Kiefer…

Table 23: Anselm Kiefer Conceptual Chart

CREATION	CONCEPTS / EXPLORED FRAMEWORKS					EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

Donald Judd…

Table 25: Donald Judd Conceptual Chart

CREATION	CONCEPTS / EXPLORED FRAMEWORKS					EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

James Turrell…

Table 27: James Turrell Conceptual Chart

CREATION			CONCEPTS / EXPLORED FRAMEWORKS			EMOTIONS	VALUES
							METAPHY.
RULES/PRINC.							PHILOSOPH.
RATIONALITY	COLOUR	COMPLEXITY		GEOMETRY	SENSITIVITY	HARMONY	SUSTAIN.
FREEDOM	LIGHT	SIMPLICITY		ORDER	EXPERIENCE	TRANQUILI.	SYMBOLICAL
INTUITION	SUBSTANCE	PURITY	HUMAN	FORM	MOVEMENT	STILLNESS	SPIRITUAL
IMAGINATION	MATERIALITY	ESSENCE	MEMORY/CULTURE	RHYTHM	SENSES	CONTEMPLA.	EMOTIONAL
EXPRESSION	SPACE	ATMOSPHERE	NATURE	PROPORTIONS	PERCEPTION	EMPTINESS	METAPHOR.
REPRESENTAT.	TIME	SPIRITUALITY	ABSTRACTION	SERIALITY	TACTILITY	DEAPTH	POETICAL

General Analysis…

As the charts clarify, when it comes to creating significance, both artists and architects use the same creation tools, the same conceptual frameworks, explore the same emotions and define the same values, in similar ways. These are general operating concepts and frameworks, combined and articulated by each of them both similarly and differently, because each case study has its own approach.

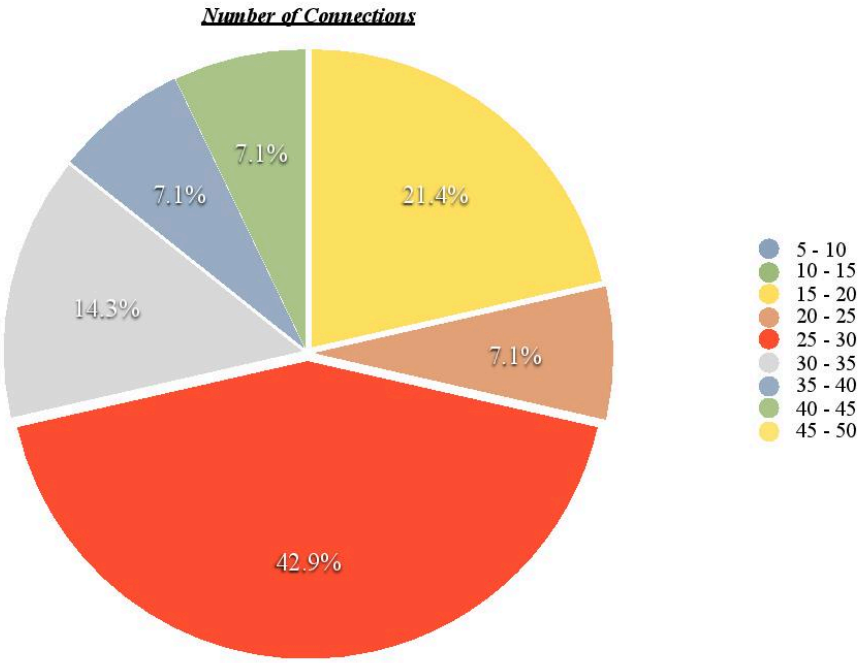
There are, of course, differences between the architecture, painting and sculpture, as explained in chapter 3 and 4, however, those differences are considered to be primary to the case studies, rather than operational in the creation of significance; in other words, the basic function of dwelling for architecture (the basic aspects of creating shelter for the human being), is a criteria that is satisfied constantly and it is not what defines significance; likewise for painting, the idea of composing a two dimensional creation is not an operating and driving aspect. On the contrary, these individual aspects of each field in some case studies (James Turrell and Barragán) were questioned and somewhat changed; in others, they define the background from which significance can be composed (for example the Bruder chapel, by Zumthor, that aims to creates a spiritual encounter).

One other conclusion that can be drawn is that the case studies that use rules and rationality as their main creation tools, tend to focus more on conceptual frameworks related to reason such as order, abstraction, geometry, purity and simplicity (as is the case of James Turrell, Donald Judd, Josef Albers, John Pawson, Le Corbusier and Andrea Palladio); and the opposite holds true, case studies that use the creation principles of intuition and imagination tend to focus more on conceptual frameworks that are more intangible such as colour, atmosphere, substance, space and sensitivity (as is the case of Mark Rothko, Anselm Kiefer, William Turner, Peter Zumthor, Le Corbusier and Luis Barragan).

(b) Number of elements analysed used by each case study

Another main aspect that needs to be noted, is the fact that not all case studies use the same amount of conceptual references, values or creation tools. Each one uses different aspects, in different ratios and in different combinations. However, at this point it is of the essence to explain, that all of them use a high number of combinations and do not use specifically one or two from each category, but use multiple aspects from the various categories. The graphic below presents the sum of each of the connections established to each framework by each case study. It is clear, that 6 of the case studies use between 25 and 30 connections (out of a sum total of 50 frameworks analysed), where as 3 case studies use between 15 to 20 connections and only one case study (Le Corbusier) uses between 40 to 45 connections. Immediately under him with 35 to 40 connections is Anselm Kiefer. Thus, the graphic shows that 42% of the case studies are in the range of 25 to 30 connections. Where as the low levels of 5 to 10 and 10 to 15 connections remain unused defining 0% of the case studies and the opposite extreme of 45 to 50 connections also defines 0%.

Number of Connections	*5 - 10*	*10 - 15*	*15 - 20*	*20 - 25*	*25 - 30*	*30 - 35*	*35 - 40*	*40 - 45*	*45 - 50*
#			3	1	6	2	1	1	



Graphic 1: Comparative analysis number of elements analysed used by each case study.

8.2.1. CREATION PRINCIPLES AND METHODS

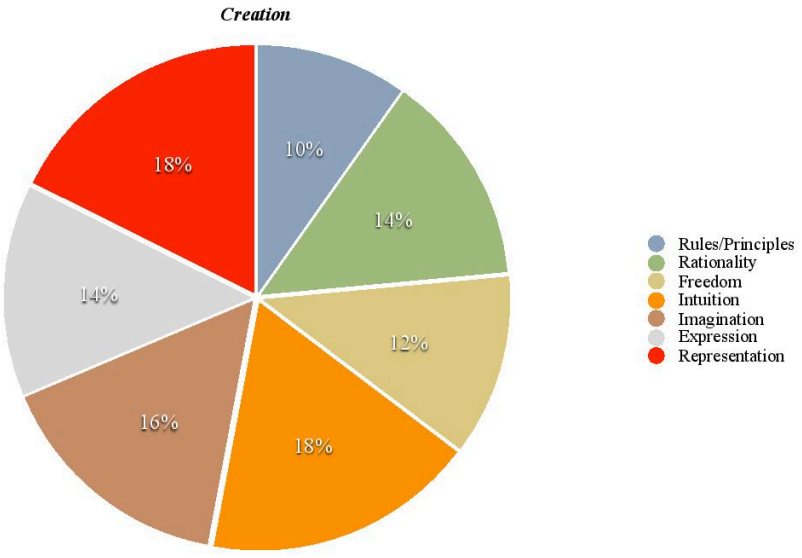
The next aspect that is noted are the creation principles used by each of the case studies. Seven creation principles were defined: (1) Rules/Principles (which relates to guiding principle aspects that guide the creative process such as proportions), (2) Rationality (which relates to the use of the faculty of reason), (3) Freedom (which relates to the underlying idea of creative freedom), (4) Intuition (the faculty of intuition), (5) Imagination (the capacity to imagine), (6) Expression (the idea that something has to be expressed) and lastly (7) Representation (the idea that something needs to be represented.

(a) Number of times used by each case study

The graphic that follows establishes the number of times each creation principle was used by the fourteen case studies. The graphic shows that all of the principles were used in a rather equal manner: being that Intuition and Representation define 18% (being used by 9 case studies), Imagination defines 16% (being used by 8 case studies), Expression and Rationality define 14% (being used by 7 case studies), the idea of Freedom defines 12% (being used by 6 case studies) and lastly, Rules and Principles defines 10% being used by only 5 of the case studies out of the 14.

Creation Principles

Creation	*Rules/Principles*	*Rationality*	*Freedom*	*Intuition*	*Imagination*	*Expression*	*Representation*
#	*5*	*7*	*6*	*9*	*8*	*7*	*9*



Graphic 2: Comparative analysis of creation principles of each case study.

(b) The Creative Process and the use of the Creative principles

At this point it is of value to enumerate the different creative processes we analysed previously for each case study (Chapter 6 and 7), in order to understand how the different principles are manipulated and used in the artistic process.

Architectural Creation Principles Summary:

- ***Andrea Palladio:*** Palladio's work methodology is deeply related to the calculations of proportions and ratios in order to achieve the most harmonious relationships of the parts and the whole. The creative process, thus, was led by a sense of order and a desire to achieve unity and virtue, through mathematics, geometry, form proportions and harmony, guided by the Vitruvian trilogy principles (*venustas, firmitas, utilitas),* pragmatism and a desire to find rules and types that defined architecture.

- ***Frank Lloyd Wright:*** Wright's creative process and methodology is led both by rational ideals and intuitive understanding; the creative process is oriented in a great way, by the spirit and the faculties connected to the spirit such as intuition, imagination and emotion**.** in order to allow spirit guide the creation, Wright found in drawing the tool and the methodology he needed; guided by a deep desire to reveal the 'greatness of his soul' and the inconsistencies, complexities and contradictions that from there derive. Driven by the idea of organic architecture, his methodology is also articulated by a sense of wholeness and spatial connections.

- ***Luis Barragan:*** no architecture element is ever finished or concluded, but instead, is an open living system that should adapt, change and mutate; The design, the architectural space, thus reveals itself over time; not only in a brief moment of project design, but it unravels, as the space is lived and experienced. His process thus, is a process of discovery over time, guided by an emotional understanding of space and existence. Uses the methodology of 'collage', as an assembly of different elements, that juxtaposed memories and experiences in an intuitive and expressive way. Establishes a connection to memory: the aspect of 'sentimentality' in architecture.

- ***Le Corbusier:*** Le Corbusier's creative process and methodology uses all conceptual systems; based firstly on an intuitive and rational understanding of the landscape and the site, is followed by a gestation period (drawing from research and inspiration), and then follows the insight stage (spontaneous intuitive birth) of the overall idea; this idea is then studied and incorporated with other elements, that aim both at creating an expressive creation and a representation of the principles he believed in. Painting is used as a free expression (freedom) of imagination, within a cartesan frame, and then those ideas explored are converted into architecture (painting as a laboratory for architecture).

- ***Tadao Ando:*** Ando's work process can be characterized as a systematic sort of reasoning, which uses drawing to uncover intuitive and primal understandings. The project develops based on those intuitive drawings, that make architectural qualities clear, and create the capacity for 'substance' and 'substantive' qualities to emerge. Strongly rooted in the Japanese tradition that defines an existential understanding.

- ***John Pawson:*** the design process is led by a very strong mental image or picture of a space, and how he wants to create it and organize it. His work process is defined by the

aspects that are considered to be elements of simplicity, or the elements of architecture that can contribute to that whole quality. It is a rational process of simplification (to the minimum) guided by both reason and intuition, that aims to represent primal values of architecture: a search for the essencial elements of architecture.

- ***Peter Zumthor:*** Zumthor's work process is an intuitive based decision process, guided and led by emotions, memory, feeling and instinct. It is oriented by a sense of 'vision' or 'dream' of the overall design. As such, it is possible to understand that his design process uses both emotional tools and rational ones, balancing between sensitive awareness and logical reasoning. However, it is not the logical reasoning that dictates the design, but instead the emotional forces come first (mental images, emotions, dreams, visions), and then the logical orders judge and arrange those forces. And that is why he uses drawing as a fundamental tool for the development of both the mental images and the sensitive qualities.

Painting and Sculpture Creation Principles Summary:

- ***William Turner:*** Turner's creative process was driven by his vision, imagination and instinct. Based on visual, in location drawings that capture initial impressions and intuitions, and then are later 'converted' into larger works. His creative process was also conveyed by instinct and by an emotional drive. invented new techniques to make vision come alive, and used many mediums to explore his intuitive understanding of reality.

- ***Edward Hopper:*** Hopper's creative process is inspired by the environments he lives in and by the atmospheres that capture his attention in the world around him (American landscapes, sense of nostalgia), aiming to represent the emotions and qualities that it possessed (loneliness). His methodology and his creative process was characterized by a deep search for subjects that allowed him to express the inner world he wished to portray (duality of imagination and rationality). There was a coherence and an interdependence between all forms of creation and each influenced each other.

- ***Josef Albers:*** Albers was very rigorous in his process and catalogued every choice and method applied; the final creation was a rational one, defined by techniques and rational choices already established from the experimentation stages. He followed a rational process and methodology cataloguing and documenting every step of his decisions.

- ***Mark Rothko:*** His creative process was led and guided by his overall ideals and beliefs of what art could and should be. In all, his creative process was intuitive, expressive and conducted by the imagination. Developed complex time consuming painting techniques that could accommodate his creative instinct and intuition. His work process is characterizes, a neo-platonic type, as a clarification of the idea into the final painting.

- ***Anselm Kiefer:*** For Kiefer, the creative process is a transcendental process. Guided by a vague shock value that drives him into creation; managed by intuition, and imagination, the desire to express, the shock value, and to represent intangible principles. the work process develops in a sort of experimentation process. Kiefer's work uses heavy impasto and multiple techniques and objects in an intuitive and expressive way; he invents new techniques that attempt to create a 'living organism'.

- ***Donald Judd:*** Judd believed that artists didn't have to make their own art: (only the 'meaning' and the significance of the art itself mattered), thus, challenging the traditional creative process, Judd distanced himself from the process of 'making' art, and begun using 'industrialized' mechanism and processes. He follows a rational

process oriented by rules and principles of what he believes to be art (representing those qualities as an object), in search of the essencial element that defines and builds an object.

- ***James Turrell:*** Turrell's work process and artistic technique is more similar to an 'architectural' process, than it is, to an artistic one. Turrell's work process is led by rational decision making, using technology as an aid and annihilating every aspect of human creation both in the space and in the process. Turrell works as a scientist does: driven by rationality and accuracy.

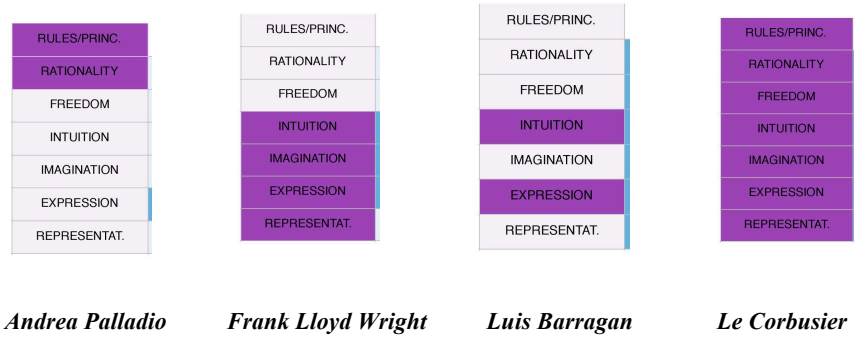
From the above brief descriptions it is possible to understand that there are two main types of creation: one led by instinct, imagination and expression and the other led by reason, rationality and principles (that drift away from personal expression) towards a more formal language. What other generalities can be drawn?

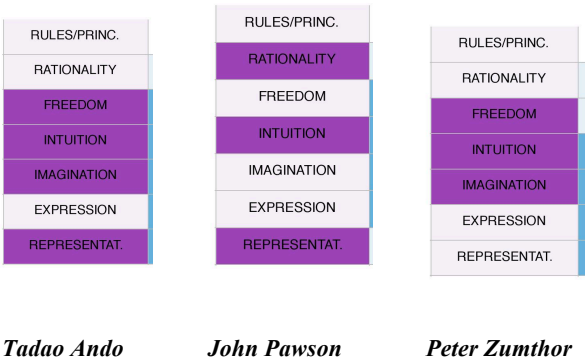
How are the creation principles used?

(c) Creation Principles as Combinations

Besides the overall understanding that all of the faculties and concepts were used by all of the case studies more or less equally, it is important to understand which faculties and concepts are associated to which and how those creative faculties were combined. Thus, the above synthesis is summarized in the diagrams presented below, in order to allow for a better cross-analysis.

Table 29: Comparative Conceptual Chart of Creation Principles used by the Architects





Architectural Creation Principles analysis:

- One first conclusion that can be drawn from the observation of the architectural and creation principles is the fact that only Le Corbusier uses all the of the concepts and faculties.
- The next outcome is the fact that Andrea Palladio is the only one of all the case studies to use only two main creation principles and concepts (rules and rationality); which is cohenrant with the methodology of the sixteenth century.
- Thus, another conclusion is that the twentieth century architectural creations of significance use a broader and wider range of creations aspects: such as the idea of freedom, the use of intuition and imagination.

Painting and Sculpture Creation Principles analysis:

- One result that can be brought about from the observation of the painting and sculpture creation principles is the fact that it follows the same logic as the Architectural case studies: two groups are defined, some that use rationality and rules and intuition and imagination. However, it is of reference the fact these case studies (painting and sculpture) choose to use these tools freely, where as in the previous analysis, due to the nature of architecture, some of those creation aspects need to exist.

Table 30: Comparative Conceptual Chart of Creation Principles used by the Artists



A series of other conclusions derived from the both the above analysis are pointed out:

- Whereas most of the case studies follow their own creation combination of principles and concepts, there are various case studies that follow the exact same system: Donald Judd, James Turrell and Josef Albers, follow a logical type of creative process using Rules and Principles, Rationality and Representation (of something); in the second group is William Turner and Mark Rothko that use Freedom, Intuition, Imagination and Expression.
- There is a trilogy of Freedom, Imagination and Expression that is present in multiple case studies (both architects and artists): Tadao Ando, Peter Zumthor, Le Corbusier, William Turner, Mark Rothko and Anselm Kiefer.
- Case studies that use this trilogy do not use rules and principles and rationality; and case studies that are based on rationality and principles do not use expression, imagination, intuition and freedom (Except for Le Corbusier).
- The idea of representation is featured in both polarities: both reason and intuition.
- Each case study has an average use of three to four creative aspects.

Synthesis:

It has been seen that the creative process was guided by two distinct approaches: on the one hand led by instinct, imagination and expression and on the other hand led by reason, rationality, rules and principles (that drift away from personal expression) towards a more formal language. We also defined that there *is a trilogy of Freedom, Imagination and Expression that is present in multiple case studies (both architects and artists). We also saw that the only case study that uses all the creative principles announced in Le Corbusier; each case study has an average use of three to four creative aspects; and finally we saw that the idea of Representation is featured in both creational polarities: both reason and intuition.*

8.2.2. EMOTIONS

The next aspect that will be studied will be the emotional principles used by each of the case studies. *(The overall understanding of emotion that is considered was defined in Chapter 5, part 5.7. Emotion, however, for a more general understanding of emotion it is also possible to consult the Glossary).* These emotions were defined and pointed out by the artists and by the architects as there main driving aim of their creations (defined by a coding analysis). The six emotions can thus be perceived and understood as principles. Six emotions were defined: (1) Harmony (which relates to driving idea of creating harmony), (2) Tranquility (which relates to the creation of tranquil emotions), (3) Stillness (which relates to the desire to create silence), (4) Contemplation (the desire to create a contemplative engagement with the viewer), (5) Emptiness (the desire to create a pure 'empty' condition), (6) Depth (which relates to complexity of emotions in themselves as combinations).

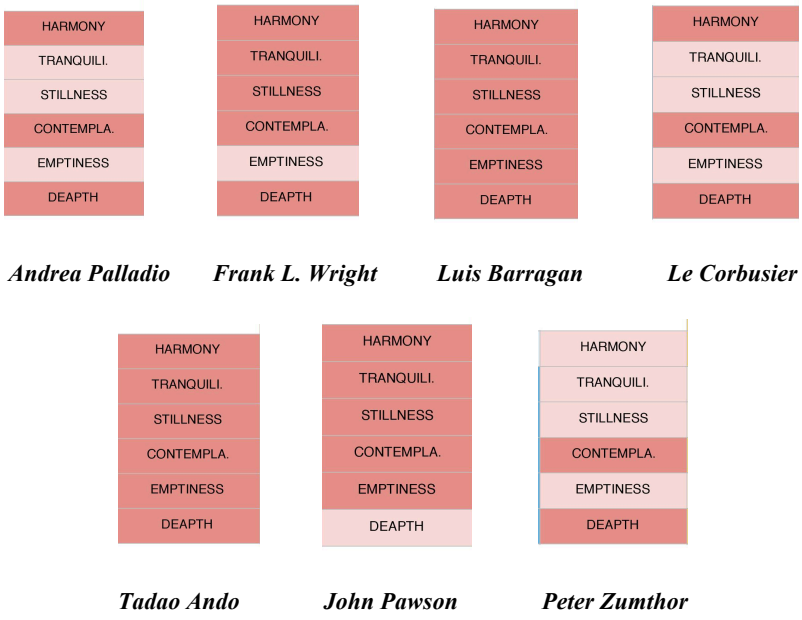
It is important to clarify that there are other emotions that are specific to architecture and that are associated to its primary function of dwelling and shelter, that were not considered simply because they were not announced as driving criterias for the creation. A house for example, should transmit emotions of safety, protection and privacy. However, these emotions, much like the overall primary function of architecture, were a background form which everything else could grow: they were not announced at all.

On the other hand, painting and sculpture can aim to trigger violence, for example, however these emotions were not announced as being the aim of the case studies at all. Instead, the cases studies all explained that the driving emotions that drive their creations are those previously announced. Some use only two of them, others more, however they are the emotions that define the core of their aims.

Following is an analysis of the emotions used by both architects and painters and sculptures case studies, an examination of their views with a comparative graphic which is followed by conclusions.

Architectural triggered Emotions:

Table 31: Comparative Conceptual Chart of Emotions used by the Architects

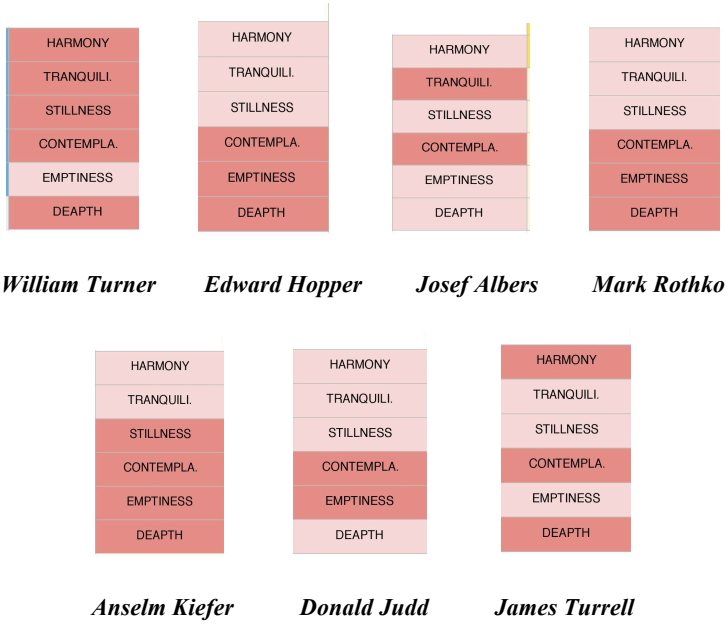


Architectural Emotions analysis:

- A point that can be determined from the observation of the architectural emotions is the fact that both Tadao Ando and Luis Barragan aim to create all of the emotions listed.
- Another main point is that Peter Zumthor aims to trigger both contemplation and depth in the observer; the other emotions result from that specific combination (the only architect that uses only two).
- One other principal idea is the fact that all the architects except John Pawson are fuelled by the desire to create 'Depth' (combination of multiple complex emotions).
- Also, the emotion of Harmony has a central role for the architects, being used as a driving motor by all of them except Peter Zumthor.

Painting and Sculpture triggered Emotions:

Table 32: Comparative Conceptual Chart of Emotions used by the Artists



Painting and Sculpture Emotions analysis:

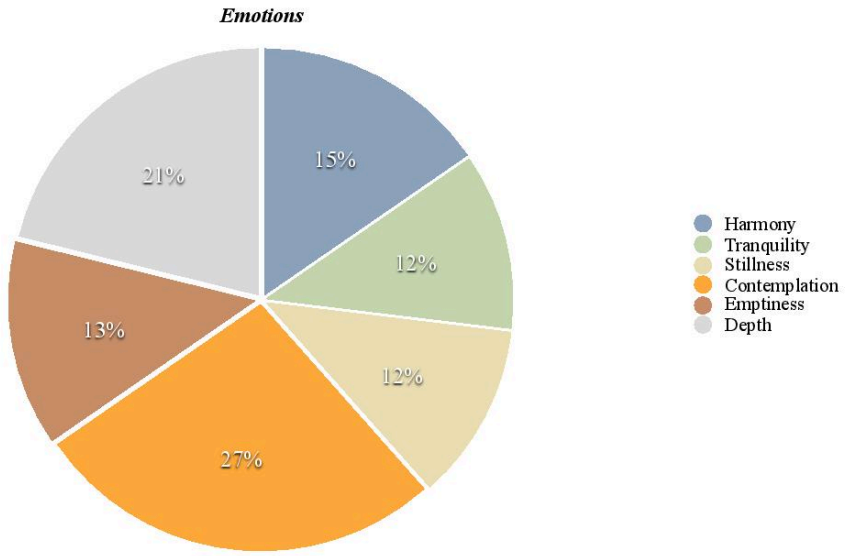
- From the observation of the painting and sculpture emotions it is shown that it follows the same logic as the Architectural case studies: using mainly the desire to create contemplation and depth (complex emotions).
- Where as with the architects the idea of harmony has a central position, for the artists it does not.

Overall Emotions analysis:

- It is possible to define that contemplation has a central position in both architects and artists.
- All of the case studies use multiple emotions as their driving aim and as an important factor of the overall creation (average of 4 out of 6).

Following in a pie graphic establishing the percentages of usage of each emotion by each of the case studies:

Emotions	*Harmony*	*Tranquility*	*Stillness*	*Contemplation*	*Emptiness*	*Depth*
#	*8*	*6*	*6*	*14*	*7*	*11*



Graphic 3: Comparative analysis of emotions used by of each case study.

A series of results derived from the above graphic can be pointed out:

- The emotion of contemplation is used by all of the case studies and defines a sum total of 30% of all of the emotions used.
- Following is the emotion of 'Depth' which totalizes 21% (being used by eleven of the case studies).
- The least used emotions are tranquillity and stillness (which defines only six uses out of all the cases).
- The emotions of Depth and Contemplation are used in combination by eleven of the case studies.
- Establishing a central position (neither used a lot nor a little) are the emotions of Harmony and Emptiness.

Synthesis:

It was seen that various emotions were common to all of the case studies and that some played a more central role than others. The emotions that were most used by all of the case studies are the emotions of contemplation (all of them used it) and depth (which defines the idea of complexity of multiple emotions), and which was used by eleven of the case studies. These two emotions are used in combination (together) by eleven of the case studies. The least used emotions are those of tranquillity and stillness (which defines only six uses out of all the cases). Establishing a central position (neither used a lot nor little) are the emotions of Harmony and Emptiness. All of the case studies use multiple emotions as their driving aim and as an important factor of the overall creation (average of 4 out of 6).

8.2.3. CONCEPTUAL FRAMEWORKS

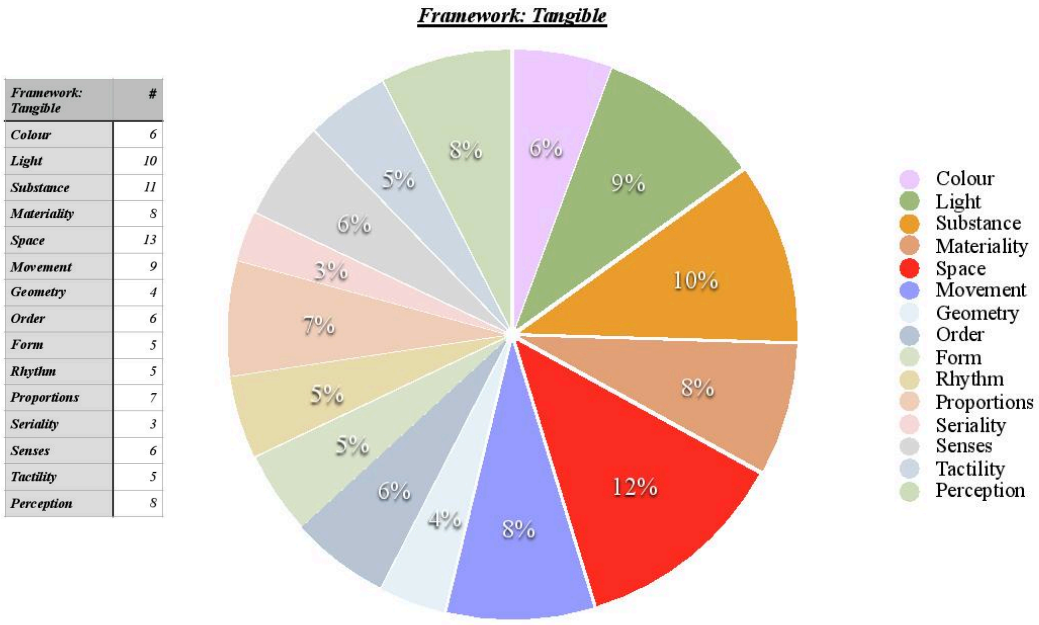
The next aspect that is analysed is the conceptual framework used by each of the case studies. These were defined and pointed out by the artists and by the architects as there main driving interest of their creations (defined by a coding analysis). The frameworks include disciplines such as geometry, aspects of reality such as movement and light, and other aspects that were considered of primary important such as the idea of substance (presence), the senses, materiality (tactility), the idea of complexity or atmosphere (intangible presence and essence).

At a first level of research they were combined together, however at this stage it is possible to organize those conceptual frameworks in two parts: the tangibles and the intangibles. The tangibles conceptual frameworks (which relate to tangible criteria's) are: colour, light, substance, materiality, space, movement, geometry, order, form, rhythm, proportions, seriality, tactility and perception. The intangible conceptual frameworks (which define the intangible aspects announced by the case studies) are: complexity, simplicity, purity, essence, atmosphere, spirituality, experience, sensitivity, human, memory/culture, nature, abstraction and time. Below is a graphic of the percentage of use of each of these conceptual frameworks used by both the architects and painters and sculptures case studies, which will be followed by the adequate analysis. This defines part (a) and (b). After this phase an overall analysis was conducted of all the elements together in order to see which connections could be defined, and in order to draw further conclusions: this defines part (c). A brief synthesis will conclude the conceptual framework investigation.

(a) Tangible conceptual frameworks:

A series of analysis derived from the graphic presented below can be summarized:

- The tangible conceptual framework that is most used by all of the case studies is Space (used by thirteen of them), defining a total of 12% usage out of all the conceptual frameworks analysed.
- Immediately following 'Space' is the conceptual framework of 'Substance' (used by eleven) defining 10% of all the concepts.
- After which is 'Light' (used by ten) defining 19% of all the concepts.
- The least used are 'Seriality' (used by three case studies) defining 3% of all the concepts and 'Geometry' (used by four) defines 4%.
- Of relevance is the dominant position of the concepts of 'Movement' and 'Materiality' that were used by 9 case studies and define 8%.
- Five concepts define more than half of the usage of all the overall concepts: Light, Substance, Movement, Materiality and Space.

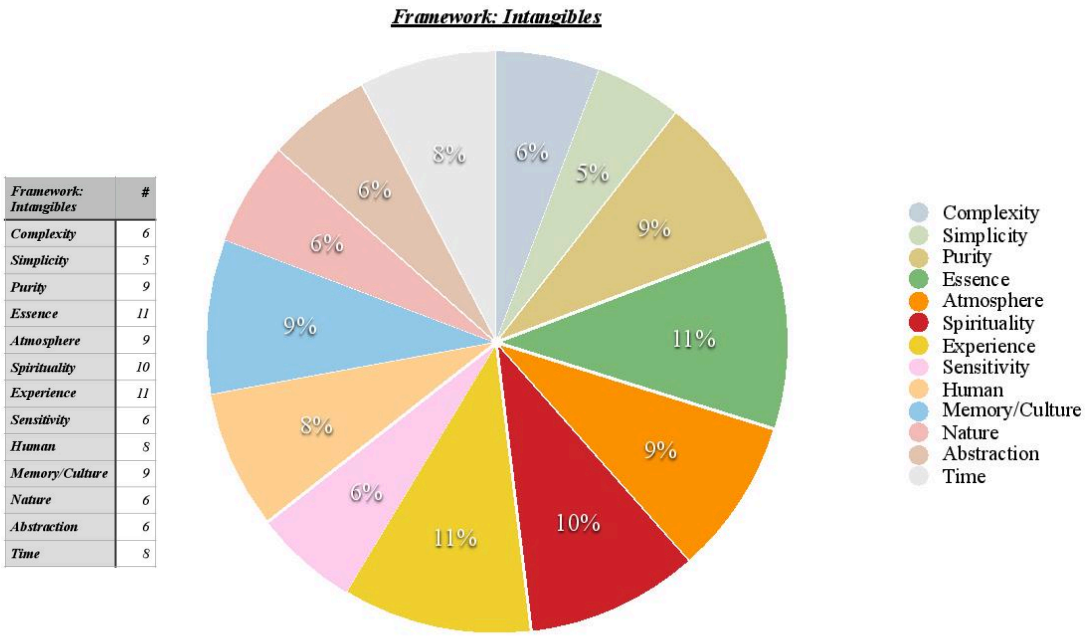


Graphic 4: Comparative analysis of conceptual framework (tangible) used by each of the case studies.

(b) Intangible conceptual frameworks:

A series of considerations derived from the graphic below can be summarized:

- The intangible conceptual framework that is most used by all of the case studies is Essence and Experience (used by eleven of them), defining a total of 11% usage out of all the conceptual frameworks analysed.
- Immediately following is the intangible framework of 'Spirituality' is the conceptual framework of 'Substance' (used by ten), defining 10% of all the concepts.
- After which is 'Atmosphere' (used by nine), defining 9% of all the concepts.
- The least used is 'Simplicity' (used by five case studies), defining 5% of all the concepts.
- Following Simplicity, as the least used are four conceptual frameworks: Complexity, Sensitivity, Nature and Abstraction (used by six case studies) and each one defining 6% usage of all the concept.
- Five concepts define more than half of the usage of all the overall concepts: Experience, Spirituality, Essence, Atmosphere and Purity.



Graphic 5: Comparative analysis of conceptual framework (intangibles) used by each of the case studies.

(c) Intangible and Tangible conceptual frameworks:

Since we have identified which conceptual frameworks are of most relevance for the case studies and which are of least relevance, it is important to understand the relations between each other, and their connections to the case studies. For this a Social Network Analysis was conducted.

Both graphics represent the same, however they are expressed in different ways. Both establish a map of connections between the case studies and the conceptual frameworks used: the first highlights the names according to the number of connections it establishes (small names for little connections, large names for large number of connections); the second graphic, emphasizes the connections itself rather than the names. Both are presented in the pages that follows.

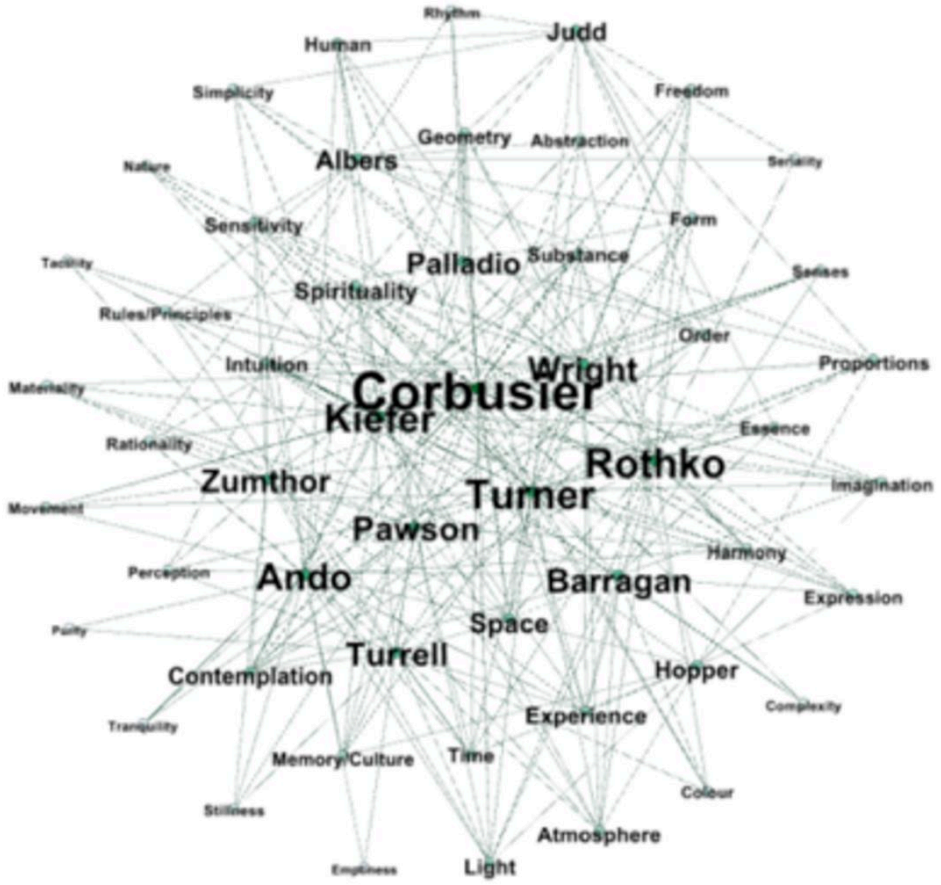


Figure 13: Social Network Analysis of Case Studies and their conceptual frameworks: both tangible and intangible

A group of results occured from both the graphics (current page and the page that follows) can be summarized:

- Firstly that the case studies that establish most number of connections to most number of conceptual frameworks, defining a central position are Le Corbusier and Anselm Kiefer.
- These are followed by Wright, Rothko, Turner, Pawson and Zumthor.
- The conceptual frameworks that establish a central position in the map are: Space and Spirituality.
- These are consequently followed by Experience and Substance.
- The conceptual frameworks that establish a peripheral position in the map are: Seriality (3 connections), Nature (4 connections), Purity (2 connections), Complexity (3 connections), and tactility (4 connections).
- The case studies that establish a peripheral position are: Judd, Albers and Hopper (defined by the least number of connections established).

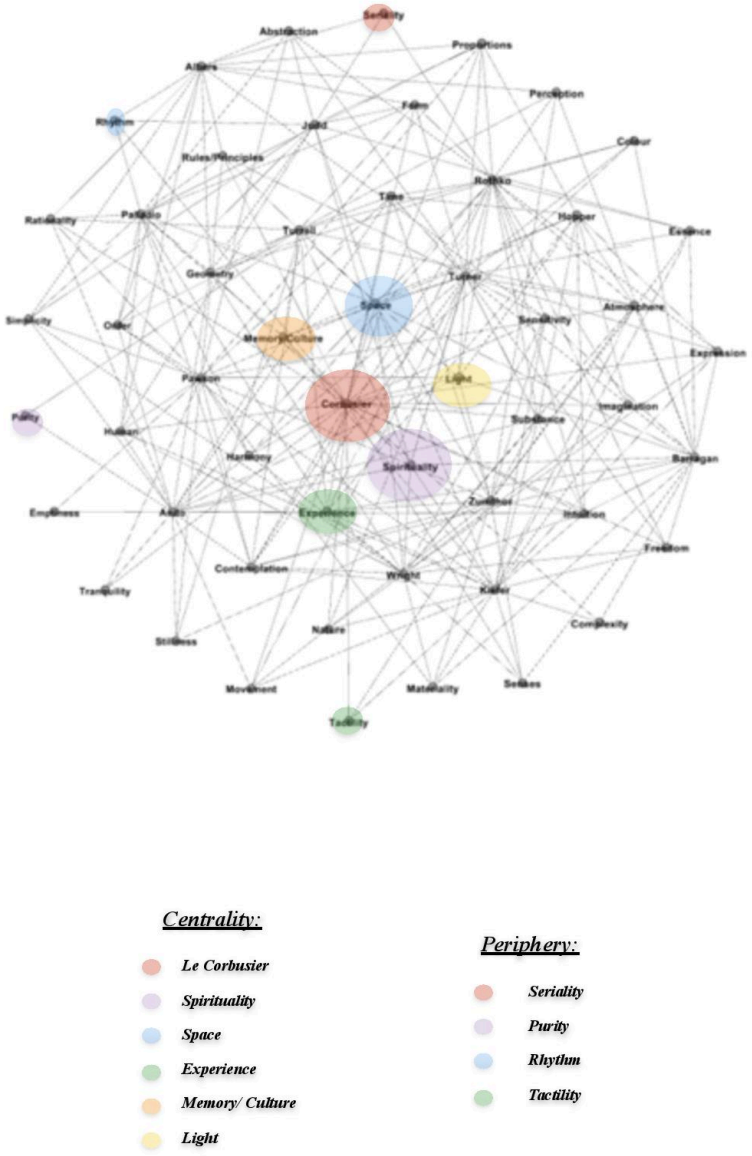


Figure 14: Social Network Analysis of Case Studies and their conceptual frameworks: both tangible and intangible II

Synthesis:

It was shown that various conceptual frameworks (both tangible and intangible) were used by the different case studies. Just like the other analysis, it is possible to understand that both artists and architects value the same conceptual frameworks. The tangible conceptual framework that is most used by all the case studies is Space (used by thirteen of them), immediately following 'Space' is the conceptual framework of 'Substance' (used by eleven) defining 10% of all the concepts, after which is 'Light' (used by ten) defining 19% of all the concepts. The intangible conceptual framework that is most used by all of the case studies is Essence and Experience (used by eleven of them), defining a total of 11% usage out of all the conceptual frameworks analysed, Immediately following is the intangible framework of 'Spirituality' is the conceptual framework of 'Substance' (used by ten) defining 10% of all the concepts, after which is 'Atmosphere' (used by nine) defining 9% of all the concepts. The least intangible used is 'Simplicity' (used by five case studies) defining 5% of all the concepts. The least tangible used are 'Seriality' (used by three case studies) defining 3% of all the concepts and 'Geometry' (used by four) defines 4%. Lastly, we saw that the case studies that establish most number of connections to most number of conceptual frameworks, defining a central position are Le Corbusier and Anselm Kiefer, followed by Wright, Rothko, Turner, Pawson and Zumthor. The conceptual frameworks that establish a central position in the map are: Space and Spirituality.

8.2.4. VALUES

The next aspect that is analysed are the values used by each of the case studies. These values were defined and pointed out by the artists and by the architects as there main driving interest of their creations (defined by a coding analysis).

At this point, it is important to clarify once more, the evolving concept of value. The work begun with an understanding of value as guiding and driving aspects (broad preferences concerning appropriate courses of action or outcomes). For example, philosophy approaches the concept of value and also can create a theory of values; however, it is not in this sense that the word value is understood. Value is the underlying considerations that guides the actions and creations of the case studies. We saw that each individual case study, was guided and driven by various of these 'values'. These were organized by eight categories: metaphysical (desire for the universal), philosophical (desire for truth), sustainable (desire for goodness), symbolical (desire for symbolic connections), spiritual (desire for the spiritual), emotional (driven by emotions), metaphorical (desire to create and establish metaphors), and poetical (desire to create poetic connections). Thus, at this point, we can understand that the values that define each case study can also be understood as desires for something, and the creation of connections towards something.

Firstly a comparative analysis is conducted, clarifying which case study uses which value: presented below as summary tables, Social Network Analysis charts and graphics, in order to assess which values were most used and how they relate to each other. Following each graphic and map is an analysis.

Secondly, each value is analysed individually, determining how each case study approached it and how it was used. Thus, for each of the values it will be presented a brief summary of each of the case studies, architectural and artists, that contain the value in questions, and an analysis of how they are expressed and used in the artistic and architectural process. After this, a brief description of the value itself is presented (as defined by the case studies).

8.2.4.1. COMPARATIVE GENERAL UNDERSTANDING

1. ***Summary of Individual Values:***

(a1) Architectural Values:

Table 33: Comparative Conceptual Chart of Values used by the Architects



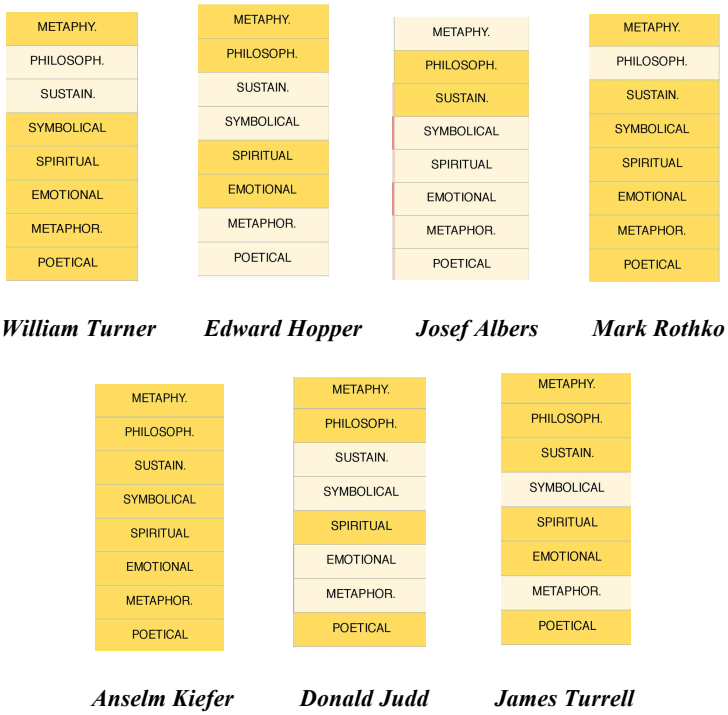
Architectural Values analysis:

- First of all, the conclusion that emerges from the observation of the architectural values is the fact that both Tadao Ando and Le Corbusier incorporate and take into consideration a greater number of them (6 out of 8).

- Another main result is the fact that all of the architectural case studies take into account a large number of values: either four, five or six values out of the eight that were in question.
- One other main idea is the fact that all of the case studies consider sustainable values.
- Also, only Peter Zumthor doesn't consider spiritual values.

(a2) Painting and Sculpture Emotions:

Table 34: Comparative Conceptual Chart of Values used by the Artists



Architectural Values analysis:

- One first aspect that can be concluded is that Kiefer is the one artist that incorporates all of the values.
- Josef Albers, on the other hand incorporates only two.
- Spiritual values are considered by all of the artists except for Josef Albers.

(a3) Overall Values analysis:

- It is possible to define that Spiritual Values is the one value that is most considered by both artists and architects, immediately followed by the Sustainable values.

2. Comparison of Values Analysis:

Since we have identified which values are of most relevance for each of the case studies and which are of least relevance, it is important to comprehend the relations between each other, and their connections to the case studies. For this a Social Network Analysis was conducted. The first graphic (presented below), creates a visual map between the case studies and the values used, therefore it is possible to see which case studies use which values. It is a sort of summary chart.

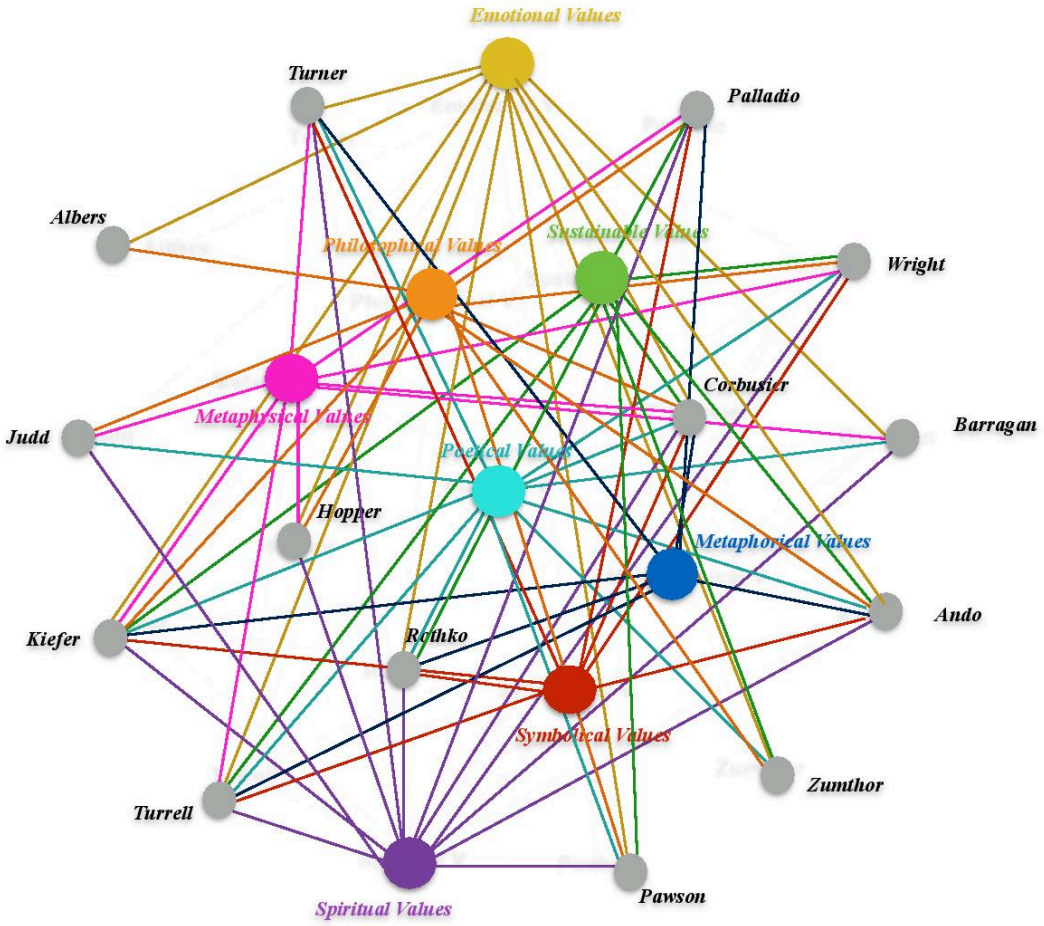


Figure 15: Social Network Analysis defining an over view of case studies and their connections to each value.

The second and third graphic (presented below as Figure 16 and 17), establishes a map of connections between the case studies and the values used: where as the third, highlights the names according to the number of connections it establishes (small names for little connections, large names for large number of connections), the second uses colour to better clarify the content and defines the specific number of connections to each value. The fourth graphic define a percentage use of each value.

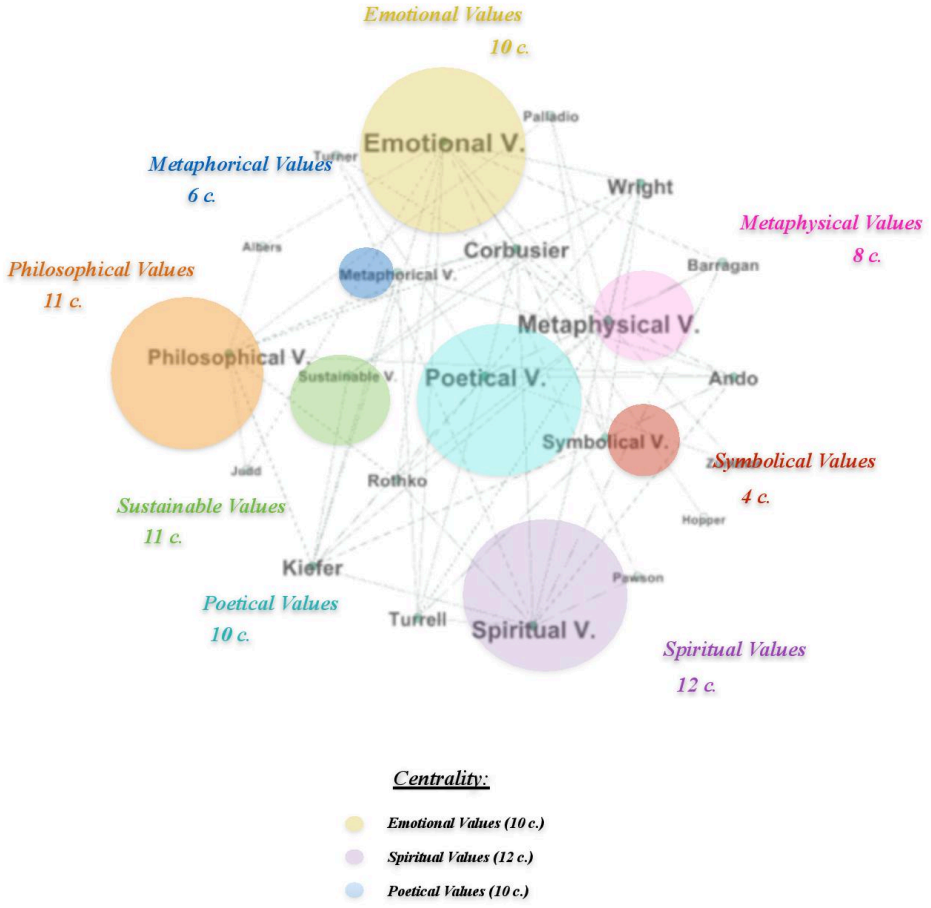


Figure 16: Social Analysis Network, clarifying the Centrality defined by the most used values.

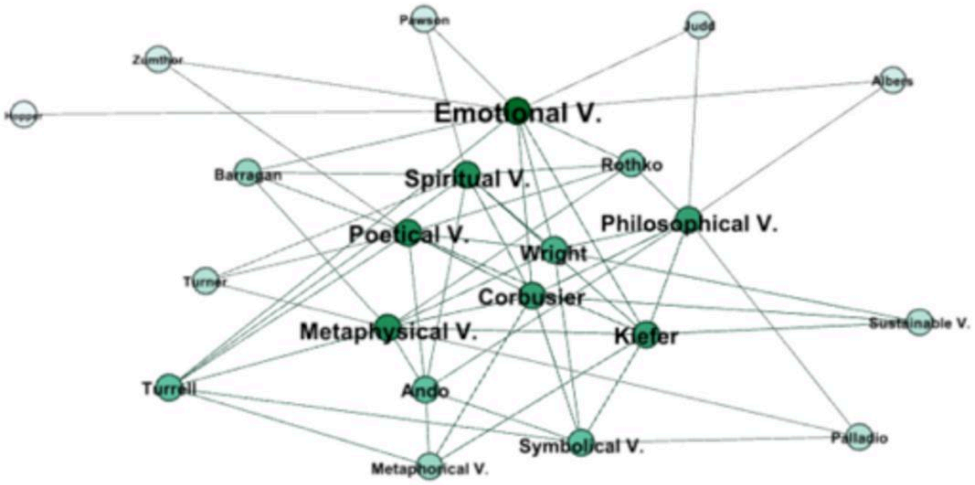
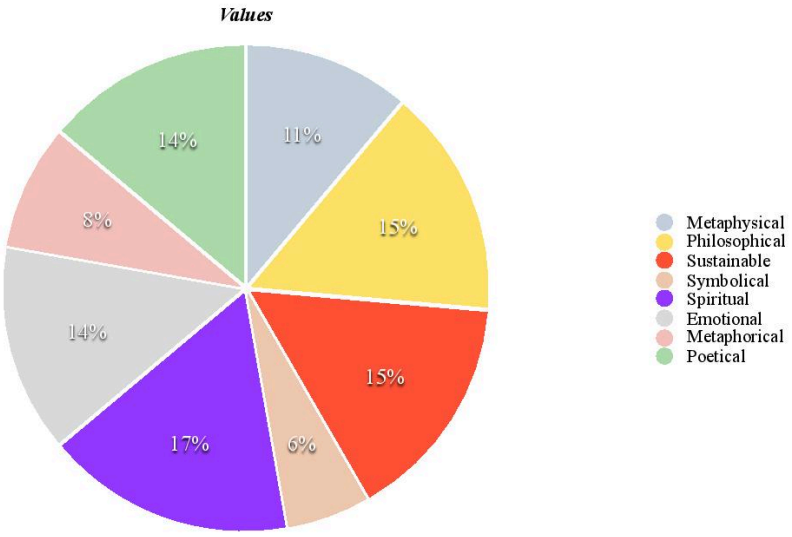


Figure 17: Social Network Analysis of the connections of values and each case study.

Values	*Metaphysical*	*Philosophical*	*Sustainable*	*Symbolical*	*Spiritual*	*Emotional*	*Metaphorical*	*Poetical*
#	*8*	*11*	*11*	*4*	*12*	*10*	*6*	*10*



Graphic 6: Comparative analysis of values used by each study as percentages.

It is possible to define a few aspects pointed out from the observation of the previous three graphics:

- Firstly, that Spiritual Values play a vital role and position, establishing a central position, (used by twelve out of fourteen), defining 17% of the total of values used. As the most used value by all the different case studies, immediately followed by Sustainable and Philosophical Values, (both used by eleven out of fourteen case studies), defining 15% of the total of values used.
- Secondly, that the case studies that establish the most number of connections to most number of conceptual frameworks, defining a central position is Anselm Kiefer (which uses all of the values), followed by Mark Rothko (uses seven of them), which is then followed by Le Corbusier, Tadao Ando, Turner and Turrell, with all use six of the values.
- The conceptual frameworks that establish a central position in the map are: Emotional and Spiritual Values, which are immediately followed by Poetical, Metaphysical and Philosophical Values.
- The least used value by all of the case studies are the Symbolical Values (4 out of 14) defining 6% of the total of values used.
- The second least used value by all of the case studies are the Metaphorical Values (6 out of 14) defining 8% of the total of values used.

At this point, we will analyse each specific value, defining firstly how they are used by each case study, and secondly, arriving at an overall definition of the value.

8.2.4.2. PHILOSOPHICAL VALUES

(a) Synthesis

Philosophical values (or the desire for establishing truth) are present in almost all case studies. Following is a summary of the architectural and artistic case studies that use this value, how they use it and why: these are Andrea Palladio, Frank Lloyd Wright, Tadao Ando, John Pawson and Peter Zumthor, Josef Albers, Anselm Kiefer, Donald Judd and James Turrell.

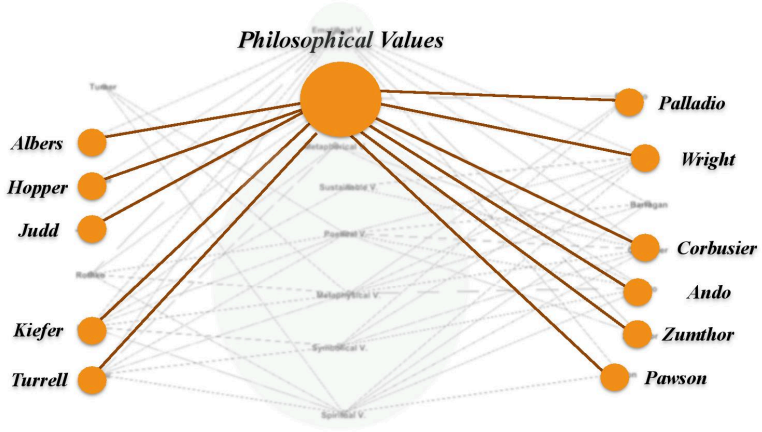


Figure 18: Philosophical Values

(b) Expression and Use of the Value

- ***For Andrea Palladio:*** Architecture is a union between the intangible world of virtue, forms, and heavenly manifestations of the spirit and the pragmatic sensorial world of the body: union of both Platonic ideals (virtue and spirit) and Aristotelian principles (experience and the senses). Thus, it is these two main philosophical systems that define Architecture (once the establishment of shelter is already defined) and that sustain all of creation through reason. His architecture embodies this philosophical duality between the intangible world of spirit and virtue and the material world of nature, senses and forms: his architecture is pulled between two forces: on the one hand the intangible world of spirit and virtue that dictates overall pure, forms, harmonies and proportions (everything that communicates to the spirit) and on the other hand, the material world of nature and the senses that dictates and shapes the physicality of the space, the details of the materials, the textures, the colours and the atmospheres (everything that communicates to the senses). Palladio is also greatly formed by the

philosophies of his time in regards to love, art and spirit that saw a revival of the classical way of thinking, such as Plotino's views. The way these philosophies influence his architecture is that they believed in the trilogy of beauty, truth and goodness working as one; Palladio too, believes that all art and all spaces should embody this trilogy, as a way of connection with the divine.

- ***For Frank Lloyd Wright:*** the belief that architecture and the arts could be part of the universal order of the world and of God, was led by a Platonic understanding of forms and beauty, a transcendentalist view on life and a romantic view of nature (deeply influenced by the philosophical views of the transcendentalists and the romantics). The architect must understand the world created by God, so that architecture can be a part of the whole. Wright's ideas of Nature and of creation, were derived from Emerson and the other Romantics; it is a view where nature has a religious understanding and has a deep complex spiritual value. For Frank Lloyd Wright, deriving from these philosophical views, architecture serves as a mediator that completes nature, filling it with the human spirit and allowing man to perceive a universal harmony and divine order; nature, acquires its meaning in relation to the human soul and to the divine spirit, and needs architecture (man) in order to be complete. These philosophical views greatly shaped the way FLW thinks about architecture, what it should do, and how he creates: architecture, then, should be in tune with the universal order, belong to it, complete it, and aspire to create such a connection that man finds himself closer to God. This view, shaped all the design process, the idea generation phase, and all the design phases; it is the guiding principle that sustains the creation process.

- ***For Le Corbusier:*** the architects role was that, of creating forms in space that affect our senses by provoking 'plastic emotions' (based in geometry and intuition); these, are connected to a sense of an order that is in accordance with the world and generates a specific experience of beauty, affecting both our minds and our hearts; thus, for him, there is a philosophical value that sustains his overall idea of what architecture is, as in order for plastic emotions to affect our senses and our intellects, they need to incorporate and express philosophical ideas (universal order), thus appealing to man's highest faculties.

- ***For Tadao Ando***, architecture too relates very deeply and closely to philosophical values. For him, architecture embodies a philosophy of time, place, existence, of being in the world and of experiencing the spiritual dimensions. It is these philosophical ideals that deeply characterize true architecture and allow for a deep connection to be established. Besides these general philosophies of existence, there is also a deep understanding of the Japanese philosophies as a way of life. The concept of 'nothingness' is a central theme, an essential concept, in Zen thought, perfect state of emptiness is equally equivalent to a perfect state of 'fullness', where 'nothing' is also 'everything'. Another principle from Zen Philosophy, is the idea that everything has a dual nature (body and spirit) and therefore, there should be an awareness of the spiritual within the material, an awareness of the timeless within the self. For Tadao Ando, these philosophical values define what architecture should embody, what it should do, and how it should be created. They guide all decision making process and assure that the creation is endowed with the right qualities and principles.

- ***For John Pawson:*** John Pawson's architecture is also built on a strong philosophical understanding: the philosophical and spiritual concept of simplicity and minimalism that finds its roots its multiple sources: in the Zen philosophies, in Thoreau's quest for simplicity, in the Quakers philosophies, the Buddhists way of life, and the overall Western philosophies that sustain a simple and uncomplicated way of life. The minimum as a philosophical way of life, that Pawson identifies and describes in all spheres of existence, is a philosophical and spiritual quality deeply rooted in the idea that simplicity, depuration and a minimal type os

experience and existence in the world is the most valuable means for living and leads one closer to a spiritual way of life. Overall, it is this philosophical concept that defines all of Pawson's creations and defines his creative process, as well as the emotions and poetry that he embodied in his work. This philosophical value is a backdrop for his belief, goals and aspirations.

- ***For Peter Zumthor,*** architecture is deeply rooted in another philosophical system: that of phenomenology. Phenomenology as a philosophical discipline, the study of structures of experience, or consciousness, is connected to the study of "phenomena" (things as they appear in our experience, or the ways we experience things, thus the meanings things have in our experience) and is also connected to the sensory qualities of our existence. Architecture, then, in the same way, embodies these ideas and views of understanding and perceiving the world: it does so by exploring the senses, by trying to root man into a deeper sense of consciousness, by using tactility, colour and other tools to awaken man's perceptions and by creating an overall evasive quality: the atmosphere. It creates a rich perceptual and emotional experience in order to create a 'phenomena' that awakens consciousness and creates a means for understanding our place in the world. Peter Zumthor's architecture is deeply rooted into this philosophical idea: it shapes his idea of what architecture is, defines the sense of the 'real' and of 'atmospheres' that he aims to create and guides his creative process.

All these six architects use philosophical values as guiding principles, as foundations for their ideas of life and of architecture: they define what architecture is, and guide the understanding of what it should do and how it should do it, therefore guiding the creative process and every decision making of the project.

- ***For Josef Albers:*** underlying art is this philosophical and logical understanding of the properties and systems that allow art to communicate it's messages and allow man to understand the hidden messages of the world. He creates his own philosophical idea, rooted in experimentation and in intuitive observations, that sustains that understanding of the subjective nature of colours, their relationships and their harmonies would ultimately lead man to a better understanding of himself.

- ***For Hopper :*** Philosophical values are incorporated in a unique way; for Hopper the world itself and the human being needed to understand his own innate existential condition. Thus, there is a unique existential philosophy (that can be associated to Heidegger) that deeply permeates in all of his way of thinking and in all of his art.

- ***For Anselm Kiefer:*** Anselm Kiefer roots all of his artistic creations in philosophy, however not exactly in a direct and clear way. For him art is in itself a very complex and philosophical subject of which he echoes the views of Heidegger. But further, he finds in the philosophical questions related to our own existence the motive strength and core concept that defines his work: who are we? What are doing here? And where do we belong? Are just some of the philosophical questions hat sustain Kiefer's work. Therefore, Kiefer's work is very closely related to this philosophical value: it is the value that defines everything in his art, from the way he creates to what he creates, how and why. The driving themes that sustain the work are precisely those existential philosophical questions, materialized in each work as a variation of that theme.

- ***For Donald Judd***, art needed to create a new type of philosophy: one that freed art from all of the previous forms of restraints and conditions that made it be what it was, in a reduced

kind of way. He aimed to create a new philosophy of art, that claimed the object had to be freed into space, and understood as it is: without being a representation of anything else. The object had to be understood as an object, for what it was and for the properties and values it contained. In his depuration to the 'essence' of the thing, allowing for the real 'truth' of the object to emerge, Judd creates a link with not only Platonism and it's quest for the universal world of 'ideas' (the basic world of ideas and forms that define and sustain the universe) but also with Heidegger's ideas of existence and being at its most primal and basic way. Judd is not only influenced by these philosophical systems, but he created his own views on the matter. The definition of this new philosophical idea defined who and what he believed in (as an artist and as a theorist); these views shaped the way he creates, how that creation could emerge, and what it stood for.

- ***For James Turrell,*** there is an underlying philosophical system that is the foundation of his creations, and that is metaphysics: the idea of understanding who we are, and what we are doing here. There is another idea that sustains his creations, and that is Plato's allegory. He believes art's role is to act as a sort of 'light' from the truth: that makes the shadows in the cave and allows man to awaken and follow the light (the truth). This is a simple analogy for a much deeper and complex philosophical thought: one that sustains that man is in the shadows and needs to understand the truth; one that defends that art is way by which the deep and universal truths can be understood. For him, then, all his art is a means of rooting man in his own existence, making him understand the sense of 'being' part of the universe. His philosophical ideas and values guide his creation.

Just as the architects, the artists too use philosophical values as guiding principles, as foundations for their ideas of life and art: either as existential questions (Kiefer), or as the creation of a new philosophy (Judd and Albers), it is the philosophical values that define what art is and every decision making of the artistic process (both intuitively and rationally). Both artists and architecture use philosophical values as a sort of cornerstone and foundation conceptual/existential/metaphysical idea from which art and architecture can grow from.

(c) Considerations on the Value

Philosophical values define who and what the artist/architect believes in, embodies in his/hers actions and aspires to understand; it is a desire for truth. It defines their ideas of what architecture or art should be, what it can do, and how it should do it. It is a motor value that defines the foundations of the self and shapes the views on life, being, art and the universe. It is as a kind of cornerstone that acts as a conceptual/existential/metaphysical idea from which art and architecture can grow from. It defines the belief system at all levels of existence: metaphysical, emotional and spiritual. In regards to how the value operates, it defines what architecture and art should embody, what it should do, and how it should be created; they further guide all decision making process (in general terms) and assure that the creation is endowed with the right qualities and principles. It is the philosophical values, that shape the minds and the hearts of the artists and architects and thus define the whole framework from which the creation will grow from.

Philosophical values as guiding principles, as foundations for their ideas of life and art can further be understood: as existential questions (Kiefer, Hopper), as the creation of a new philosophy (Judd), as an overall metaphysical understanding of life (Turrell), connected to phenomenological understanding of life (Zumthor), as a simplistic and minimalistic understanding of life (Pawson), as a complex system that creates thoughts and emotions through forms (Le Corbusier), or as Platonic understanding of the world (Palladio and Wright). Either way, as demonstrated, it is the philosophical values that define what art is and every decision making of the artistic process (both intuitively and rationally).

Synthesis:

Philosophical values are used as guiding principles, as foundations for the artists and architects ideas of life and of art: they define and guide the understanding of what the artwork and architectural work should do and how it should do it, therefore guiding the creative process and every decision making of the project. It is a motor value that defines the foundations of the self and shapes the views on life, being, art and the universe. It is as a kind of cornerstone that acts as a conceptual/existential/metaphysical idea from which art and architecture can grow from. It defines the belief system at all levels of existence: metaphysical, emotional and spiritual. Overall, it is also characterized by a desire for truth.

MINIMAL PHILOSOPHIES

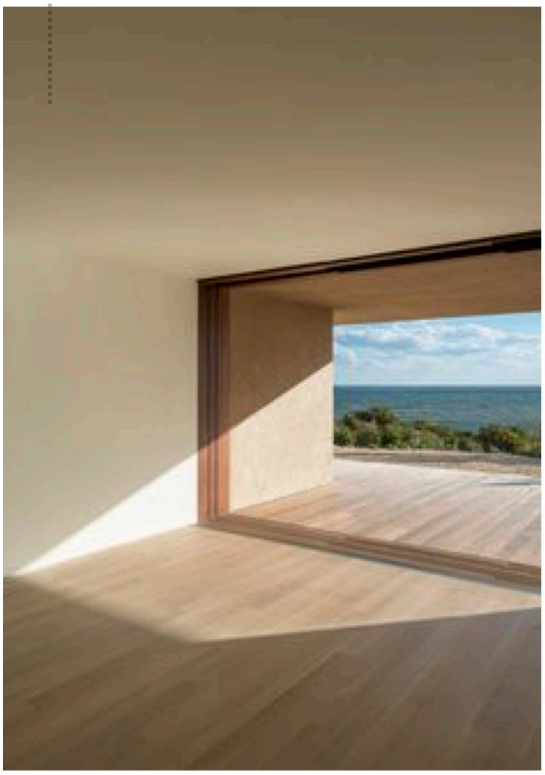
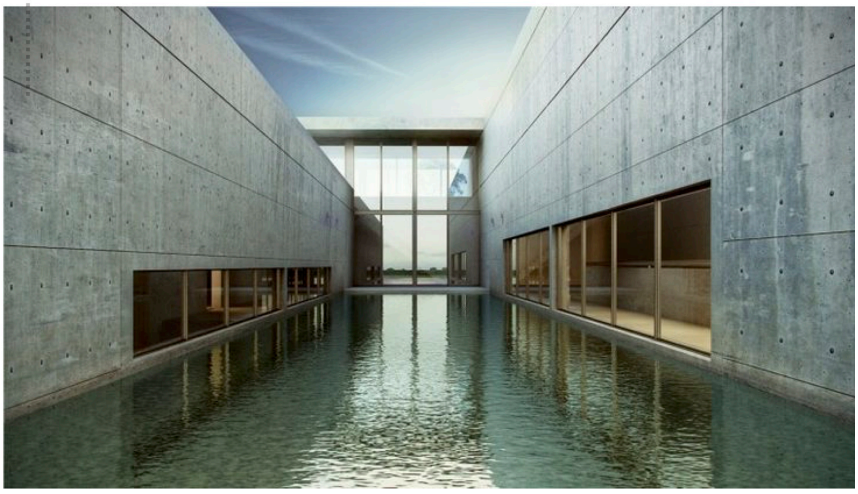


Photo 1: John Pawson, Montauk House; Source: http://www.johnpawson.com/works/montauk-house/; Photo 2: Tadao Ando's Pulitzer Foundation for the Arts, Contemporary Art Museum St. Louis; Source: https://pt.pinterest.com/pin/9499849188369058/; Photo 3:The third-floor studio at Donald Judd apartment, 101 Spring St NY; Source: http://archrecord.construction.com/projects/portfolio/2013/05/1305-Judd-Home-and-Studio-Architecture-Research-Office-slideshow.asp?slide=3;

EXISTENTIAL PHILOSOPHIES: THE SELF WITHIN THE WORLD





METAPHYSICAL PHILOSOPHIES: THE FREED AND LIBERATED OBJECT

PLATE 95: PHILOSOPHICAL VALUES IN THE CASE STUDIES

8.2.4.3. EMOTIONAL VALUES

(a) Synthesis

Emotional values or desires are present in multiple architectural and artistic case studies: these are Luis Barragán, Le Corbusier, Tadao Ando and John Pawson, for the architects; Edward Hopper, Mark Rothko, Anselm Kiefer and James Turrell, as the artists. We will analyse each approach in order to define what we can understand as 'emotional values'.

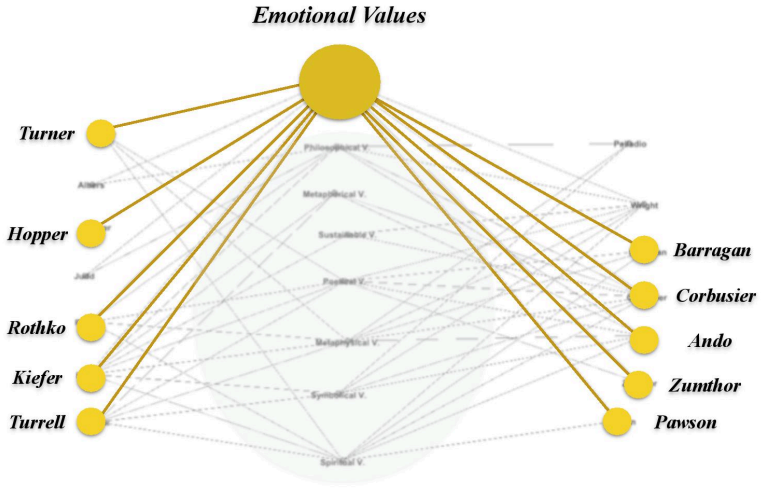


Figure 19: Emotional Values

(b) Expression and Use of the Value

- ***For Barragán:*** architecture should be emotional, and his work is centred around the idea of an emotional architecture. Emotional architecture generates specific emotions: tranquillity, serenity, poetry, stillness, magic and enchantment qualities, creating an 'isolated' sense of utopia that aims to allow man to find his own 'safe haven' in the world and ultimately in himself. For Barragan, in order to make these emotional spaces, it is necessary to understanding the causes of emotions and the root of what makes man be moved. It is this emotional quality, understood also as beauty, that mere architecture is elevated into an art.

- ***For Le Corbusier***, architecture creates what he calls 'architectural emotion' which is: a poetic instance that acts emotionally and powerfully on the senses of man, and exists when the work resonates inside of us and is in tune with the universe. Le Corbusier was indeed deeply interested in provoking emotions and in creating sensations at all levels; architecture doesn't only create an 'architectural emotion' but also is in itself a 'thing of plastic emotion' that should use elements that 'strike our senses' and 'satisfy our visual desires'; plastic architectural elements 'affect us' by specific emotions (such as fineness, serenity or interest) acting on our senses specifically; where as architectural emotion acts on a broader level. For

Le Corbusier, the emotions created through space range from stillness, solitude, happiness, contentment, contemplative, intrigued, discovery, mystery, mysticism, awe, and even resignation. For Le Corbusier, it is this capacity to stir our emotions, communicate psychologically and the ability to create relations that act on our consciousness (putting us in accordance with the laws of the universe) that makes Architecture an Art.

- ***For Tadao Ando,*** for the creation of 'Shinta' (union of the body and the spirit) architecture must create specific emotions of emptiness, contemplation, 'nothingness' and 'stillness'. Ando creates spaces that embody the emotions that define a spiritual life (such as meditation, silence, tranquillity, awe, and solitude), in order to express large ideas and allow man to feel those emotions within himself and understand his own spiritual dimensions. It is through these embodied emotions, that man is separated from the outside mundane world and begins to live in this other/another world where simplicity, contemplation, meditation and awe, are experienced as part of his own condition and therefore he become in tune with the spiritual dimensions of life.

- ***John Pawson*** also states that through his architecture, the embodiment of specific emotions: his spaces embody emotions of stillness, simplicity, isolation, restraint, harmony, emptiness, contemplation and meditation, echoing a simple but meaningful way of life and portraying a world that is at a perfect balance within itself and with the world around it. Through these emotions, he aspires to act on the sensitivity of the spirit of man. He achieves these emotions not only by the guidance of the principle of the minimum as a spiritual concept but also by the innate idea of poetry. For John Pawson, creating 'empty space' as emotion and poetry is a metaphor for our own existence; together, both act as spiritual values.

- ***For Peter Zumthor,*** architecture is also connected to emotion is a different way; he believes that by creating a sense of the experience of 'reality', by exploring the tactile and sensory qualities of materials and space, that is immersed in real life, by awakening the senses through a sensuous connection, in memory and in culture, generates multiple emotions in the viewer. These emotions are rich and diverse and act as a trigger to consciousness. They are emotions of awe, suspense, mystery, contemplation, meditation and silence. He strives to achieve a deeper connection with the viewer, one that 'moves' him and communicates at various emotional levels.

As a synthesis, architects consider that architectural emotion is the embodiment of emotions within the architectural space that allows for the development of consciousness and the union of the body and spirit. Next is an analysis on the artists views.

- ***For William Turner,*** it is the creation of emotions, understood through the idea of abstraction and landscape, that grants art its value. The landscape itself contained an emotional condition, that served as a premise to capture and portray those emotions to the viewer.

- ***For Edward Hopper,*** it was through human emotions that we could better understand the human condition and it's emotional framework that defines the spirit and soul; therefore his art was fuelled by the desire to re-create, define and embody human emotions, making the viewer perceive them in deeper ways. The emotions most explored by Hopper are: melancholy, honesty, vulnerability and intimacy, captured by a mystery and dream like quality. It is this rich composite layer of emotions and feelings that grant Hopper's work his unique depth and that allow for the viewer to empathize and generate similar emotions within him.

- ***For Rothko,*** art is the expression of human emotions: for it reflects the human spirit. Through the embodying and representation of those emotions, the viewer is confronted with the multiple emotions of his own human life, and in feeling them, awakens to a higher understanding of life. Emotions were the link between man's world and intangible world of the spirit. Rothko uses all of human emotions in their wide and complex range, such as happiness, bliss and melancholy.

- ***For Anselm Kiefer***, emotions are part of the way we create new connections in life and in art; for him, emotions possess an intensity and a complexity that is derived from a combination of multiple factors such as occurs in poetry. It is emotions that is at the root of those universal intensities he tries to comprehend and define: emotions of smallness, of belonging, of connection… he also explores the emotions of longing, separateness, and union. These emotions are part of his metaphysical and cosmological understanding of the world and are deeply rooted in the coming to awareness of consciousness.

- ***For James Turrell,*** it is through the experience of intense emotions that this deeper understanding of life can emerge; encounters, unique experiences, trigger and awaken emotions of: contemplation, meditation, peace, stillness, shock, understanding, etc. and allow man to connect with himself and with the world of metaphysical existence.

In short, artists (just like the architects) consider that the artistic emotion (the embodiment of emotions) grants art it's value, and allows for the development of consciousness and the union of the body and spirit.

(c) Considerations on the Value

Emotional values can generally be understood, as the desire to create specific emotions, the embodiment of emotions in the creation, in order to generate those emotions in the observer, thus, allowing them to grow in consciousness.

In Architecture we find the emotional values have a very strong emphasis and are revealed as possessing a great importance. This emotional value is present as: a belief in an 'emotional architecture' (Barragán), the creation of an 'architectural emotion' (Le Corbusier and Tadao Ando) or as creating an emotional reaction in the viewer (Zumthor); all of them sustain the belief that architecture embodies and generates multiple emotions (rich and diverse) through a kind of a poetic instance that acts on consciousness and spirit. It is these emotional values that elevate architecture to an art (Barragán and Le Corbusier), act on the sensitivity of the spirit of man (John Pawson), promotes consciousness (Zumthor) and allows for the union of the body and the spirit (Tadao Ando). Architecture embodies emotions that echo mystery and enchantment (Barragan), promote stillness and meditation, echoing a spiritual life (Tadao Ando and John Pawson) or emphasize awe, imagination and discovery (Le Corbusier and Peter Zumthor). Architectural emotion is also related to poetry, for it not only derives from a 'poetic instance' (Le Corbusier) but is also associated to the 'poetical idea' (Pawson); together, emotion and poetry both act as spiritual values (Le Corbusier, Pawson, Barragan and Tadao Ando). These 'architectural emotions' allow man to find his own 'safe haven' in the world and ultimately in himself (Barragan), act emotionally

and powerfully on the senses and spirit resonating inside of us (Le Corbusier), creating relations that act on our consciousness (Zumthor) putting us in accordance with the laws of the universe (Le Corbusier), allow for an understanding of the spiritual dimensions by promoting a union of body and spirit (Tadao Ando) and act on the sensitivity of the spirit of man by creating a perfect balance within the self (John Pawson).

In Art, the emotional value is also present as a strong and vital quality of great importance. Artists believe in the creation and embodying of emotion in order to create an identical emotional reaction in the viewer and awaken deeper levels of existence. It is the emotional framework (human emotions) in art that: defines and captures the spirit and soul (Hopper), reflects the human spirit (Rothko), creates new connections in life (Kiefer), is at the root of cosmological universality (Kiefer). Artistic emotions that are used are: honesty, vulnerability and intimacy (Hopper), happiness, bliss and melancholy (Rothko), smallness, belonging and connection (Kiefer), and lastly, contemplation, stillness and understanding (Turrell). These emotions can either be explored individually, or together, but in most cases, they are explored in their complexity and in associations. It is this artistic emotion that allows for: a deeper understanding of life to emerge (Turrell), a coming to an awareness of consciousness (Turrell), man to connect with himself and with the world of metaphysical existence (Turrell), an awakening into a higher understanding of life (Rothko), a link to be established between man's world and intangible world of the spirit (Rothko).

Both artists and architects, share the same views on this 'emotional value' and both materialize it in the same way: by embodying emotions within the work, and allowing those to communicate with the viewer at deeper levels of existence. These emotional considerations are values because they are firstly present as guiding motors in their creators.

Synthesis:

Emotional values are considered to be from both artists and architects, the one aspect that communicates grants art it's value, and allows for the development of consciousness and the union of the body and spirit. In art it was seen that the emotional framework (human emotions) defines and captures the spirit and soul (Hopper), reflects the human spirit (Rothko), creates new connections in life (Kiefer), is at the root of cosmological universality (Kiefer). Architectural emotion, similarly, is related to mystery and enchantment (Barragan), promotes stillness and meditation, echoing a spiritual life (Tadao Ando and John Pawson) or emphasizing awe, imagination and discovery (Le Corbusier and Peter Zumthor). Architectural emotion is also related to poetry, for it not only derives from a 'poetic instance' (Le Corbusier) but is also associated to the 'poetical idea' (Pawson); together, emotion and poetry both act as spiritual values (Le Corbusier, Pawson, Barragan and Tadao Ando). In both cases, emotional values are at the core of the creation process, and allow for a link to be established with consciousness, promoting a union of body and spirit.

EMOTION OF CONTEMPLATION AND STILLNESS FROM DARKNESS AND INTROSPECTION



EMOTION OF CONTEMPLATION AND STILLNESS FROM DARKNESS AND INTROSPECTION



EMOTIONS OF SMALLNESS AND BELONGING

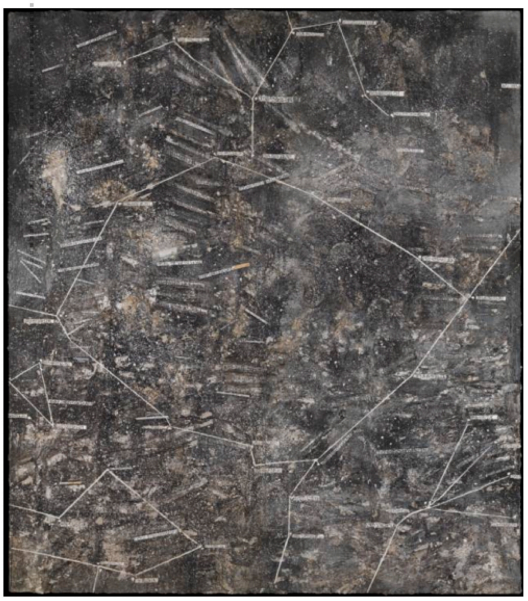


Photo 1: Automat, 1927, 71.4 cm × 91.4 cm; Source: https://en.wikipedia.org/wiki/Automat_(painting); Photo 2: Interior Space of the chapel; Source: http://en.wikiarquitectura.com/index.php/File:Bruder_Klaus_34.jpg; Photo 3: 'Cette obscure clarté qui tombe des étoiles' (1999), dimensions: 3400 x 1650 x 1100 mm, materials: acrylic paint, oil paint, shellac, earth, sand, wood, paper and glass on two canvases, lead, iron, books and other material.; Source: http://www.tate.org.uk/art/artworks/kiefer-cette-obscure-clarte-qui-tombe-des-etoiles-ar00041

PLATE 96: EMOTIONAL VALUES IN THE CASE STUDIES

8.2.4.4. SPIRITUAL VALUES

(a) Synthesis

Spiritual values are present in multiple architectural and artistic case studies: these are, Andrea Palladio, Frank Lloyd Wright, Luis Barragán, Le Corbusier, Tadao Ando and John Pawson, for the architects; William Turner, Edward Hopper, Mark Rothko, Anselm Kiefer, Donald Judd and James Turrell, as the artists.

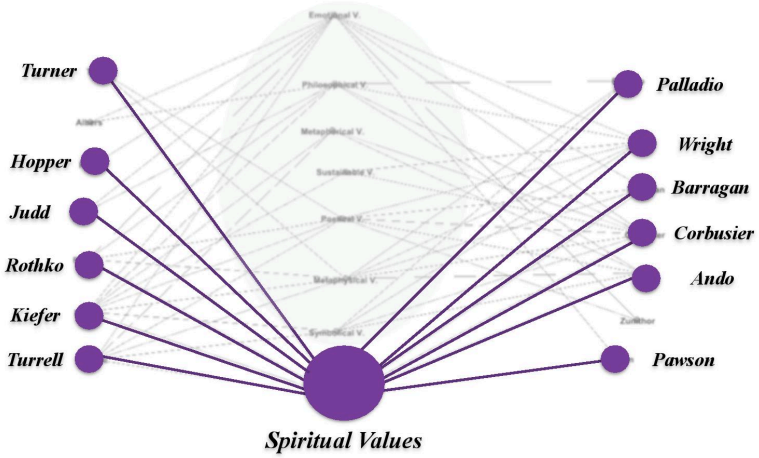


Figure 20: Spiritual Values

(b) Expression and Use of the Value

- ***For Andrea Palladio,*** architectural spaces aimed to communicate virtue, wisdom and truth, and to elevate man into a higher dimension of spiritual life. His architecture is a pursuit for that which is harmonious, universal and spiritual using proportions (derived from nature, music and number) to create an ideal of life, virtue and spirit.

- ***For Frank Lloyd Wright***, architecture strives to achieve, a union between Man, Place, Nature and Spirit, between the physical material dimension of man and the spiritual dimensions of God; to promote a reconciliation between man and a kind of 'lost paradise'. Architecture should see and understand Nature as spiritual, and the artist/architect should always turn to Nature for inspiration (in Nature are the 'codes' and 'principles' by which God creates). Architecture, then belongs to this spiritual world, and in being an extension of it, allows man to belong there too. But Wright's spiritual values also have another criteria: they are deeply rooted in Unitarian Religion: The Unitarians believed in the unity between all things, searching for a sacred meaning that exists despite of the all the world religions, believing that science was a necessary tool for attaining truth and that no doctrine should be imposed in its 'supporters'. All these views and principles deeply influenced Frank Lloyd Wright's vision of the world and of architecture defining his spiritual values.

- ***For Barragán,*** Architecture should create tranquillity and serenity at a spiritual level, allowing man to find peace within. It is through emotion that man can find peace in his soul, and have a broader understanding of his own spiritual life. The use of colour and light creates a mystical and spiritual architecture and atmosphere.

- ***For Le Corbusier,*** architecture as a pursuit of that which is universal and that speaks to the spirit of man, has a deep spiritual value at it's very core. Spirituality, the communication of values and principles to man's spirit, is what defines architecture's primal aims. Therefore, the whole architectural space is constructed and created in accordance with this goal: and every stage of the creation is guided by this idea. Forms, shapes, symbols and ideas, act on man's spirit and shape his spirituality.

- ***For Tadao Ando,*** architecture responds to both psychological and spiritual dimensions: it allows for transference of the self to a spiritual dimension. Ultimately, Tadao Ando's spaces aim to provoke an 'epiphany' of the absolute void of God and our place in the universe. By creating an architecture that embodies spiritual values and spiritual emotions, spaces communicate and resonate in the spirits and souls of the viewers; like any art, he stimulates the human spirit and the soul by awakening the sensitivity and emotional levels that are otherwise silent.

- ***For John Pawson***, through architecture man is able to create a link into another dimension: one of spiritual wholeness. Simplicity and Minimalism are in itself a spiritual type of depuration, a cleansing of the superfluous and a focus on what really indeed matters and is meaningful, establishing a deeper spiritual connection. These ideas that are rooted in Pawson's architecture, grant it a spiritual dimension from the very origin of the very first thought. Also, spiritual values emerge as the combination of emotional values and poetical ones.

Architects have strong spiritual roots in their creations. For them the spiritual dimensions are incorporated into the creation: the creation should possess spiritual values in itself. Spiritual aspects thus are taken into account, in order to communicate, through architecture to man's spirit.

Now for the artists:

- ***William Turner*** saw in his 'abstract' art (using colour, light and harmony as his 'foundation systems') the means by which spirituality and God could be made manifest. Turner was striving to capture the expression of spirituality in the world. He wished to re-create the power of God on earth through his art, and he found that power to be most manifest in intense/rare natural manifestations (such as rainbows, snowstorms, sunsets). Painting, thus, was a means of capturing and conveying God and the 'spirituality' emanation that came through nature. His artworks then were imbued with spiritual values at multiple levels: firstly as an idea and a goal, and secondly as a guiding motor for his creative process and decision-making.

- ***For Edward Hopper***, the creation of a type of universal existentialism, a 'window' into the metaphysical and emotional life, also reflects an innate spiritual condition of life. However for Hopper, the metaphysical values that catered to our own existence, were more of a focus point of the creation, than the spiritual values that could derive from them.

- ***For Rothko,*** art could create a spiritual connection within the viewer because it contains those spiritual truths within itself, and is an embodiment of that spiritual experience. He

aimed to represent what he considered to be the most pure and timeless condition of human life: that of the spiritual life. His creations are windows through which the viewer can find a state of consciousness and contemplation that allows for a spiritual connection.

- ***For Anselm Kiefer,*** spirituality is a condition of the metaphysical value; in understanding his own metaphysical existence, the immersion in an absence of time, the place of man in all the history of the universe, man becomes more in tune with his consciousness and with his spirit. Spirituality emerges naturally, and is not a value that is emphasized in itself, individually. However, to understand our place, our consciousness, our fates, is like a religion (says Kiefer) and does create a place where the spirit is alive.

- ***For Donald Judd***, there is an underlying spirituality to space and to the object that is true. The object creates a more complete form of existence within the space. Although there is no reference in his words about spirituality, it is clear, that there is a search for a more complete type of existence, that allows for our own spirituality to be 'awakened'.

- ***For James Turrell,*** Light is spiritual and acts as a revelation on man. Light then, this spiritual entity should be emphasized and accentuated in order for man to understand his own spiritual place in the universe. It is through light that man understands that truth.

For the artists spiritual values are also of vital important. They aim to reflect, in art, an innate spiritual condition of life, to capture the expression of spirituality in the world or even to understand the spiritual dimensions of the universe, through art.

(c) Considerations on the Value

Spiritual Values can generally be understood as the creation of a connection to a spiritual life, to the divine, and to man's soul; through the artistic and architectural creation, that embodies and recreates those spiritual ideas, emotions and views within itself, man becomes in tune with his own spiritual dimensions.

In architecture, spiritual Values are considered to be an architectural aim, they are deeply rooted in one of architecture's main goals: to communicate virtue, wisdom and truth, and to elevate man into a higher dimension of spiritual life (Palladio), to achieve a union between nature, man and God (Wright), to create tranquillity and serenity at a spiritual level (Barragan), to communicate spiritual values and principles to man's spirit (Corbusier), to allow for the transference of the self to a spiritual dimension (Ando), to create a link into another dimension: one of spiritual wholeness (Pawson). Spiritual Values are rooted in a strong spiritual idea of life: for Palladio they are rooted in Platonism, for Wright in Unitarian Religion, for Tadao Ando it is Japanese philosophies and spiritual aesthetics and for John Pawson, it is minimalism and simplicity as a spiritual understanding. In order to make architecture fulfil it's spiritual aims, architects use similar techniques: following nature's principles (Palladio and Wright), using emotion so that man can find peace in his soul and have a broader understanding of his own spiritual life (Barragan), using forms, shapes, symbols and ideas that act on man's spirit and shape his spirituality (Le Corbusier), by embodying spiritual values and emotions through space it resonates in the spirits and souls of man (Ando), by combining emotional values and poetical ones (Pawson).

Overall, there is the underlying belief that architecture belongs to the spiritual world, by embodying principles, values, emotions or ideas, and in being an extension of it, allows man to belong there too, elevating him into a higher spiritual life.

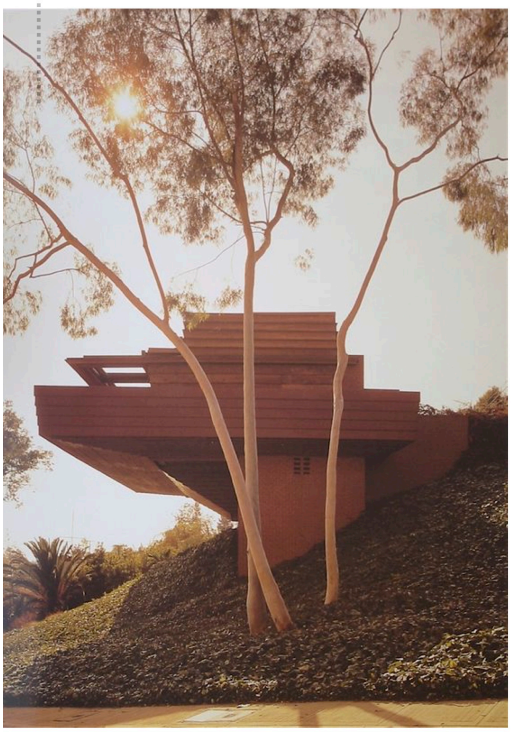
In Art, spiritual Values are also considered to be an artistic aim: to make God and spirituality manifest (Turner), to capture the expression of spirituality in the world, to re-create the power of God on earth (Turner), to reflect an innate spiritual condition of life (Hopper), create a spiritual connection within the viewer and represent the spiritual life (Rothko), to allow man to be more in tune with his consciousness and with his spirit (Kiefer), to allow for our own spirituality to be 'awakened' (Judd), to allow man to understand his own spiritual place in the universe (Turrell).

They are materialized in multiple ways: through the manifestation of intense/rare natural events, such as rainbows, snowstorms, sunsets, (Turner), through the combination of metaphysical and emotional life (Hopper), through the embodiment of spiritual truths and the spiritual experience (Rothko), through the understanding of metaphysics (Kiefer), through the creation of a more complete form of existence within the space (Judd), through the use and understanding of light as a spiritual entity and as a revelation (Turrell). In all, spiritual values allow for man to find a state of consciousness and contemplation that creates a deeper spiritual connection (Rothko); it allows man to find a place where the spirit is alive (Kiefer). They derive from an aim of art itself, to represent the spiritual life and create a connection with consciousness and spirit.

Both in the artists and the architects there is the exact same underlying goal, idea and methods as to understanding and using spiritual values.

Synthesis:

Spiritual values are both incorporated into the creation and define the overall aim of the artwork or of the architectural space: to make God and spirituality manifest (Turner), to capture the expression of spirituality in the world, to re-create the power of God on earth (Turner), to reflect an innate spiritual condition of life (Hopper), create a spiritual connection within the viewer and represent the spiritual life (Rothko), to allow man to be more in tune with his consciousness and with his spirit (Kiefer), to allow for our own spirituality to be 'awakened' (Judd), to allow man to understand his own spiritual place in the universe (Turrell), to communicate virtue, wisdom and truth, and to elevate man into a higher dimension of spiritual life (Palladio), to achieve a union between nature, man and God (Wright), to create tranquillity and serenity at a spiritual level (Barragan), to communicate spiritual values and principles to man's spirit (Corbusier), to allow for the transference of the self to a spiritual dimension (Ando), to create a link into another dimension: one of spiritual wholeness (Pawson). Both architects and artists consider spiritual values to be at the core of the creation and define the aim of *art itself, to represent the spiritual life and create a connection with consciousness and spirit.*



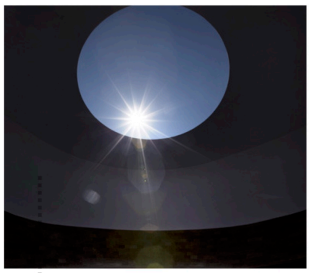
GOD IS IN THE BALANCE WITH NATURE



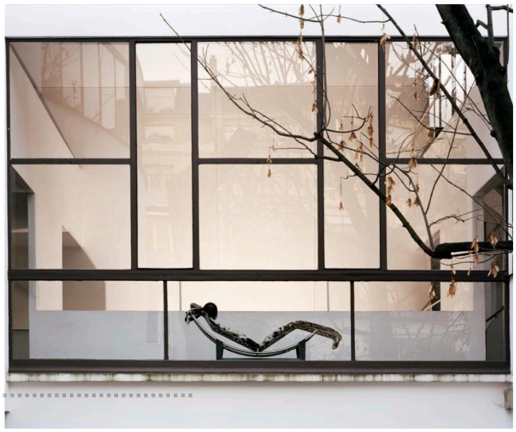
EMPTINESS IS GOD



THE SPIRIT LIVES THROUGHT THE TRAGIC AND THE TIMELESS



ALWAYS TURN TO THE HEAVENS



ART SPEAKS FOR THE SPIRIT

Photo 1: The Langen Foundation by Tadao Ando, 2004; Source: http://www.arcspace.com/features/tadao-ando/langen-foundation/; Photo 2: Frank Lloyd Wright. Sturges House. Usonian style. Brentwood, California, 1939; Source: https://pt.pinterest.com/pin/251075747955023813/; Photo 3: Untitled, 1969, oil on canvas; Source: http://www.wikiart.org/en/mark-rothko/untitled-1969-1; Photo 4: James Turrell skyspace; source: http://www.atlantico.fr/rdv/atlantico-grand-large/voyage-mesure-dans-art-et-etoiles-arizona-quentin-desurmont-778246.html; ; Photo 2: outside window of the Villa Roche; Source: http://www.fondationlecorbusier.fr/corbuweb/morpheus.aspx?sysName=redirect150&sysLanguage=en-en&IrisObjectId=8286&sysParentId=150

PLATE 97: SPIRITUAL VALUES IN THE CASE STUDIES

8.2.4.5. POETICAL VALUES

(a) Synthesis

Poetical values are present in multiple architectural and artistic case studies: these are Luis Barragán, Le Corbusier, Tadao Ando and John Pawson, for the architects; Edward Hopper, Mark Rothko, Anselm Kiefer and James Turrell, as the artists.

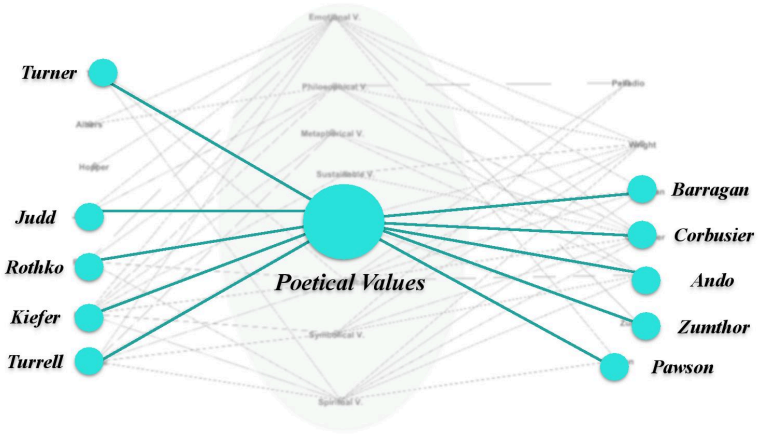


Figure 21: Poetical Values

(b) Expression and Use of the Value

- ***For Barragán*** Architecture can convey the most poetic and beautiful idea possible of the passing of time ('beautification by time'), creating a 'depth' of life. It is architecture as a reconciliation between all the elements of existence that allows for a poetical encounter to emerge, by communicating poetic emotions.

- ***For Le Corbusier,*** poetical values arise from the various stages of creation with the aim of communicating to man's spirit. It is through poetry that man reconnects with his consciousness. He aimed to create poetic moments: so intense that it allowed for a flow of 'sacred' life to find a space to occur. Because architecture's emotional elements create a poetic encounter, there is a close connection between the emotional and the poetical values.

- ***For Tadao Ando,*** poetry (and metaphor) is the tool that allow him to express his goals and convey universal truth's. Architecture as poetry creates moments and specific atmospheres creates a condensation of substances and allows for poetical encounters to emerge (the use of high contrasts, of shade and darkness and statement 'awe' moments). These poetical moments, allow for a rich communication between the self and the space, and for the communication of messages that are communicated promoting human consciousness.

- ***For John Pawson*** poetry is a result of the overall architectural process, and is deeply connected to the emotional values. Poetry is expressed through the coordination of the materials, the proportions, the sense of light and darkness that is very controlled, the change of textures and even the flooding of white and subtle shades of ochre's. All these elements combine together as a whole, creating this idea of 'empty space', that is indeed very rich in emotional value and poetical ones. These two values combined give birth to another value: that of a spiritual existence.

- ***For Peter Zumthor,*** poetry is a condition that emerges naturally. The rich, textural and material spatial experience originates a specific 'poetics', making a mysterious aura that 'seduces' the viewer in an immersive experience. Architecture as atmosphere is a deeply poetic and rich experience that immerses the viewer. Poetry is not considered as a property or a desire, but instead is a result of the whole process.

As a résumé, for the architects, poetry is a value that is of the utmost importance in establishing a deep connection with man's spiritual conditions; it is connected to emotional values and to metaphorical ones (Tadao Ando) and elevates human consciousness (Le Corbusier).

As for the artists:

- ***For Turner,*** poetry is an underlying quality that emerges in the work itself, as a combination of all other values. Although he does not describe poetry in his work, this understanding emerges from the analysis of his works. Poetry is his work is a subtle essence, carried throughout the whole as atmosphere.

- ***For Rothko***, poetry is expressed silently; it is not a main objective, neither is it the drive of his work, however through the balance of colours and the creation of these metaphorical emotions, the striving towards a metaphysical, emotional and spiritual life, there is an underlying sense of the poetical that comes through and emerges naturally.

- ***For Anselm Kiefer,*** Poetry, is not only a thematic reference that drives the creative process but further more, it is a vital condition of the artwork itself; a precondition for its artistic meaning, as an echo of Heidegger's views on art. Poetry belongs to the artwork, at all stages of creation and interpretation. For Kiefer, a poem is like 'a diamond', it is 'concentrated energy', and the poem, is an alive substance, that is used in the painting not only as an influence but as a complex and mystical theme. As such Kiefer echoes some poems meaning in his painting's, some are very clear, whereas others are not definite, but poetry is one the motive forces for creation.

- ***For Donald Judd***, there is an underlying poetic understanding of space and of the object. The object as an addition to space, adds other qualities, including poetical ones. By introducing a foreign object, (that reflects, that is large, or that is colourful) in a certain specific way, poetry arises. These poetical qualities, occur as strange encounters, but are characteristic of Judd's work.

- ***For James Turrell,*** work is filled and infused with a poetical understanding of life: it is not only that life can be poetical, but that to create poetical encounters, is to give the being part of his self: his own place in the universe. Through poetry, (gazing at stars, shades of blue, creating a 'space' in the midst of 'nowhere', specific angles and colours, specific accents and materials), Turrell manages to echo that transcendental harmony of the universe and make a metaphysical poetical understanding of the universe emerge.

For the artists, poetry is a more of an operative value: it can explore poetical conditions, encounters, circumstances and qualities. It is a underlying quality that permeates in the work. Above all, it is considered a vital condition of the artwork itself.

(c) Considerations on the Value

Poetical Values can generally be understood as the creation of a poetical encounter that establishes a deep connection with man's conscious and with his spiritual dimensions. Poetry is generally understood as a frail and intangible essence, that both frames the artists and architects creation process as a goal and that is contained in the work itself.

For the architects, poetry is: a condition that that emerges naturally (Zumthor), a result of the overall architectural process be connected to emotional values (Pawson), understood as the creation of specific atmospheres as a condensation of substances (Ando); it arises from the various stages of creation with the aim of communicating to man's spirit (Le Corbusier) and it can conveys the most poetic and beautiful ideas (Barragan). It is connected to emotional values and to metaphorical ones (Tadao Ando). Overall, for the architects, poetry is a value that is of the utmost importance in establishing a deep connection with man's spiritual conditions; it is connected to emotional values and to metaphorical ones (Tadao Ando) and elevates human consciousness (Le Corbusier).

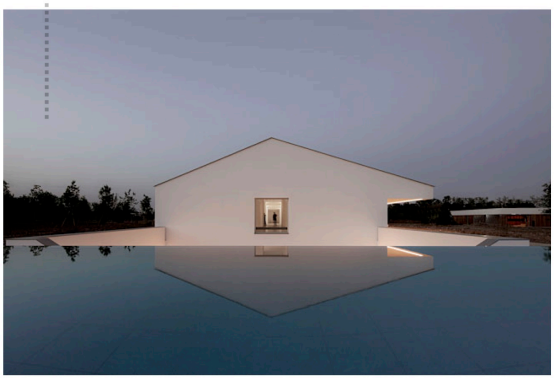
For the artists, poetry is explored as a concept and as innate condition of art. For them, poetry can be expressed in multiple ways: it can be a result of the combination of the other values (Rothko), it can be a driving force of the creation (Kiefer) it can be expressed as an intense experience (Turrell) and it can be understood as a quality (Judd)). For the artists, poetry is a more of an operative value: it can explore poetical conditions, encounters, circumstances and qualities. It is an underlying quality that permeates in the work. Like so, it is considered a vital condition of the artwork itself.

For both artists and architects, there is the underlying idea that it is the value of poetry that establishes a deep connection with man's spiritual conditions and elevates human consciousness (Le Corbusier), that it connects to emotional and spiritual values, and that it emerges naturally, as an intangible essence, as a result of other values.

> ***Synthesis:***
> *Poetical values can generally be understood as the understanding of a frail and intangible essence that both frames the artists and architects creation process as a goal and that is contained in the work itself, as the creation of a poetical encounter that establishes a deep connection with man's conscious and with his spiritual dimensions. The value of poetry establishes a deep connection with man's spiritual conditions and elevates human consciousness; it both connects to emotional and spiritual values, and emerges naturally, as an intangible essence, as a result of other values.*



THE WORLD IS PURE AND A SAFE HAVEN





KNOWLEDGE GIVES WINGS (FREEDOM)



Photo 1: Garden design and architecture, Casa Ortega, Mexico City; Source: Sarah Frances Dias Photography, photos taken by the Author.; Photo 2: John Pawson's Casa delle Bottere; Source: http://poeticglance.com; Photo 3: James Turrell, Roden Crater; Source: http://cargocollective.com/flatsurface/following/flatsurface/Roden-Crater-James-Turrell; Photo 4: Book with Wings, Anselm Kiefer ; Source: http://www.allaboutartschools.com/directory/artists/websites/images/kiefer_bookwithwings.jpg

PLATE 98: POETICAL VALUES: POETICS, METAPHORS AND SPACE

8.2.4.6. SUSTAINABLE VALUES

(a) Synthesis

Sustainable values are present in multiple architectural and artistic case studies: these are Andrea Palladio, Frank Lloyd Wright, Luis Barragán, Le Corbusier, Tadao Ando, John Pawson and Peter Zumthor, for the architects; Josef Albers, Mark Rothko, Anselm Kiefer and James Turrell, as the artists. After this analysis, we will draw ideas that define the present value.

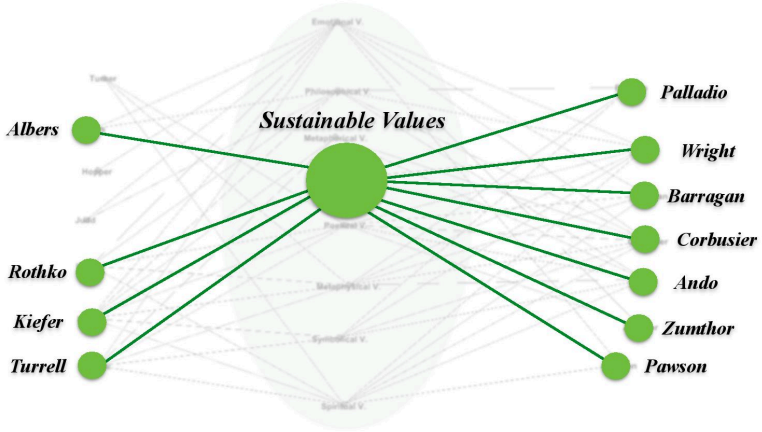


Figure 22: Sustainable Values

(b) Expression and Use of the Value

- ***Andrea Palladio's*** sustainable values in architecture are based in the ideal that good architecture has a moral obligation to transform man's life and allow him to connect to the most virtuous sides of his own existence. As a 'manifestation of virtue', architecture can inspire man and make man's spirit rise towards the 'virtues' materialized through architecture.

- ***For Frank Lloyd Wright,*** creations are outward manifestations of an all-encompassing spiritual unity whose name is God; therefore, it was the architect's duty, as the creator, to be a part of that unity and to embody those principles, so that man can evolve into other realms of existence.

- ***For Barragán***, architecture creates for man's spirit to find peace and tranquillity from the world; he creates a cosmos, a home, a spiritual shelter filled with emotions that allow man to find his place in the world. This is precisely what defines his sustainable values: the idea that man needs to find a place where he can feel at 'home' in order to grow psychologically, emotionally and spiritually.

- ***For Le Corbusier,*** because architecture aims to connect to the spirit of man, there is this idea of communicating emotions and principles that can help man re-encounter his own consciousness: that can help him grow and expand.

- ***For Tadao Ando,*** architecture through it's spaces strives to create a connection between the self and it's spiritual higher self, and allow man to understand his own spiritual dimension and

thus, to develop spiritually; therefore, his sustainable values are present as an innate desire to allow man to grow and expand his own awareness.

- ***For John Pawson***, there is a driving sense of spiritual sustainability that is embodied in his work: he believes that simplicity, possesses a moral dimension that implies the notions of 'selflessness' and 'unworldliness' and can be communicated to the viewer. He strives through simplicity in architecture to establish a bridge into man's spiritual dimensions, making him more 'at peace' in himself and in the world.

- ***For Peter Zumthor***, his sustainable values are manifest in his deep desire to allow man to be rooted in the world, and to understand his own existential condition. Through establishing a deep emotional and poetical connection, the user is immersed into another dimension, awakening into a more 'connected' type of existence. Architectural space allows for the emergence of a sense of reality, of self, identity and memories, by rooting the being in the physical and 'real' world with the viewer, promoting a more sustainable existence.

Essentially, for the architects, sustainable values are considered to be a duty that the architect has, as the creator, to be part of a universal unity and to embody principles that can communicate to man, creating a connection between the self and it's spiritual higher self. Now for the artists:

- ***For Josef Albers,*** art possesses this idea of a sustainable value in the sense that it helps the viewer realize his own misconceptions of the world and realize the 'mistakes' of his own perceptions. He believed even knowledge could be deceptive and so man had to learn to trust intuition, insight and vision. It is through our imagination based on geometry and order, as summarized in art, that man can begin to understand truer values about the world and about himself.

- ***For Rothko,*** his sustainable values emerge through the idea that art has a duty of being like the classical 'tragedy' and enable man to feel emotions that he hasn't felt. In doing so, man is transformed from the inside out, letting him open up to more spiritual and emotional levels of his own existence.

- ***For Anselm Kiefer***, it is a sustainable value to portray man's longing for eternity and for the metaphysical existence and understanding; producing new connections and new meanings lead man to understand his place in the universe, and his own existential and metaphysical existence, promoting an evolution of humanity.

- ***For James Turrell,*** sustainable values emerge in his desire to create a perceptual and emotional experience that 'awakens' the viewer from his usual day-to-day condition, 'shaking' him into another reality. This shift of both perception and experience has a deep impact in the being at other levels of existence: such as psychological, emotional and spiritual levels. In other words, shifts of physical perception 'jolt' the being awake and transform him at his own core. This idea of a transformative experience that awakens the being into a realm of 'truth' has a parallel with Plato's cave allegory.

Both artists and architects believe that art and architecture are based in the aim of creating an immersive experience allowing man to grow at all levels of existence. Thus, there is the underlying desire to create a more sustainable world and a more sustainable human being, that is in contact with all sides of his existence, including his higher self and his soul.

(c) Description of the Value

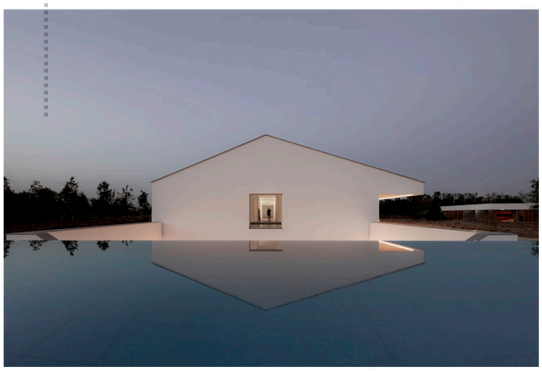
Sustainable Values can generally be understood as the desire to create experiences and perceptions that enable man to expand his own ideas emotions, self and place in the world. They are defined by a desire to help humanity evolve and change, psychologically, emotionally and spiritually, promoting a more sustainable existence. Architectural sustainability is defined by: the idea that it is the architect's duty, as the creator, to be part of a universal unity and to embody those principles (Wright), the idea that there is a moral obligation of architecture and of the architect to transform man's life (Palladio), the idea that it can and should connect to the spirit of man (Le Corbusier), the idea that it's aim is to create a connection between the self and it's spiritual higher self (Ando and Pawson), the idea that establishing a deep emotional and poetical connection, awakens man into a more 'connected' type of existence (Zumthor). In doing so, architecture: inspires man and make man's spirit rise towards virtues (Palladio), allows him to evolve into other realms of existence (Wright), allows him to connect to the most virtuous sides of his own existence (Palladio), allows man to find a place where he can feel at 'home' in order to grow psychologically, emotionally and spiritually (Barragan), permits man to re-encounter his own consciousness helping him grow and expand (Le Corbusier), lets man grow and expand his own awareness (Ando), allow man to understand his own spiritual dimension (Ando), creates a bridge into man's spiritual dimensions, making him more 'at peace' in himself and in the world (Pawson), allow man to be rooted in the world, and to understand his own existential condition (Zumthor). As for Artistic Sustainability, it is very similar to the architectural sustainability. It sustains that: art helps the viewer realize his own misconceptions of the world and realize the 'mistakes' of his own perceptions (Albers), art has a duty of being like the classical 'tragedy' and allowing man to feel emotions that he hasn't felt (Rothko), by creating new connections and new meanings art allows man to understand his place in the universe (Kiefer), through transformative emotional and perceptual experiences, man 'awakens' to other realities (Turrell).

Overall, sustainable values aim to transform man, from the inside out, allowing him to open up to more spiritual and emotional levels of his own existence, helping him re-encounter his own consciousness and expanding his own awareness. Art and architecture do this, by creating new connections and new meanings, by creating transformative emotional and perceptual experiences, by embodying universal values, emotional (sense of home) and poetical values and by creating a bridge into man's spiritual dimensions.

> ***Synthesis:*** *Sustainable values are driven by the idea that the creator (painter, sculptor and architect) has a duty (a moral obligation) to communicate and embody knowledge and wisdom in his creations, that help man evolve into higher dimensions of his own existence. Thus, sustainable Values can generally be understood as the creation of experiences and perceptions that enable man to expand his own ideas emotions, self and place in the world. It is defined by a desire to help humanity evolve and change, psychologically, emotionally and spiritually, promoting a more sustainable existence. Sustainable values aim to transform man, from the inside out, allowing him to open up to more spiritual and emotional levels of his own existence, helping him re-encounter his own consciousness and expand his own awareness.*



THE WORLD IS PURE AND A SAFE HAVEN





KNOWLEDGE GIVES WINGS (FREEDOM)



Photo 1: Garden design and architecture, Casa Ortega, Mexico City; Source: Sarah Frances Dias Photography, photos taken by the Author.; Photo 2: John Pawson's Casa delle Bottere; Source: http://poeticglance.com; Photo 3: James Turrell, Roden Crater; Source: http://cargocollective.com/flatsurface/following/flatsurface/Roden-Crater-James-Turrell; Photo 4: Book with Wings, Anselm Kiefer ; Source: http://www.allaboutartschools.com/directory/artists/websites/images/kiefer_bookwithwings.jpg

PLATE 98: POETICAL VALUES: POETICS, METAPHORS AND SPACE

8.2.4.8. METAPHYSICAL VALUES

(a) Synthesis

Metaphysical values are present in multiple architectural and artistic case studies: these are Andrea Palladio and Frank Lloyd Wright, for the architects; Edward Hopper, Mark Rothko, Donald Judd, Anselm Kiefer and James Turrell, as the artists.

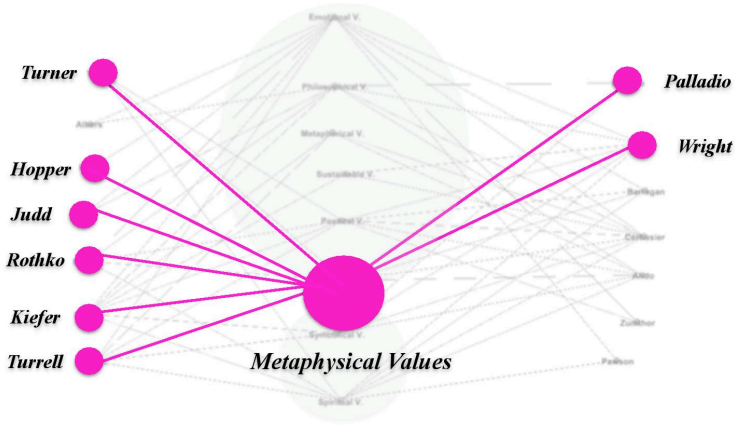


Figure 23: Metaphysical Values

(b) Expression and Use of the Value

- ***For Andrea Palladio,*** architecture is based in both a Platonic and an Aristotelian understanding of the world; both these views have a metaphysical understanding of existence at the core of their vision and understanding of the world. The Platonic metaphysical ideal (that there is a world of perfect forms, where virtue is at it's most complete, and where man is destined to be), is carried out through the whole creation at all scales of the design, and incorporated into the most minute details, echoing nature itself, that has the same laws at the different levels of observation. Metaphysics guides the whole of the architectural creation that ultimately, is aimed to allow man to become immersed in that type of metaphysical existence.

- ***For Frank Lloyd Wright,*** all creations could be part of the universal order, echoing metaphysical principles, if they embodied the universal principles that sustained all creation; they are part of Nature, and belong to the realm of God, and thus allow man to become rooted in his own metaphysical dimension, making man understand his place in the universe.

The two architects believe that in echoing nature's universal laws they allow man to understand his place in the universe, his own metaphysical dimensions. Thus metaphysical values for the architects are associated to universal laws and principles, and their communication to man.

Now for the artists:

- ***For Turner,*** the creation of abstracted emotional and imaginative landscapes could establish a link to this alterior dimension: the spiritual and metaphysical world. Thus, in creating art that

reflects the values and principles of those dimensions (of the pure world, utopian perfection and other perfect conditions) man could evolve into understanding those dimensions within himself and within the world.

- ***For Edward Hopper*** it is in creating these dualities (represented by both the 'window' and the 'void'), between real and illusion, day and night, light and darkness, life and death, that a metaphysical and cosmological dimension can be created through the artwork. The complex nature and metaphysical understanding of life (man's loneliness in the world, melancholic feelings of confusion, emotions of mis-placement) are always portrayed in Hopper's paintings.

- ***For Rothko,*** a metaphysical understanding of the self and of the world transposes throughout all of his work. He believed that art's role was to enable man to find his place in the world (in himself and in the universe) once more; by embodying a metaphysical view of the self, art communicates to human consciousness, allowing man to see those dimensions that otherwise would be hidden. For him, Art expresses a 'metaphysical meaning', in a synthesis that is both physical and spiritual.

- ***For Anselm Kiefer,*** the universe, the self and the world are part of a much larger existence than the one we understand; it is this metaphysical and cosmological idea that drives all his creative process and all of his themes and works. It is a search for the understanding of the transcendental extemporal existence: a metaphysical understanding of the universe. These metaphysical quests are represented through poetic significances, through the existential 'being', through the weight of history of the world and of humanity, and through the search for timelessness.

- ***For Donald Judd,*** by making space more 'metaphysical', art can make us understand our own metaphysical place better. The freed object allows us to question our own views of existence and to understand our own place in the world. Creating objects that complete space, allows for a metaphysical encounter to take place, and lets us understand our own meaning in the world and in the universe. It is a way of reflecting those primal and basic ideas that define our existence as human beings and as a humanity: our metaphysical longings.

- ***For James Turrell***, there is a universal order of the universe and of the world, and art aims to be a contribution to this universal order: a metaphysical understanding of art. This universal order, or this metaphysical understanding of the world, can be emphasized and understood by experiences, encounters and perceptions, through art. We should be more in-tune to this metaphysical side of our existence, and art is the means that can allow that to occur. It is a deep metaphysical and cosmological understanding that supports his creations. In order to do this, he creates experiences that focus on the heavens and the celestial bodies.

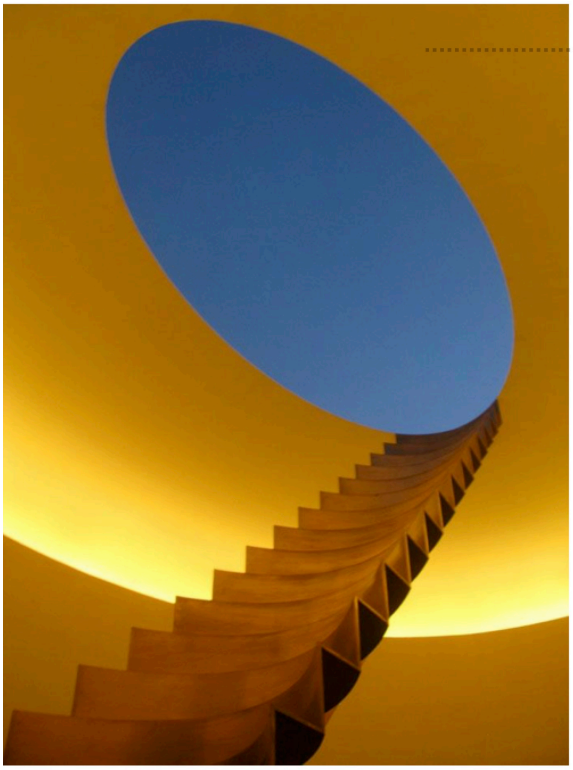
The artists understand metaphysical values in a broader way: they do not believe that art needs to reflect universal laws to be metaphysical in terms of form but sustain that a metaphysical condition can emerge as a result of multiple experiences: experiences that echo a complete space (Judd), that focus on the heavens and the celestial bodies (Turrell), that emerge through poetic significances (Kiefer), that embody a metaphysical view of the self (Rothko) or that echo the dualities of existence such as life and death, darkness and light (Hopper).

(c) Considerations of the Value

Metaphysics in general relates to that which is explains the fundamental nature of being and the world; as a philosophical discipline, it is related to ontology (study of the nature of being, becoming, existence, and reality) and cosmology (the study of the origin and fate of the universe). Thus, metaphysics is generally deeply connected mainly to the understanding of out place in the universe and in the world, trying to define our own existence as human beings. Thus, Metaphysical Values, in general terms, as it relates to art, can generally be understood as the desire to make the creation belong to a universal and timeless condition allowing man to understand his place in the universe. For the architects, a metaphysical understanding of the world and the self, emerges when the creation echoes nature's universal laws, when it creates as part of the universal order (Frank Lloyd Wright and Palladio). The artists understand metaphysical values in a broader way: they do not believe that art needs to reflect universal laws to be metaphysical in terms of form but sustain that a metaphysical condition can emerge as a result of multiple experiences: experiences that echo a complete space (Judd), that focus on the heavens and the celestial bodies (Turrell), that emerge through poetic significances (Kiefer), that embody a metaphysical view of the self (Rothko) or that echo the dualities of existence such as life and death, darkness and light (Hopper).

Principally, there is the intrinsic belief that it is a deep metaphysical and cosmological understanding that sustains creations (Kiefer) and the general conviction that the art's have a responsibility to echo metaphysical values: the complex nature and metaphysical understanding of life should be echoed in art (Hopper), that art's role is to enable man to find his place in the world (in himself and in the universe) once more (Rothko) and that we should be more in-tuned to this metaphysical side of our existence, and Art is the means that can allow that to occur (Turrell). One further note is that art expresses a 'metaphysical meaning', in a synthesis that is both physical and spiritual (Rothko). Metaphysical values, incorporated in art and architecture, gives man the possibility to become immersed in a new metaphysical existence (Palladio) and communicates to human consciousness, allowing man to see those dimensions that otherwise would be hidden (Rothko), makes us understand our own metaphysical place better (Judd). It is by metaphysical values that man questions his own views of existence and understands his own place in the world and in the universe.

> ***Synthesis:*** *Metaphysical values in general terms, as it relates to art, can generally be understood as the desire to make the creation belong to a universal and timeless condition allowing man to understand his place in the universe. It is by metaphysical values that man questions his own views of existence and understands his own place in the world and in the universe. For the architects, a metaphysical understanding of the world and the self emerges when the creation echoes nature's universal laws, when it creates as part of the universal order; for the artists, metaphysical values relate to experiences, they can focus on the heavens and the celestial bodies (Turrell), they can emerge through poetic significances (Kiefer), they can embody a metaphysical view of the self (Rothko) or they can echo the dualities of existence such as life and death, darkness and light (Hopper). Either way, it is a deep incorporation of metaphysical ideas that both question existence, and answer it through the artistic creation, allowing man to become more in tune with his own metaphysical existence.*



OUR PLACE IN THE COSMOS

OUR PLACE OVER NATURE





OUR PLACE ON EARTH: LOOKING TO HEAVEN



MAN IN THE MIDST OF THE UNIVERSAL FORCES

OUR PLACE IN THE SELF



Photo 1: James Turrell, Aqua De Luz, Tixcacaltuyub, Yucatan; Source: http://talbotspy.org/academy-art-museum-hosts-james-terrells-perspectives/; Photo 2: Frank Lloyd Wright's Massaro House; Source: http://www.chronogram.com/hudsonvalley/living-wright-in-lake-mahopac/Content?oid=2128566; Photo 3: Photo 8: Untitled, 1968, oil on canvas; Source: http://www.wikiart.org/en/mark-rothko/untitled-9; Photo 4: J.M.W Turner, *Snow Storm: Hannibal and his Army Crossing the Alps*, exhibited 1812, c. Tate; Source: *http://kids1.tate.org.uk/blog/who-is-j-m-w-turner/; Photo 6: Interior Space of the chapel; Source: http://en.wikiarquitectura.com/index.php/File:Bruder_Klaus_34.jpg*

PLATE 100: METAPHYSICAL VALUES IN THE CASE STUDIES

8.2.4.8. METAPHORICAL VALUES

(a) Synthesis, Expression and Use of the Value

Metaphorical values are present in multiple architectural and artistic case studies: these are Andrea Palladio, Frank Lloyd Wright and Tadao Ando, for the architects; William Turner, Edward Hopper, Mark Rothko and Anselm Kiefer, as the artists.

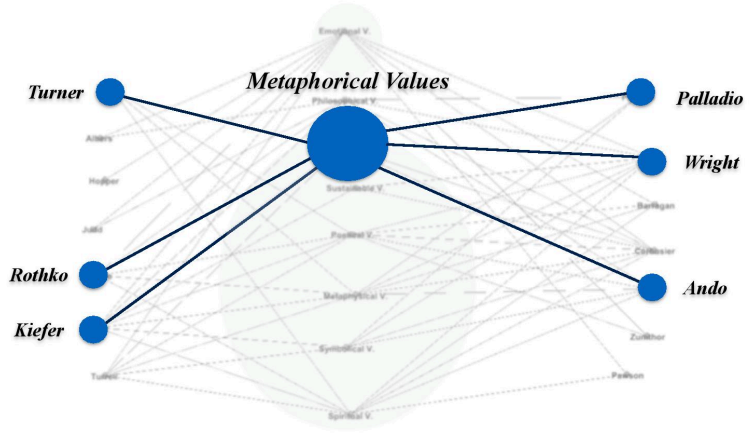


Figure 24: Metaphorical Values

(b) Expression and Use of the Value

- ***For Andrea Palladio,*** every element of architecture was a metaphor: it embodied the perfection of the virtuous type of life, the ideal condition that belonged to the intangible world of forms.
- ***For Frank Lloyd Wright***, architecture itself was a metaphor and acted as a symbolic and metaphorical reference. His views were deeply immersed in Emerson's metaphor for creation as an alembic referencing the technique the alchemists used to distil materials into gold; this metaphor, sustained that creators distil the principles from matter and nature, in order to arrive at some form of gold as universal spirit. Creation, then, was itself a metaphorical idea, and the created object (gold) possessed principles in itself, that were metaphorical of the natural and universal order of the world.
- ***For Tadao Ando***, Architecture, when combined with poetical values becomes a metaphor for universal truths; in other words he sustained that universal truths are communicated through metaphors that are embodied in the architecture itself. As metaphorical truths embodied in Ando's spaces it is possible to announce: light above all other things, that there is nothing other in life but emptiness and spirituality, that that which is valuable needs to be found and experienced deeply, and that the spiritual life occurs inwardly in solitude.

For the architects there is this basic idea that architectural creation itself is a metaphor for universal truths. Now in regards to the artists.

- ***For William Turner***, atmospheres were charged with metaphorical ideas: the landscape itself was merely a metaphor for the power of nature and of God, and there were multiple spiritual lessons embodied in the landscapes, that could be captured and understood through the creative spirit.

- ***For Rothko,*** the metaphorical values emerge almost imperceptibly, because they emerge within the work process itself: by trying to represent the emotional world of the spirit, Rothko embodies it with properties and particularities that define it's essence: such as the idea of possessing contradictions, the fact that it is composed of multiple layers that cover and reveal themselves, and the fact that there are no boundaries and no limits. These are metaphorical lessons embodied in the work itself. Art, with Rothko is a metaphor in itself for the spirit, but also contains multiple metaphors within the work that need to be unravelled and understood.

- ***For Anselm Kiefer,*** the creative process could be understood through the metaphor of alchemy: extracting the spirit of the substances and elevating it to 'gold' (ordinary life elevated into spiritual realm). Not only is the creative process a metaphor in itself, but also, the artwork itself holds metaphors, for another type of existence: the metaphysical and spiritual existence. There are then, metaphorical ideas that are present through the union of different concepts: such as, for example, the sunflowers and technology in decay, that is a metaphor for 'future' life when nature has taken over the world and man has perished.

There is another note worth mentioning in regards to Hopper's work. ***Hopper's*** paintings become metaphorical 'windows' themselves, into the inner lives of our being. Concluding, for the artists the artwork itself is a metaphor for universal truths, and contains universal truths and ideas in itself: thus the artwork works in a duality as a whole and as micro metaphors.

(c) Description of the Value

Metaphorical Values can firstly be understood as that which creates or possesses a metaphor; a metaphor (as a figure of speech) is that which uses ideas to represent or refer to something else in order to show similarities or connections; so too, in regards to the artistic and architectural creation, metaphors are used that relate and create connections to something other than itself. From the above analysis, it is possible to firstly understand, that, generally, metaphorical ideas incorporated into the creation, are metaphors for universal truths.

In regards to the architectural creation: architectural creation itself is a metaphor for universal truths (Ando, Wright and Palladio) and for the ideal condition that belonged to the intangible world of forms (Palladio). Universal truths are communicated through metaphors that are embodied in the architecture itself (Ando) but also, every element of architecture is a metaphor itself (Palladio). Here architecture is a metaphor and can contain smaller metaphors within it's existence.

The same idea is revealed through the artists in relation to the artistic creation: the artwork itself holds metaphors of another type of existence: the metaphysical and spiritual existence (Kiefer) and art is a metaphor for the spirit, but also contains multiple metaphors within the work that need to be unravelled and understood (Rothko). Thus, for the artists the artwork itself is a metaphor for universal truths, and

contains universal truths and ideas in itself: so the artwork works, in a duality as a whole and as micro metaphors (just like for the architects).

Other ideas can be summarized in regards to a broader definition of the value. Mostly, metaphors act as 'windows' into our essence and spirit (Hopper), communicating universal truths (Ando, Wright, Palladio, Rothko, Palladio and Kiefer), embodying multiple spiritual lessons (Turner), they are understood through the creative spirit (Turner) and allow for the mind and the soul to understand new universal and spiritual truths. Metaphorical ideas are present through the union of different concepts (Kiefer) and need poetical values to emerge (Ando).

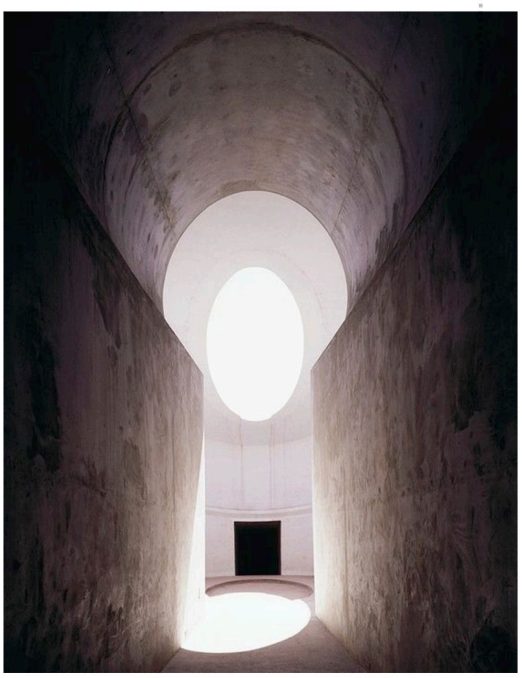
Metaphorical Values are embodied in the creation and create a link to universal truths: they act as metaphors for lessons and spiritual truths.

> ***Synthesis:*** *Metaphorical values, in regards to the artistic and architectural creation, are used to relate and create connections to something other than itself. Both for the artists and the architects the artwork itself is a metaphor for universal truths, and contains universal truths and ideas in itself: thus the artwork works in a duality as a whole and as micro metaphors (just like for the architects). It is the metaphorical values that: communicating and embody universal truths through metaphors (Ando, Wright, Palladio, Rothko, Palladio and Kiefer), embody multiple spiritual lessons (Turner), are understood through the creative spirit (Turner) and allow for the mind and the soul to understand new universal and spiritual truths. Metaphorical ideas are present through the union of different concepts (Kiefer) and need poetical values to emerge (Ando).*



THE LABYRINTH OF LIFE

THE CAVE, THE CIRLCE, THE SECRET DOOR AND THE DUALITY BETWEEN HEAVEN AND EARTH



THE BIRTH OF LIFE



hoto 1: Tom Ford's ranch by Tadao Ando; https://openhousebcn.wordpress.com/tag/tadao-ando/; Photo 2: James Turrell, Roden Crater space; Source: https://pt.pinterest.com/pin/338473728221057803/ Photo 3: Anselm Kiefer, Opus Magnum (2010); Source: http://artobserved.com/2012/01/london-anselm-kiefer-at-white-cube-bermondsey-through-february-26-2012/; P

PLATE 101: METAPHORICAL VALUES IN THE CASE STUDIES

8.2.4.9. SYMBOLICAL VALUES

(a) Synthesis, Expression and Use of the Value

Symbolical values are present in multiple architectural and artistic case studies: these are Le Corbusier for the architects; William Turner, Edward Hopper, Mark Rothko and Anselm Kiefer, as the artists.

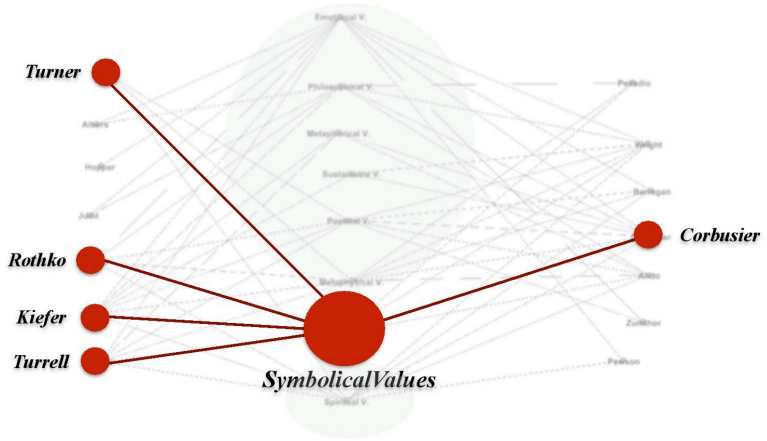


Figure 25: Symbolical Values

(b) Expression and Use of the Value

- ***For Le Corbusier,*** the symbol carries a special significance; he believes that it is through symbols that his message is better transmitted and understood to the spirit, and therefore incorporates various symbols into the architectural space at various scales. The best example of this type of symbolical incorporation in La Ronchamp: where at a first level the overall architectural form carries a symbolical reference to the natural organic world, at a second level he incorporates symbols in the details of the design such as the stain glassed windows that have symbols of nature such as the moon, the ocean or the stars. But there is one symbol, created by Le Corbusier that is present in varios of his artistic and architectural creations: the symbol of the open hand. The open hand symbol, used in drawings, sculptures, paintings, and spaces is a representation of reconciliation, communication and peace, and aims to be a symbol that creates a means of unification, of welcoming, and of establishing an open connection with the viewer. Another symbolical system created by Le Corbusier is the colour palettes or the various colour combinations used in both architecture and painting; these aim to be a symbolical reference to the natural world. Lastly, for Le Corbusier, the whole creation acts as a symbol in itself: representing the integration of human faculties and spirit, the combination of humans as a totality of emotions, intellect and soul.

There are another two symbolical uses that should be mentioned in regards to the architects. However, because they do not belong exclusively to the creation process, but instead, are culture symbols, they were not considered. This is the case with Luis Barragán, that associates nature to a symbol of wilderness and established a primal connection with the user (creating a reference to a sort of 'lost paradise') and Tadao Ando, that uses Christian symbols in both of his chapels.

From the previous analysis it is possible to understand that the architects use symbols in similar ways: it is an element added to the space, or incorporated naturally into the design of the space, that creates a symbolic reference to another quality, property, dimensions or value. Now we will analyse the artist's use of symbols.

- ***William Turner*** has a broad understanding of symbols and uses it profoundly in his work. For him, natural atmospheres were a symbol of God's existence: a direct manifestation of God's forces on earth, his strength and his glory, and as such, they act as a sign of His presence. As such, using the natural landscape automatically creates that symbolic reference with the viewer and allows him to create a link with the spiritual dimensions.

- ***For Edward Hopper***, architectural atmospheres were a symbol of the inner life of man; as such, they are used as a symbol that represents man's spirit. His spaces act as symbolical mirrors for our own inner world; 'windows' and references to our own inner psyche. Symbolically, thus, Hopper's art represents the soul's longing in life: surrounded by nothingness and emptiness, and yet with an ability to create a 'window' to another dimension.

- ***For Rothko,*** art was deeply rooted in its symbolical nature, because it could be in itself a symbol. He believed that through myth, man could find his place in the world once more, and for him, mythology operates as a symbol that communicates to human consciousness. Embodying tragedy, symbolically, for example, would cater the hearts of people, by allowing them to feel deep emotions.

- ***For Anselm Kiefer***, there are symbols that are universal, extemporal and that belong to that 'timeless' dimension he aims to understand and represents; he uses these symbols profoundly and abundantly, changing them in character but not in content. Some main examples are: the symbol of the field (that is a symbol for the lost paradise), the books (a symbol of knowledge), the sunflower (the symbol of growth and wisdom), architecture as pyramids and ruins (a symbol of time, culture, and archetypes), and many more. However, it is not only the use of these symbols individually that represent timelessness and universality, but also his art in itself is a symbol that represents the connection of man to his own history, cosmological existence and spiritual life.

As we have seen, the artists also use symbols similarly to the architects.

(c) Considerations on the Value

In general terms, Symbolic Values relate to symbols; it is the understanding of ideas, concepts, and references that relate to the use of symbols. In symbolic values, then, it is important to understand the symbol for what it represents. Symbolical Values can generally be understood, in a two-folded way: firstly the incorporation of specific symbols into the creation and secondly the artistic creation acting as a

complex symbol in itself. The first part, the incorporation of symbols into the creation, is used by both artists and architects; various symbols are incorporated: the symbol of the field and wild nature that is a symbol for the lost paradise (Barragán and Kiefer), symbols of nature and of the organic and animal kingdom that represent growth, life and wisdom (Le Corbusier and Kiefer), architectural atmospheres as symbols and representations of man's inner life (Hopper) and natural atmospheres as a symbol of God's glory (Turner). In regards to the creation acting as a symbol in itself, we find this view also echoed by both artists and architects: the belief that art is deeply rooted in its symbolical nature, because it can be in itself a symbol (Rothko), art is a symbol that represents the connection of man to his own history, cosmological existence and spiritual life (Kiefer), through architecture as a symbol a spiritual and emotional connection emerges (Le Corbusier and Tadao Ando), art acts as a symbol for the spirit for it represents the soul (Barragan) and lastly, as a summary, the whole creation acts as a symbol in itself: representing the integration of human faculties and spirit, the combination of humans as a totality of emotions, intellect and soul (Le Corbusier).

Therefore, symbolical values should be considered as: the creation as a symbol itself, that represents the integration of all of man's faculties and spirit, communicates to the spirit, and allows for spiritual and emotional connections to emerge; and secondly the incorporation of individual symbols that can create new links and other references and associations depending on their symbolic nature such as the natural fields that represent lost paradise. Essentially, symbolic values have an important function: symbols communicate to human consciousness and allow man to feel deep emotions (Rothko), they are universal and belong to a 'timeless' dimension (Kiefer), allow man to connect to spiritual dimensions (Turner) and communicate messages in a better way to the spirit (Le Corbusier).

Synthesis:

Symbolical values are elements (as symbols) added to the space, or incorporated naturally into the design of the space, that creates a symbolic reference to another quality, property, dimensions or value. Symbolical values should be considered at these scales of intervention: the creation as a symbol itself that represents the integration of all of man's faculties and spirit, communicates to the spirit, and allows for spiritual and emotional connections to emerge; and secondly the incorporation of individual symbols that can create new links and other references and associations depending on their symbolic nature such as the natural fields that represent lost paradise. The symbolic values have an important function: symbols communicate to human consciousness and allows man to feel deep emotions (Rothko), symbols are universal and that belong to that 'timeless' dimension (Kiefer), symbols allows man to create a link with the spiritual dimensions (Turner) and symbols communicate messages in a better way to the spirit (Le Corbusier).

SYMBOLS OF THE TRANSCENDENTAL

DARKNESS AND LIGHT: LIGHT AS THE SIGN OF SPIRITUALITY

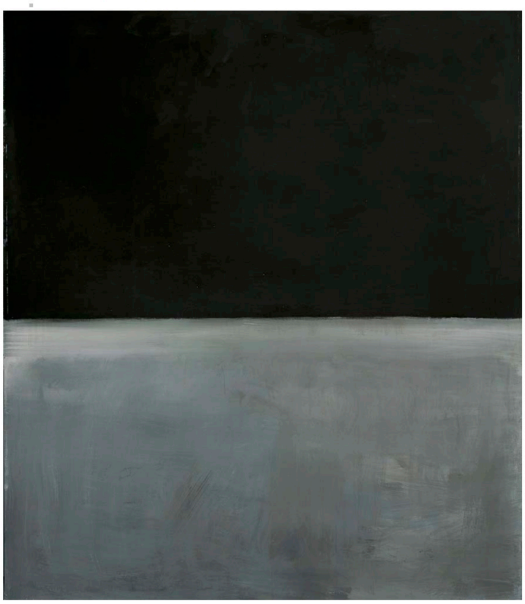




Photo 1: Untitled (Black and Grey) by Mark Rothko, 1970, Acrylic on canvas, National Gallery of Art, Washington, D.C., Dimensions 203.3 cm × 175.5 cm; Source: http://totallyhistory.com/untitled-black-on-grey/; Photo 2: One of the side chapels at La Ronchamp; Source: http://experiencingarchitecture.com/2011/03/24/light-church-in-ronchamp/

SYMBOLS OF HUMAN LIFE AND NATURE



Photo 3: Anselm Kiefer painting with the symbol of the sunflower; Source: http://www.independent.co.uk/arts-entertainment/art/reviews/anselm-kiefer-royal-academy-preview-is-he-our-greatest-living-artist-9729789.html; Photo 4: The painted doors at La Ronchamp; Source: https://www.pinterest.com/pin/383368987003797214/;

SYMBOLS OF HUMAN LIFE AND NATURE



PLATE 102: SYMBOLICAL VALUES IN THE CASE STUDIES

8.2.4.10. DEFINING VALUES

At this point it is possible to define Values, in a more general sense. Values can be understood as that which:

- Defines the conceptual psychological ideas of the creator from which the creation emerges from (Philosophical values)
- Is possessed by a desire to help and aim humanitie's growth at all levels of existence (Sustainable values)
- Aims to create a deep emotional connection with he viewer and embody emotions within the creation (Emotional values)
- Understands the spiritual dimensions of the world and of the being and thus aims to re-create them and incorporate them (Spiritual values)
- Recognizes an intangible essence of poetry and aims to recreate it in order to connect to man's consciousness (Poetical values)
- Is driven by a desire to understand our own existence in the universe and aims to convey that through the creation (Metaphysical values)
- Establishes links and connections to something other that itself (Metaphorical values)
- And lastly, as that which creates elements that generate deep associations (Symbolical values)

Value, then, can be defined as that which defines man's existence and that which drives his creation process, guiding ever decision and way of creation until the very last end result. Values are also deeply connected to the desire to communicate to man's consciousness, and profoundly rooted in the idea of aiding human evolution at all levels of existence. It is through values that art becomes art; being that in combinations, they create unique works, that respond to man's innate needs of existence.

This definition will be further developed in the following chapter.

8.3. COMPARATIVE ANALYSIS OF THEORIES AND PRINCIPLES

8.3.1. THEORETICAL IDEAS

8.3.1.1. WHAT ART IS…

How is art understood and defined?

One main aspect that most of the case studies have in common is the desire to define what art is. Either profoundly unsatisfied with the overall understanding of art prevalent at the time, or trying to summarize overall ideas, their own views were defined. These will be analysed as follows:

For the architects…

- ***For Andrea Palladio***, all the arts rest on universal principles that are discovered through experience and relate to wisdom. Therefore, good art is a 'moral obligation'. Art is, then, a portrayal of universal ideals and principles: harmony, order, proportions, and beauty, in order to allow man re-connect to those sides of himself.

- ***For Frank Lloyd Wright,*** all art should strive to understand the universal order and be part of it. The purpose of art and architecture is to understand the inner nature of things, and to express its universal spirit, becoming closer to God. Artists should convey not just the natural appearance of an object, but its meaning for the artist's soul (influence of Ruskin). Because Nature (the whole creation) is spiritual, the artist should always turn to nature for inspiration. All creations, Art and Architecture, are part of the 'universal order', as such, should be based on the same principles, in order to amplify it's purpose and it's meaning. All creation is a manifestation of God. The chief task of science and art was to discover underlying principles of order-present not just in architecture but in literature, philosophy in the organic and inorganic universe which would reveal the hidden unity of humanity and nature. For him, the artist needs to do more than merely imitate nature, he must possess a 'prophetic eye', and distil natural beauty into a 'conventional' essence; this 'conventionalization' process occurs when the 'object' possesses the qualities that define it's soul and it's spirit. The task of Art then, was to define nature's symbolic meaning, in order to guide civilization.

- ***For Barragan,*** all the arts can elevate man through their poetical emotions into a more spiritual life, thereby granting meaning to life. The arts then, have this function of creating connections between man and his spirit.

- ***For Le Corbusier*** all art is a creation of the spirit, and as such, communicates to man's spirit. The artist, is a 'creator of emotion, beauty and order', and is a participator of the universal order. Creations, as art, create from and to the spirit, through beauty and emotions that convey order and consciousness (universal principles). A characteristic Le Corbusier believed should define all great art (including architecture) is simplicity; simplicity was a way of revealing the 'spiritual system'. He believed that the spirit is best captured and portrayed through expression.

- ***For John Pawson***, Art is the product of the 'most creative and forward-thinking intellects'; it is art that has the ability to convey ideas, emotions and principles, in order to allow man to find his own harmonious place and peaceful (minimal) existence.

Thus, it is possible to understand that the architects define the arts as something of great value for the world, for the being and for the spirit. Now for the artists:

For the artists…

- ***For William Turner***, art had one single duty and aim: to be the means by which spirituality and God could be made manifest. For Turner, art was not simply a capturing of a specific emotion through a landscape, but a multi-layered complex meaningful and significant creation (using metaphor, harmony, mythology, history, nature, architecture, poetry, and other sources) that could and should re-create the power of God. Art should, then, capture the expression of spirituality in the world.

- ***For Edward Hopper***, art is capable of creating a metaphor, of being a symbol, and acting as a reflexion of an inner life of the soul; it can reflect and represent universal human emotions and universal themes that concern all of humanity and define all of our existence, serving as existential metaphors for our own metaphysical and spiritual dimensions. Art can help us understand our own emotions, our own existence and ultimately, acknowledge our own place in the world.

- ***For Josef Albers*** art has the power to affect and change our perceptions, communicating intellectually and emotionally at multiple levels and thereby achieving levels of meaning. He believed that in order to do so, it should use form, order, geometry and colour, guided by an intuitive level of understanding, attached to the faculties of insight (use experimental approaches) so that a new level of understanding, both psychological and emotional could emerge in the viewer. For him, art shouldn't rely on expressive qualities of the artist but instead be a clean, ordered and pure creation that could, due to its visual perfect perception, speak to human's intellect. Art is based on 'seeing' rather than knowledge, and is associated at a first level with fantasy, feeling and imagination.

- ***For Rothko***, art can create a state of consciousness and contemplation that allows for a deeper spiritual connection to unravel. He believed art could communicate to man's inner worlds, and that paintings can aim to represent the most pure and timeless condition of human life: that of the spiritual life. Through myth, tragedy and timelessness, in communicating to human consciousness, art could enable man to find his place in the world once more. Art was a world of the imagination, and should be ' a simple expression of complex thought'. Art's subject matter should always be the tragic and the timeless.

- ***For Kiefer***, art is a way of establishing new connections that allow man to understand a specific expanded sense of the world (primordial sense) and expand his own existence in metaphysical and spiritual ways. It is an open and alive system that is never really finished, understood or completely apprehended. It is alive, and with time, it continues it's existence, changing itself and evolving like any living organism. Art is also a longing and a quest for universal questions (searching for identity and a sense of self in the world and in the universe), for something that is beyond our own sense of understanding, for longing, union and connections, for a way of creating a unification of the world, and for a way of making an imprint in the world that seems to propel throughout the ages. Art is the construction of something that is significant for all of the time, and for all of humanity: not just for the here and for the now. Art is like religion, expanding human understanding, human consciousness and allowing for a connection between all the elements to become whole. In this quest and creative creation, art also becomes a projection of his own 'self' - kind of self projection or self aspiration of a continuation of the self; thought the self and the projection of the self, Kiefer finds in his artworks a way of creating a unification of

the world, a universality of the human condition and an imprint in the world that seems to propel through the ages.

- ***For Donald Judd***, art needs to be understood as the creation of a spirit in itself: it doesn't have to represent anything, or be anything other than what it is. a synthesis of content and form can be defined and a maximum significance can be achieved through universal principles. that a new type of art form should be created: one that combines the vision of painting with the physicality of sculpture and the spatial experience of architecture. Artistic expression should be based on a minimal expression of content. Through the liberation of the artistic object into space, art is able to convey a deeper and more meaningful experience. The object can 'be' universal values, and communicate qualities and meanings (using pure form, geometry, specific materials, vibrant colours, repetitions, and other object transformations). The phenomena of art is related to complexity and sensation.

- ***For James Turrell***, Art creates a special type of experience that allows us to understand our own metaphysical existence: our space in the world, in ourselves and in this vast universe. For Turrell art's meaning and significance arises as a metaphysical and poetical encounter. Art through shifting perceptions, and creating specific experiences, aims at creating a re-discovery of truths that are innate to our existence. Art should create an experience of wordless thought. Art should be fuelled by the deep desire to make us understand our own reality and our place in the universe. The aim of art should be to create a new understanding of the place of human consciousness and existence, within the world, the cosmos and the universe. To generate a unique and timeless experience, one that echoes the universe itself and to allow man to understand the truth.

For the artists, art is also something of great value for the world, for the being and for the spirit. However, not only because it communicates universal ideas, but also because it has the power to establish unique connections.

Then what is art for the case studies?

Defining Art…

Both artists and architects have similar views of what art is: both establish a direct connection of art to the spirit. The Architects relate the arts to a universal order, of which they are apart of and to spirit (Palladio, Barragan and Corbusier); they consider the chief task of art is to: discover underlying principles of hidden unity of humanity and nature (Wright), to define nature's symbolic meaning, in order to guide civilization (Wright). Art, creates from and to the spirit, through beauty and emotions that convey order and consciousness (universal principles) (Le Corbusier) and thus, the artist, is a 'creator of emotion, beauty and order', and is a participator of the universal order (Le Corbusier). They further define Art as: a creation of the spirit that communicates to spirit (Le Corbusier), the product of the 'most creative and forward-thinking intellects' (Pawson), a manifestation of God (Wright); that which elevates man through poetical emotions into a spiritual life, thereby granting meaning to life (Barragan).

The Artists relate the arts to the spirit and to the evolution of human consciousness, expanding on the function of the arts and how those connections emerge. They sustain Art is: the means by which spirituality and God could be made manifest (Turner), a living organism (Kiefer), the creation of a spirit in itself (Judd), capable of creating a metaphor, of being a symbol, and acting as a reflexion of an inner life of the soul (Hopper) and is based on 'seeing' rather than knowledge, and is associated at a first level with

fantasy, feeling and imagination. (Albers). For them, art captures the expression of spirituality in the world. (Turner), creates a state of consciousness and contemplation that allows for a deeper spiritual connection to unravel. (Rothko), establishes new connections that allow man to understand a specific expanded sense of the world (primordial sense) and expand his own existence in metaphysical and spiritual ways (Kiefer), creates a special type of experience that permits us to understand our own metaphysical existence: our space in the world, in ourselves and in this vast universe (Turrell). They sustain that art can help us understand our own emotions, our own existence and ultimately, acknowledge our own place in the world. (Hopper) and that the phenomena of art is related to complexity and sensation (Judd). Also, art aims at creating a re-discovery of truths that are innate to our existence (Turrell). And lastly, art communicates intellectually and emotionally at multiple levels and thereby achieving levels of meaning (Albers), to man's inner worlds (Rothko) and expanding human understanding, human consciousness and allowing for a connection between all the elements to become whole (Kiefer). Thus, the aim of art is to create a new understanding of the place of human consciousness and existence, within the world, the cosmos and the universe. (Turrell) and to generate a unique and timeless experience, one that echoes the universe itself and to allow man to understand the truth (Turrell). Thus, we understand that the case studies have a very specific understanding of what art is, excluding such types of art as reproductive art or design being an art. Art for them, is that which transforms human consciousness, and that although considers history and culture within its core, aspires to create something that is timeless.

8.3.1.2. WHAT ARCHITECTURE IS…

How do they understand and define architecture?

For the architects…

- ***For Andrea Palladio***, Architecture (just like for Vitruvius) is the art of building (connected to the idea of a knowledge of building rather to the understanding of art as we do today); architecture, as the knowledge of building, creates proportional harmonies, defined throughout the structure and space, as a whole, reflecting sacred principles and echoing the beauty of 'wholeness'. Architecture aims to create spaces that communicated virtue, wisdom and truth, and that, in doing so, elevate man into a higher dimension of spiritual life. Architecture, searches and creates that which is harmonious, true, universal and spiritual: using proportions and forms to create an ideal of life, virtue and spirit; in this ideal and ability to unify man with those ideals lies it's meaning and significance. The practice of good architecture is a 'moral obligation'. Architecture is a union between the intangible world of virtue, forms, and heavenly manifestations of the spirit and the pragmatic sensorial world of the body: union of both Platonic ideals (virtue and spirit) and Aristotelian principles (experience and the senses). In this union lies architecture's ability to serve as a link, or as a connection 'device' that allows man to connect to both its physical body (experience, emotions) and his spiritual realm (virtue, ideal of sacred life). This is the moral duty of architecture and of all the arts: to allow man to understand more than he does, to give him the space where he can encounter fragments of another reality and where he can see through beauty, an ideal that is almost eternal and timeless. Only through architecture and art, can this union be manifested, for in nature, God's creation, the spirit of man is not reconciled. As a reflexion of that divine harmony, as a 'manifestation of virtue', architecture can inspire man and make man's spirit rise towards the 'virtues' materialized through architecture.

- ***For Frank Lloyd Wright***, architecture is built up on the idea that man's creations are an extension of God's creations; as such, as Architecture and Art are part of the 'universal order' they should follow the same ideals, principles and goals in order to amplify it's meaning. Architecture can create a deeper connection between man, place, Nature and the universe and can manifest through beauty God's presence in the world. Architecture, then, as a union between Nature, Man and Spirit, serves as a microcosm for the 'beauty of the whole' and conveys the universal order. Architecture can capture the inner meaning of outward forms to reveal the cosmic unity of nature and spirit. The purpose of art and architecture is to understand the inner nature of things, and to express it's universal spirit, becoming closer to God. Architecture has a great power to manifest: which is to reunite nature with man's soul. Wright explains that just like man needs a more organic architecture, so too, man needs a more 'human' architecture, meaning qualities that are innate to man and to man alone. Imagination, Wright continues, is derived from a human light (just like the light of the sun in the physical world); creation comes from this human light, that is above instinct, and that illuminates the spirit. To affirm that light in creation and in life, is man's true happiness.

- ***For Barragán***, architecture could indeed portray and capture significance and communicate that significance to the hearts of man. Architecture is seen and understood not only as a space for a deep kind of existence, but a spiritual and emotional space that can shape man's life in better, profounder and deeper ways. For him, spaces need to contain elements of 'magic', 'serenity', 'enchantment' and 'mystery', in order to convey these deep meanings, allowing for spiritual emotions and poetical encounters to emerge within the user. Architecture should convey emotions of peace, tranquillity, stillness and serenity, in order to shelter and protect the user from the outside world and create a sort of 'utopian' place where he can find that inner peace and contemplative state of the spirit. A unique particularity, is that Barragán didn't consider architecture to be finite or closed but an open living organism, always open to change; as such, architecture should embrace other dimensions such as nature (creating a connection to the landscape around itself), art (using artistic works such as painting and sculpture as an extension of architectural space and meaning) and objects (that add other layers of meaning to the space). He believed in an emotional architecture that moved people, through its beauty and poetry, acting on the spirits of man. Architecture is a reconciliation of the past with the present, of tradition with the modern, of the arts (embracing all the arts), of nature and construction, of colour and white, of darkness and light. In this reconciliation, lies it's ability to move people and communicate poetic emotions.

- ***For Le Corbusier***, Architecture as an art has the role and mission to communicate to man's spirit: to create 'emotions' that act on man's consciousness and spirit and communicate universal ideals and principles through it's existence. Through architectural abstraction a spiritualization of the 'brute fact' (that contains symbols and ideas) occurs, a creation of an 'architectural emotion' also happens, and emerges a sense of order (part of man's consciousness and part of the universe). To re-create and re-define, to make clear universalities, and orders (manifested by 'brute facts') that are irrefutable and forgotten today, and communicate them to man's spirit, is architecture's principle aim. For Corbusier the architect, just like the artist, is a 'creator of emotion, beauty and order'. Architecture's 'objectivity' through 'abstraction' and its ability to create sublimity can appeal to man's highest faculties; and architectures ability to stir our emotions and communicate psychologically to our consciousness that makes Architecture an Art. Le Corbusier makes it clear that the impact of architecture, it's strength and it's communicative force, lies precisely in the communication to the emotions and feelings of the user of a sense of 'order' or a vision of the world. Architecture is an 'artistic fact' that deals with the stirring of emotion.

- ***For Tadao Ando,*** architecture is an art that allows for a deep connection between the self and it's spiritual higher self. Architecture is in pursuit of the 'Shinta', the union of the body and the spirit. Architecture, in this process and aim, strive to connect the Sacred and the Secular. Through emotions of stillness and nothingness, architecture allows for a transference of the self and an understanding of our own spiritual dimensions. As an art, Architecture combines the dimension of imagination and fiction. The embodiment of universal truths, through poetry, emotion and metaphor is that which allows architecture to be such a powerful substance. Architecture for Tadao Ando is not only an art that communicates emotions and embodies meanings, but it also an immense power that can elevate man's life and his spirit. Architecture, ultimately, establishes a connection between man and nature, man and spirit. He believes in experience, and creating specific architectural experiences and encounters. For him, making architecture is a back and forth between 'ideals and reality', to construct this kind of 'fictionality' in architecture, he emphasizes the importance of balance between reason and intuition. Architecture as an Art, is a substantive architecture (rooted in substance).

- ***For John Pawson*** Architecture, as an art, acts psychologically, emotionally and spiritually, on the viewer transmitting those specific emotions and meanings that are embodied in it's existence; in the case of minimal architecture (the one that sustains and creates), architecture communicates the values that only the 'minimum' and overall 'simplicity' can portray. Simplicity, he believes, is a spiritual experience that can occur in architecture and define a deeper way of life and existence. Architecture can create spaces that permit for man to become immersed in another sort of dimension, where simplicity of life and sensuality of material live together combined in one single existence, echoing a sort of spiritual union and harmony. For him, in order for architecture to achieve this, it needs to be focused on the search for the fundamentals of its existence: light, space, proportions, materials and scale. In doing so, it communicates principles that are universal.

- ***For Peter Zumthor,*** architecture is in pursuit of a 'substance' that allows man to understand his presence and existence in the world; that awareness promotes a sense of consciousness and of belonging to a broader more universal existence. He believes in a Phenomenological Architecture that is concerned with awakening a perceptual rich and intense experience in the viewer, (specific use of materials, their qualities and properties, the use of light and shadow, the overall form and colour of the atmospheres) that by awakening the senses and triggering memories and dreams, create a visual, psychological, emotional and even spiritual stimulus. Architectural space, through it's atmospheres, aim to provoke emotions, evoke perceptual experiences and allow for the emergence of a sense of reality, of self, identity and memories, by rooting the being in the physical and 'real' world in the user. As 'pure presence', architecture can generate 'pure' experiences and pure emotions. Architecture as an art is at it's most intense and most beautiful when all the elements refer to everything else, and nothing can be added or removed without destroying the whole. Architecture should embrace qualities that let it to enter into a meaningful dialogue with the user: qualities of mystery, of timelessness, of poetry, of silence and of sensuality. And allow the viewer to become rooted in the world, in himself and in the world (emotionally, psychologically and spiritually).

Then what is architecture for the case studies?

Defining Architecture…

As we have seen, what all the case studies have in common is the idea that architecture is an art. Architecture as an art, is: a reflexion of divine harmony, a 'manifestation of virtue' (Palladio), is an extension of God's creations (Wright), part of the 'universal order' they should follow the same ideals, principles and goals in order to amplify it's meaning (Wright), a reconciliation of multiple elements as an

open living organism (Barragan), the definition of an aesthetic emotion that communicates to man's consciousness and spirit (Le Corbusier), an 'artistic fact' that deals with the stirring of emotion in the spirit (Le Corbusier), the establishment of a connection between man and nature, man and spirit (Ando), is a substantive architecture (rooted in substance) (Ando), that which promotes a sense of consciousness and of belonging to a broader more universal existence (Zumthor).

Architecture creates proportional harmony, defined throughout the whole structure, as a reflexion of sacred principles and of a sacred life, echoing the beauty of 'wholeness' through the Vitruvian trilogy (Palladio), searches and creates that which is harmonious, true, universal and spiritual (Palladio), is a union between the Platonic ideals (virtue and spirit) and Aristotelian principles (experience and the senses) (Palladio), creates a deeper connection between man, place, Nature and the universe and can manifest through beauty God's presence in the world (Wright), creates sublimity and aesthetic emotions that appeal to man's highest faculties (Le Corbusier), allows for a deep connection between the self and it's spiritual higher self (Ando), acts psychologically, emotionally and spiritually, on the viewer transmitting those specific emotions and meanings (Pawson). vLastly, architecture's aim is: to create spaces that communicated virtue, wisdom and truth, and that, in doing so, elevate man into a higher dimension of spiritual life (Palladio) , to inspire man and make man's spirit rise towards the 'virtues' materialized through architecture (Palladio), to reunite nature with man's soul (Wright), to portray and capture significance and communicate that significance to the hearts of man (Barragan) , to allow for spiritual emotions and poetical encounters to emerge within the user (Barragan), to communicate to man's spirit: to create 'emotions' that act on man's consciousness and spirit and communicate universal ideals and principles through it's existence (Le Corbusier), to re-create and re-define, to make clear universalities, and orders (manifested by 'brute facts') that are irrefutable and forgotten today, and communicate them to man's spirit (Le Corbusier), to embody universal truths, through poetry, emotion and metaphor (Ando), to create spaces that allow for man to become immersed in another sort of dimension (Pawson), to provoke emotions, evoke perceptual experiences and allow for the emergence of a sense of reality, of self, identity and memories, by rooting the being in the physical and 'real' world in the viewer (Zumthor). These ideas of architecture do not exclude other forms of architecture such as social housing, they merely clarify that for architecture to be significant (as an art), it needs to aspire to be more that merely create a space that shelters and protects. The architectural case studies consider those to be primary concerns of architecture, and not what makes it an art at all.

What other ideas are there in common?

8.3.1.3. THE UNION OF ARTS: ARCHITECTURE, PAINTING AND SCULPTURE

The union of the arts…

In the beginning of the research we saw that the union of architecture, painting and sculpture was a system defined by the Beaux-Arts in the eiteenght century. However, at this point, it is of vital importance to clarify what the case studies consider of the three art forms. From various case studies, it

was possible to understand that a 'union' of these arts was vital. The union of the arts, thus, is a concept/idea that emerges with some of the artists and with the architects: some like Le Corbusier and Donald Judd theorize about it (creating theories about the ways in which the arts complement each other), others like Luis Barragán, Anselm Kiefer or Turrell show their views through their work (exemplifying new approaches and emphasizing the creation of a new artistic field).

Mainly there are two distinct ideas in regards to the union of the arts: first the idea that there can be a union between the arts, and painting, sculpture and architecture at their ideal state, share the same meaning and amplify their own existences. This view is sustained by Donald Judd, by Mark Rothko, by Le Corbusier and by Barragán. Secondly, there is the idea of an emerging of a new type of art that unites the best of each artistic field, which is sustained by artists, namely Donald Judd, Anselm Kiefer and James Turrell.

First Donald Judd's views clarify both positions; then other artists that sustain the emergence of a new type of artistic field are analysed, and then the synthesis of the arts as shared significance is observed. Lastly it is seen where these views meet and draw the conclusions.

- ***For Donald Judd***, there are two views on the matter that summarize both the approaches defined above: on the one hand the theoretical idea that the arts (specifically painting, sculpture and architecture) complement each other, on the other the idea that the limitations of categorization of the artistic object (into painting, architecture or sculpture) is limiting and no longer valid. In regards to the first idea, Judd claims that sculpture and art can indeed complete the architectural space: by adding value and meanings that are not there; in doing so there can be a union of all the arts from different artistic fields. Architecture and Art should be in a symbiosis through space. In regards to the second idea, he explains that a new type of art form should be created: one that combines the vision of painting with the physicality of sculpture and the spatial experience of architecture, and in that way the best of all three fields could be synthesized in a new type of creation. This new kind of artistic field can be created (union between sculpture and painting and architecture in a three dimensionality) and would embody a new type of significance.

- We see ***with Anselm Kiefer*** the materialization of these ideas. For Anselm Kiefer, although there is no theory pertaining to this new type of creation, he materializes Donald Judd's views of the creation of a new type of artistic field. His creations do not limit themselves to the fields of painting, sculpture or architecture, but try to merge all three fields (as had been suggested by Judd). Painting uses the techniques and the materiality of architecture, sculpture draws from painting, architectural space is used as a sculptural piece, and other cross-connections between the fields that allow for this new artistic dimension to emerge with deeper meanings and stronger significances.

- In a similar ***way James Turrell*** uses architectural space exclusively for the creation of artistic values. For him, although his art uses architectural space, it is more connected to painting than it is to architecture because of the creation of what he calls the 'fourth dimension' (an alterior dimension that connects with the spirit). However, through this new type of art, the best of both worlds can be created: one should use the best parts of each of the arts to try to create an ever more significant encounter.

So far we have seen how the emerging of a new artistic field that combines the best of the three arts; now we analyse the views on the union between the arts as shared meaning, as already briefly presented by Judd. To begin with, this view is also found in the views of Mark Rothko.

- ***For Mark Rothko***, the architectural space influenced the analysis of the artwork to such a great extent that he refused to give his painting to Mr. Seagram even after the commission was completed once he saw the restaurant space that would be inhabiting. He had the opportunity, later in his life, to work with an architect and fulfil this union between painting and architecture in the Rothko Chapel, where he was deeply involved with all stages of the design. For Rothko architectural space could not only potentiate the understanding of the significance of the painting, but also share in it's meaning, allowing for a deeper connection to emerge.

In regards to the architect's view on the matter, we will analyse the views of Le Corbusier for whom this was a central theme, Luis Barrágan and Andrea Palladio.

- ***For Le Corbusier*** the same idea is present: architecture and art are indeed co-existent, co-dependent and co sharing in meaning, for they can become at their most intense when they are placed together, working as one. This is what can be defined as a Synthesis of the Arts. For Le Corbusier, art is not merely a 'decorative' element, but instead each artistic element supports the architecture in it's own way. Therefore, art and architecture are interdependent, functioning in a mutually subordinate relationship, where a symbiosis in content, form and meaning occurs, these two forms are so interconnected that they add value to each other, and without each both would be incomplete. This interconnectivity and connection functions at multiple levels: conceptually, symbolically, metaphorically, and in significance.

- A similar idea is found in ***Luis Barragán's*** views. For him architecture is a living entity that should embrace art as an extension of their own life; he sustains that every element in the space (paintings, objects and sculptures), should continue the architectural vision and ideal, creating a space that is significant and meaningful at multiple layers of depth and significance.

- ***For Andrea Palladio***, it is another view that emerges. For him, the arts could merge in a shared meaning that emphasized both their existences; however, for him, architecture should be experienced at its most pure condition: without further additions. He believed that 'white' empty spaces could better portray the spirit of the eternal that aimed to re-create. Therefore, Palladio believes that the arts do not add to architectural significance, but create new meanings that could deter from architectural appreciation. His personal idea is that architecture should refrain from artistic 'embellishments' however, it is necessary to contextualize the art to it's time.

As a synthesis we find two views on the union of the arts: the synthesis of the arts as shared meaning (Le Corbusier, Donald Judd, Barragán and Andrea Palladio) and the emerging of a new sphere of artistic expression that combines the best of each world (Donald Judd, Anselm Kiefer and James Turrell).

Both ideas establish a new dimensionality to all artistic fields and create the possibility of a new connection between them; from them it is possible to understand that: thinking of the arts as individual categories is limiting, combining the best of each artistic field allows for the creation of new significances and the arts should collaborate together establishing new ways of creating meanings and significances (the

potential of significance that can emerge from these collaborations is infinitely superior than the thinking of each individually).

8.3.2. COMMON PRINCIPLES

What other principles are there in common?

There are various common principles that can be defined. These were selected, like the previous concepts, frameworks and values, through a coding process, that allowed to draw out the common driving principles from the various case studies.

These principles were also selected because they possessed a driving and central role for the case studies as core aspects that compose significance: they were drawn from each case study, as having a central role in the process of creation and/or for being that which should be embodied in the creation. Thus, they should be clarified and analysed further.

These principles are: the idea of time and timelessness (which connects to the desire to create something that is timeless), the idea of the creation of a living organism (creation as a living entity that has a life of its own like the works created by nature), the idea of abstraction and simplification (a process that aims to reach the essence of something), the idea of complexity (an underlying understanding that significance is also defined by complexity), the search for universal ideas (which defines an idea that there is universal ideas and a universal understanding and existence), the idea of atmospheres (as that which is intangible and immaterial), the idea of transcendence (that which transcends existence), the notion of form following spirit (the idea that what drives creation is the spirit), the driving aspect of ambiguity (the notion that all creations need to possess a high degree of ambiguity), the understanding of consciousness (consciousness as the main aspect to which significance is addressed), and the idea of spirit (spirit being that which significance is created from and that which significance engages with).

Following is a chart that clarifies the different connection between the principles, after which, each principle will be analysed individually, clarifying whom they were announced, how they were used and what they mean.

These will be analysed as follows.

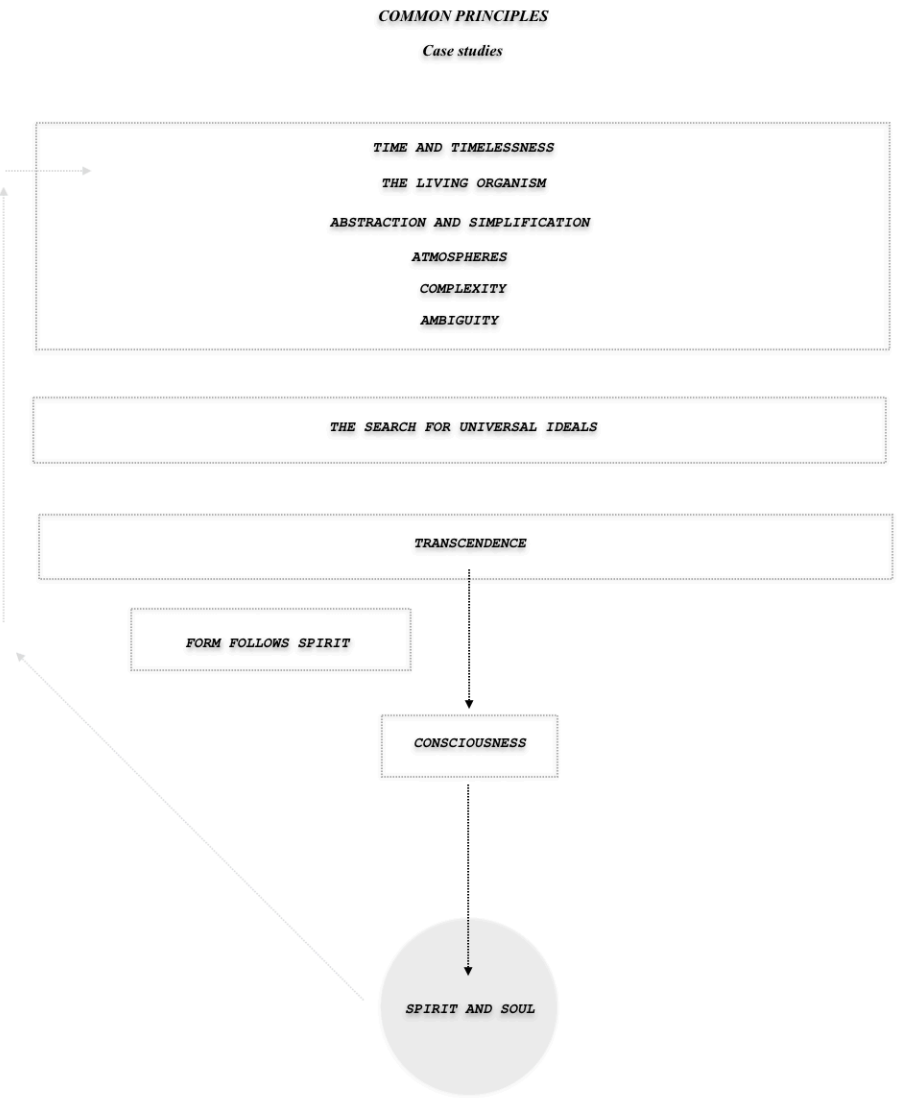


Figure 26: Diagram of Common principles

8.3.2.1. TIME AND TIMELESSNESS

How time and timelessness is understood…

Time is a concept that is of vital importance in several of the case studies. It is considered in different ways, and is part of the creation at all stages. Where as the artists explore the concept of time itself as something more fluid and more tangible (materialized in different ways), the architects explore the idea of 'timelessness' as a quality that has to exist in the architectural space. Firstly the architect's approach and views are observed, secondly the artist's views, and lastly a few coincidental points between both are defined to arrive at a definition of timelessness. It is also important to clarify, that the principle of timelessness is independent from the notions of history (a European creation of the eiteenth and nineteenth century), culture and contemporary understanding. It is something, as the following analysis

will show, that is independent from the views of the time in which the case studies find themselves in, ans strives towards something that is without time, or timeless.

For the architects…

Four architects mainly, bring the idea of 'timelessness' in their work and in their driving aims: Andrea Palladio, Frank Lloyd Wright, Le Corbusier and Peter Zumthor.

- ***For Andrea Palladio***, there was an idea of timelessness that runs through both his views of the world and of architecture. The world wasn't only run by universal rules, it was also part of an 'timeless' existence: the 'world of forms' as described by Plato, where everything is at its most virtuous and complete, and where the 'flaws' of life (such as time and decay) do not belong. Architecture strived to belong to this 'timelessness'. In order to materialize it, architecture needed to follow the properties and the principles of the 'eternal' forms. Palladio turned to the Ancient architecture of the Romans and Greeks to find this 'timelessness' however, the underlying desire is to achieve a creation that stands across times.
- ***For Frank Lloyd Wright,*** there was also a 'timeless' condition that could emerge through architecture.Although Wright was deeply 'contemporary' in his architecture, this 'timelessness' emerged as an understanding of the 'spirit' and of God, that derived from the unique union of architecture with Nature (man and divinity) and that are always eternal. In order to become 'timeless' architecture needs to promote an integration and a connection between man, spirit and God.
- ***For Le Corbusier,*** the idea of timelessness is incorporated through the desire to create spaces that do not show or embrace the ageing and passing of time. He believed in an architecture that would stay the same, unchanged, and pure, for as long as it stood, and incorporated this idea of time through it's opposite: the absence of it. This idea of an immaculate empty and pure space (a 'timeless' space) is psychologically, emotionally and spiritually driven for it aimed to create the space for the contemporary man. Le Corbusier, is thus a contemporary man, that believed and aimed to create a 'timeless' condition.
- ***For Tadao Ando and John Pawson,*** although they are the architects that express least relation with this concept, the idea of timelessness is still present, even if as a consequence. 'Timelessness' emerges as part of their spiritual 'minimal' spaces; it is a quality that emerges as a materialization of their spiritual and universal ideals through space. Ando based on Japanese aesthetics and philosophy, Pawson using archetypes that define the essential elements of modern architecture (the wall, the arch, and others).
- ***For Peter Zumthor***, timelessness is also an idea that belongs to architecture. For him there is the underlying desire to make the architecture seem as if it has always been there, as if it has belonged there since the beginning; in order to achieve this, Zumthor uses materials and forms in a unique way, creating a 'spaceless' atmospheric dimension and using pure forms. In doing so, he makes architecture belong, in a sense, to a 'no time', to a 'timelessness'.

As a summary, Architects understand 'timelessness' as a quality that can be achieved when all the parts are in tune with one another, when a spiritual atmosphere occurs in space and when a harmonious connection is established between man and space.

For the artists…

As for the artists, the concept of 'timelessness' is explored by William Turner, Rothko, Kiefer and Turrell.

- ***For William Turner***, the abstracted landscape captured a 'lost time' a 'paradise' kind of place that existed as a timeless existence through the world: it could be found in the atmosphere, that could capture through it's most intense forms of expression the qualities of that forgotten and lost world. Turner brings forth this idea of the 'lost paradise' and a 'lost time', as a sort of 'spiritual utopia' through the landscape, finds echo in multiple religious references and various mythological stories: the ideas of the Garden of Eden in Christianity or the legend of Arcadia (an idyllic vision of unspoiled wilderness, splendour and harmony) of the Ancient Greek mythology later brought forth in the Renaissance. Both speak of a lost time when the natural landscape and humans were in perfect harmony and bliss. Turner's search for the timeless is through the idealist, perfected landscape, materialized through the intensities and changing world of nature.

- ***For Rothko,*** the concept of time is analysed as a quest for the 'timeless' condition. As a neo-platonist (ideas), for him the human soul was timeless, and therefore, timelessness should be the main subject that art addresses.

- ***For Kiefer,*** painting belongs to 'something that is beyond human time', it belongs to a geological time, a cosmic and a universal time. It is this cosmic time that fuels his creative spirit, and leads him to understanding time as a malleable thing, a plastic element that is long-lasting, infinite, universal and eternal. Landscapes and atmospheres then, portray a universal understanding of the world by capturing the a-temporal or the in temporal, the place that exists beyond history or even before history, that belongs to a 'timeless' existence, and to a place that belongs outside of time itself.

- ***For Turrell,*** it is this idea of cosmological time that defines his creations and that should define our existence and the connections between light and spirit; simultaneously, and derived from the previous, is an understanding of the idea of metaphysical timelessness. He searches for the beginnings and endings of time itself, and aims at capturing through his spaces this idea of the 'cosmic' and the 'timeless' conditions that define man and his existence on earth, leading him to observe the heavens.

- ***Both Kiefer and Turrell*** aim at creating for a cosmological 'timeless' and 'metaphysical' time. This idea of 'cosmic', 'cosmological' and 'universal' time relates to the time since the birth of the universe, it is considered to be the time spam of the development of the universe. Therefore, it makes our understanding of time (year 2016) relative and devoid of sense, making us understand that we are part of a greater time history than our perceptions initially allow us to understand. Cosmological time then, is universal and everlasting: echoing the same qualities as 'timelessness'. Both artists sustain that because the human being is placed in a geological time, it strives to understand it's own place in that endless timelessness – leads to a metaphysical and spiritual understanding of the self and of the world.

For the artists, time is a concept that is malleable and can be not only a quality that is portrayed in the work (as in the case of Turner and Kiefer) but also something that can emerge in the viewer through it's understanding (Rothko and Turrell). Either way, it is a central concept to the creation process and the understanding of the work.

As an essential summary, for the architects, 'timelessness' is understood as a quality that is portrayed and embodied in the creation (Palladio, Wright and Zumthor); for the artists, 'timelessness' is understood as a search for a 'lost time' (Turner), a search for 'timelessness' as eternal manifestations of the soul (Rothko), a search for the understanding and insertion of/in cosmological time (Kiefer and Turrell). It is variations of the same central theme. As a synthesis/analytical remarks, it is possible to understand that making architecture and art be 'timeless' or exude 'timelessness' allows for a deep sense of belonging to emerge in the viewer, making them become rooted in an existential, metaphysical and spiritual way. Architects understand 'timelessness' as a quality that should permeate throughout the space. Where as Artists understand 'timelessness' as both a quality and a more malleable property, that can be moulded and re-created to be lived in. Although somewhat distinct in the way it is approached and created, for both the architects and the artists, there is this centrality around the idea of 'timelessness' and the overall goal to create it and provoke it in the viewers. All these ideas of time are coincidental in the sense that they search for the 'timelessness' qualities of time; they all refuse to accept time itself, as a substance that dictates the present, and search for the 'eternal' qualities that can abide in the today; they all search for the timeless: for that which exists beyond time itself, that which survives time itself, and has the ability to transcend the limitations of mortal life.

Defining timelessness…

At this point, it is possible to define the quality of timelessness. The 'timelessness' quality can firstly be understood as that which is beyond history, that has no beginning and no end, as that which is eternal and always everlasting and as that which is permanent; in this way, it refers to no particular time but encompasses all times, in an eternal and ever lasting understanding. It is associated to immortality, for things that are not dictated by time, living forever and are eternal. These ideas find echo in many different cultures, myths and religions, that were based in the idea of timelessness and immortality of all things that are sacred and spiritual: the Greek, Hindu, and Buddhist Gods, the ideas of Angels, and of God with Christianity and Judaism, and lastly a mythological example, the elixir of life with Alchemy. As we have seen, 'Timelessness' can be expressed in multiple ways in both art and architecture, however what all have in common, is the desire to re-create it, and embody it as a quality in order to provoke it as an emotion and feeling in the viewers. As a theme it is attached to the immortality of the soul, the long lost 'sense of paradise', and to the metaphysical existence of the universe. It can either be expressed, through the 'absence of time' or through the idea of a 'cosmological time' (universal time), however, in both cases, time seizes to exist and is dissolved to allow for something more in-temporal and eternal to emerge. This communication with 'timelessness' lets for man's consciousness to develop in multiple levels: psychologically, emotionally, metaphysically and spiritually.

8.3.2.2. THE LIVING ORGANISM

The Living Organism: The Open Field of Creation and Interpretation…

Another principle or idea (in this case a model or a philosophical idea) that needs to be analysed is the artistic and architectural creation as a living organism that in itself generates an open field of interpretation. This view is present in both fields of painting and architecture, in very similar ways.

- ***For William Turner***, art is indeed an open system, alive in itself as an interpretation. He is known for never considering his works to be finished (on the 'varnishing day' Turner spent the day painting, and adding to the overall creation). He saw his works as always incomplete and as a constant open structure of 'signification'.
- ***For Kiefer,*** all art is a continuous process and is never really finished; for him all art, is always open, waiting to be continued and explored. Sometimes his he works on paintings for as long as ten years, and let's nature act on it as it does with the world. For Kiefer, not only is the art process always open, the work itself is always in on-going and in continuous transformation, but these qualities emerge as an open system of interpretation in the viewer.
- ***For Peter Zumthor*** the design process itself is an 'open' and 'alive' field that aims at on the one hand at 'revealing' and understanding the 'alive' qualities of the creation. These alive qualities are used in the architectural space and echo in the viewer's experience of the atmosphere.
- ***For Luis Barragán,*** in a similar way, architecture is a thing that is alive in space and time, and therefore it should always take into account the living circumstances that will act on it and change it: such as nature, objects or art. These things, for him, acted on the architecture and belonged to it, adding more significance to the overall architectural space.
- ***For other architects, Palladio and Le Corbusier,*** the living organism is not directly announced however it is possible to establish relations. The living organism also finds evidence in classical ancient understanding of architecture (Ancient Greece and Rome), since they used the human body as a model for architecture in general, considering both the parts and the whole. Both Palladio and Le Corbusier were profoundly influenced by these ideas.

The main driving idea that is present for both architects and painters is that all creation is open, alive and as if it were a living organism (constantly changing and therefore always incomplete). It is never finished, and therefore should take into account the life systems that will abide in it and that will become part of it. Further, because it is alive, it is also alive in significance and meaning generating multiple and shifting interpretations for the viewers: it is always open for new appreciations and new understandings. The viewer perceives this type of incompletion, apprehends it, and remains always curious and intrigued about what it is saying; it is an open system that is never closed but continues endlessly. The open field as a constructed artistic result is 'never' complete, and thus presents itself as an open field of interpretation. The artistic creation as a living organism: takes into account other life forces that will act on the work; it is brought forth by this idea as that already exists in the creation phases (creation is never finished) and finally it is always open to new interpretations and appreciations, because it is always incomplete. As we

have seen, it is a profoundly important idea for architecture that also finds echo in the works of the painters.

8.3.2.3. ABSTRACTION AND SIMPLICITY

In regards to form and the generation of form there are some views that are coincidental, namely the idea of abstraction, simplicity and reduction as a means to better capture the qualities and values that should be immersed in the artistic work.

- ***For William Turner***, abstraction was a more accurate and more precise way of defining the spirit of place: however, it was an abstraction that was rooted in reality, and searched in nature and landscapes around him for the real principles that sustained that abstraction. Abstraction, was a language derived from 'real' and 'intangible' life. And it was through abstraction that it was possible to uncover the underlying universal properties and lessons that sustain existence.
- ***For Rothko,*** depuration and reduction, were a means of expressing multiple layers of meaning. Once this purification has occurred the viewer can then apprehend new kinds of associations. It was through abstraction that the spirit could best be characterized, for the spirit in itself is without form.
- ***For Donald Judd,*** minimal art is freed from all representation ideas and finds in abstraction (pure forms and pure colours) the tools it needs to create objects that are in themselves in tune with universal ideas and principles. The language of minimal art aims to achieve a synthesis of content and form and create maximum significance through universal principles. There is a constant depuration at all levels of creation that is read clearly in the final object. This leads to the core of Judd's theory: the minimal. For James Turrell, there is also a focus on abstraction and simplification; for him, spaces are simplified to their minimum essence allowing the viewer to become fully immersed in the space and in the atmosphere, creating a realm of pure perceptual experience. However, attached to this simplified language is added elements that add 'poetical' and 'metaphysical' values.

In short, for the artists, there is clearly the driving idea that abstraction, minimal language and simplification and depuration can indeed capture in a more intense way the spirit and represent ideas more intensely. However this language is not valid in itself, but needs to follow also metaphysical, poetical, emotional and spiritual values. In regards to the architects, three main architects that share the same views: Le Corbusier, Tadao Ando and John Pawson.

- ***For Le Corbusier***, architectural form, should have a simplified language and character (the five points of architecture); he sustained the use of pure forms, simple lines, straight openings and an overall depurated atmospheric feel; however, he also believed that other layers of meaning should be added to the space through other forms such as colour or art.
- ***For Tadao Ando,*** forms should be used in a reduction and simplicity of character: using aesthetic poverty (the idea that there is no need for excesses and decorative elements) and a reduction of space to its bare essential (simple means). It is through these pure forms and an abstracted sense of the world that the real substance of things can be found and understood. Thus, the process of architecture, is a process of reduction and formal abstraction that in driven by emotional and poetical conditions; it is materialized as a space that echoes emptiness/nothingness, through this on-going reduction of the space to its bare essential qualities.

- ***For John Pawson,*** in the same way, simplicity and minimalism as a quality, should be embraced by all the arts at all levels of existence. This simplicity, in regards to abstraction and form, is a result of careful study, and understanding of the fundamentals of architecture, and is also derived from a constant depuration process.

Both architects and artists share the same basic idea: that the artistic/architectural process is the result of a depuration process, in search of a minimum essential language, that uses abstraction as quality; after this depuration phase and main idea, elements are added that answer poetical, emotional, metaphysical and emotional values.

8.3.2.4. COMPLEXITY

The idea of complexity…

Simultaneously to the notions of abstraction and simplicity, it was also found the principle of complexity. Complexity, in all case studies, emerges as a combination of other aspects and factors: it is mostly an end result. However, complexity itself is considered as a necessary condition of the creation process and as a requirement of art. Art and architecture, by their very nature, are always complex. Thus, complexity is an operating principle because it is considered as a necessity that needs to be coordinated and understood. So while on the one hand, simplicity and abstraction guide the process, complexity is the driving idea that sustains that process of simplication.

8.3.2.5. THE SEARCH FOR UNIVERSAL IDEAS

There is another main underlying idea that characterizes both the architects and the artists: and that is the search for universal principles. Firstly it is analysed the architect's ideas and approaches and then the artists, and lastly connections between both are established.

- ***For Andrea Palladio,*** architecture should echo the universal principals that sustain all of humanity. In order to do so, it should discover and re-create harmonies, proportions and laws that sustain creation in the architectural space. For Palladio, a proportional harmony, defined throughout the whole structure, is a reflexion of sacred principles and of a sacred life, echoes the beauty of 'wholeness', conveys the 'universal design' and communicates the 'divine harmony'. It is the search for these underlying universal laws that define nature, humans, and the universe (all of creation), that can make Architecture belong to that universal quality.

- ***For Frank Lloyd Wright,*** both architecture and the arts should strive to understand the universal principles that underlie the whole of creation and re-create them, because understanding and echoing these universal principles allows one to become closer to God. Man should strive to define these principles, understand them and convey them through his creations. The chief task of all art and of architecture is precisely to discover these underlying universal principles which reveals the hidden unity of humanity and nature, man and the universe. Discovering universal principles, then, not only allows one to become closer to God, but also allows the artist/architect to create according to those principles (to apply them freely in his creations) and contribute (with his creations) to the divine order.

- ***For Le Corbusier,*** following the classical tradition, there are indeed a series of principles and rules that define all creation and man should discover them and re-create them through his work

(architecture and art) so that it belongs to the universal order of the world. The best example in Le Corbusier's work is the development of the Modulor, that sustained that the proportions of the human body and in overall nature defined an inherent order of the world, re-discovering the classical ideas of universal laws.

- ***For Tadao Ando,*** there is also a universal truth that sustains the world: architecture then, should embody those universal truth through metaphor, poetry, and emotions, and allow those truths to be understood and lived as spiritual encounters. It is this world of universal truths, that is found in the sacred and in the secular, that can be embodied in architecture that is key to spiritual development.
- ***For John Pawson,*** architecture can indeed be a communication of universal truths, through the idea of simplicity, that is deeply rooted in our traditions (both historical, architectural and spiritual). But it also strives for universality in yet another way: architecture in being a search for the fundamentals (light, space, proportions, materials and scale) that have always defined architecture (classic understanding) can communicate principles that are universal.

For the architects there is this clear idea that not only are there universal principles, but that architecture should discover them and embody them, in order to be apart of the universal order of the world and become closer to God. Now we will analyse the artist's views on the matter.

- ***For William Turner*** landscapes were symbols and metaphors for a universal spiritual language that could portray its significance across time and cultures. He believed that only did universal principles exist, but that they could be captured and apprehended intuitively through the process of creation. He aimed to echo the universal language and the universal principles of nature and the universe through his art.
- ***For Edward Hopper,*** the search for the universals was something slightly different: he had a deep interest in universal human emotions and universal themes that concern all of humanity and define all of our existence. With Hopper, universalities are exposed through the particular and the intimate, and what it possesses, that is most abstract and general: it's emotions and it's feelings.
- ***For Joseph Albers,*** art was all about searching for the universalities. He saw them rooted in geometry and order, away from individual expression and the marks of the self: order and geometry are the foundations of meaning and significance; expression is personal and therefore cannot be used for universal understandings. It is through geometry and formal expressions that the real essence can be portrayed and a universal order can be understood.
- ***For Rothko,*** the idea of universality is present in another, yet similar way. For him, there was a universality of emotions, feeling and spiritual longing, that ran across all human beings and across all times: and that is what should be captured and echoed through art.
- ***For Kiefer,*** universality is present in the idea of a universal, metaphysical and cosmological dimension of humanity. He believes that man is part of a 'primordial' universal, (rooted in the primitivism of the world). Art's role is to capture that universality and allow man to understand it. Further, as a theme, Kiefer uses universality constantly. For him, atmospheres, human beings and landscapes, possessed these universal qualities, a universal idea, and that was what he strived to represent and capture: the universality of the self (through the projection of the self), the place and of time.
- ***For Donald Judd,*** his whole work is in pursuit of a quality that is true and universal: It is through the language of minimal art, (as defined by Judd), that a synthesis of content and form can be defined and a maximum significance can be achieved through universal principles. Judd believed that art should search for the universal language that is true and meaningful: principles

of harmony, proportions and forms. These entities, (pure, clean and simple) communicate in a deeper way and in a more truthful way.

- ***For James Turrell,*** there is indeed a universal dimension that defines all existence, and that is connected to the cosmological and metaphysical understanding of the being and the world; that dimension, should be potentiated, amplified and understood through art. It is this universality of time and space, that defines our humanity and to which art should strive to portray and be part of.

For the artists the idea of universal principles is more ample and is not only considered as laws of form and harmonies but also as encompassing the ideas of universal soul and emotions, universal cosmological time and metaphysical universal ideals. All of the artists have in common this idea of representing these universal qualities through art, and that it is art's role to re-create them through creation.

Defining Universal Ideas…

Both artists and architects aim to represent and re-create universal principles: as form and harmony, as emotion, as spirit, as a metaphysical dimension or as a cosmological one. It is this main idea that there is a universal truth that underlies all creation and that the arts should be a part of that universal order in order to become closer to God. Man should strive to define these principles, understand them and convey them through his creations. The chief task of all art and of architecture is precisely to discover these underlying universal principles which reveals the hidden unity of humanity and nature, man and the universe. By embodying those universal truths through form, metaphor, poetry, or emotions, it allows those truths to be understood and lived as spiritual encounters.

8.3.2.5. ATMOSPHERES

Understanding Atmospheres…

Another main driving idea in both artists and architects is the idea of the 'Atmosphere'. As to the artists, there is this constant spiritual connotation of the atmosphere.

- ***William Turner*** saw in the atmosphere the truth he so much longed for; for him atmospheric landscapes were symbols of God and of Spirit. Turner uses the natural landscape and its intangible qualities as atmosphere to reflect the intangible condition of the spiritual world and to serve as a motor for the search of universal qualities. Atmosphere is a metaphor for the spiritual condition of the world.
- ***Edward Hopper*** in a similar way, believed that atmospheres captured the universal human condition, its inner world and its soul. Hopper uses the architectural space as the archetype and symbol for the inner self and for the search of the universal qualities.
- ***For Rothko***, atmospheres, as vague fields of colour and light, echo the emotional and spiritual condition of the human being.
- ***For Kiefer,*** the atmospheric landscape is metaphorical and poetical as much as it is symbolic and spiritual. Kiefer associates the atmosphere and the open field with the notion of the timeless

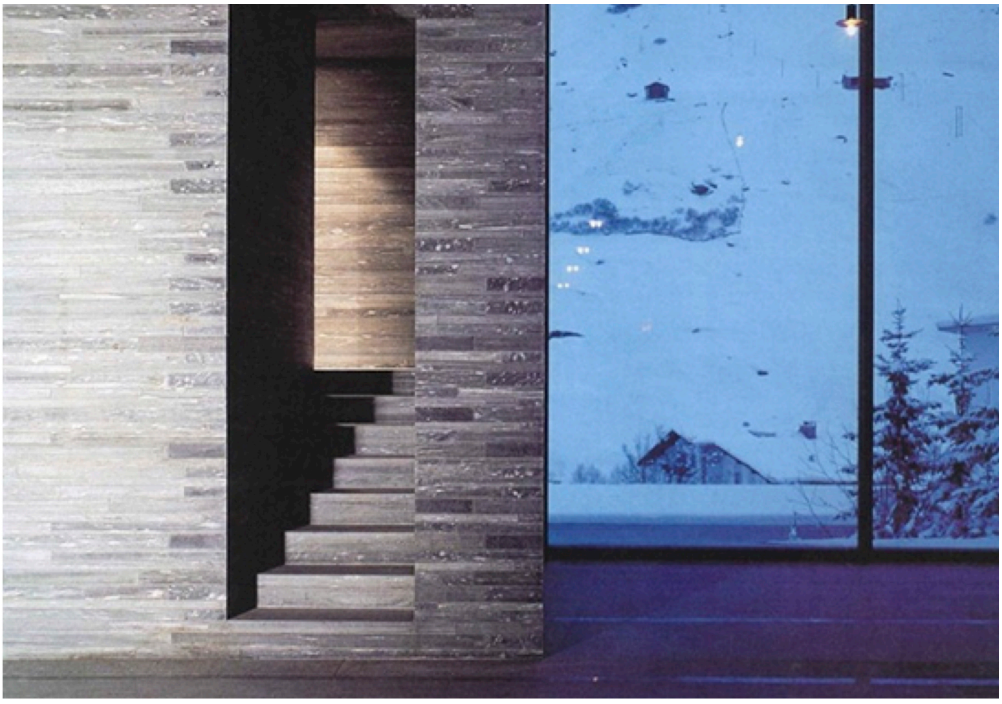
utopian land, they possess this mystical and transcendental meaning, a reference to a golden time, a golden age.

- ***For James Turrell,*** atmospheres as pure presence, as pure space, as pure colour or as pure abstraction (devoid of any other elements) creates an emotional and psychological shock that concedes man to be propelled into understanding his own condition. Besides these shocks, atmospheres have another purpose, which is to belong to the universal and timeless condition of the universe, to emphasize it, act as it's continuum, and let man to understand things that he otherwise could not.
- In architecture, it is Peter Zumthor that most focuses on the 'atmosphere' as a quality. ***For Peter Zumthor*** architecture is all about creating atmospheres and presences. In creating an atmosphere that is phenomenological, atmospheric and acts as a presence, he allows man to become involved in another dimension, that allows him to become aware of his surroundings and of himself. That awareness promotes a sense of consciousness and of belonging to a broader more universal existence.

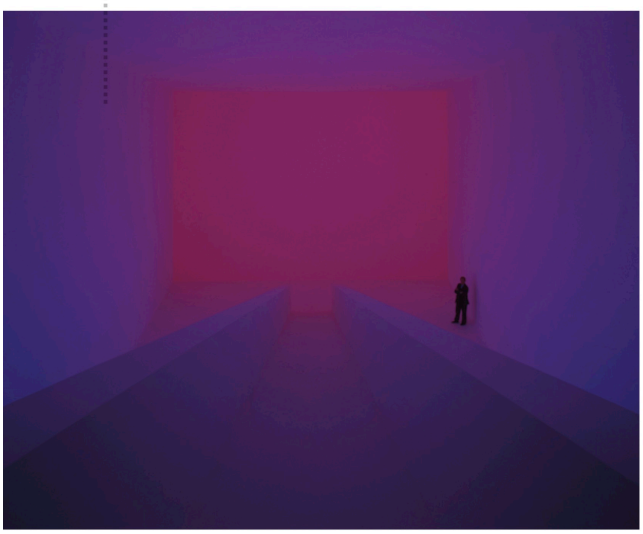
Both artists and architects share the same vision and goal about what an atmosphere should be and about what it can do. Atmospheres (natural and architectural) are a background for life and can possess the qualities and emotions one wishes to emphasize or re-create through creation. The creation of atmospheres, thus, serves three purposes: first the creation of an atmosphere (creation of a utopian land), secondly, the creation of a space that enables the understanding of the atmospheric impression as a symbol and spiritual metaphor, third the atmosphere allows for promotion of a sense of consciousness and universal understanding of existence. Although it is Zumthor that is widely known for defining and using the word atmosphere in architecture, as we can see, there is an underlying use of the concept in both architecture, painting and sculpture. The views of the principle, as we have seen are very similar and aim to engage the observer in the same way. He materializations, however, differ: where as Zumthor focuses on materials, tactility and the senses, Turrell creates more immersive and abstract atmospheres and Kiefer, for example, re-creates the atmospheres in two-three dimensional works.

Defining Atmospheres: The Elusive Metaphysical, Poetical and Spiritual Quality…

Now we can define what an atmosphere is: at it's most basic level 'atmosphere' refers to the overall mood and feeling of a place or space portrayed in an artwork or lived as architecture. It can be defined as being composed of evasive and elusive qualities, having a sort of hazy dream like feel to it's character. At a more deeper level an atmosphere is: a symbol of God and of Spirit (Turner), it captures the universal human condition and its inner soul (Hopper), is a phenomenological quality that acts as a presence (Zumthor), belongs to the universal and timeless condition of the universe (Turrell), echoes the emotional and spiritual condition of the human being (Rothko), is a metaphorical, poetical, symbolical and spiritual essence and possesses a mystical and transcendental meaning (Kiefer), allows man to be involved in another dimension and be aware of who he is (Zumthor) and creates an emotional and psychological connection with the viewer/user (Turrell).



PERCEPTIVE ATMOSPHERES



EMOTIONAL

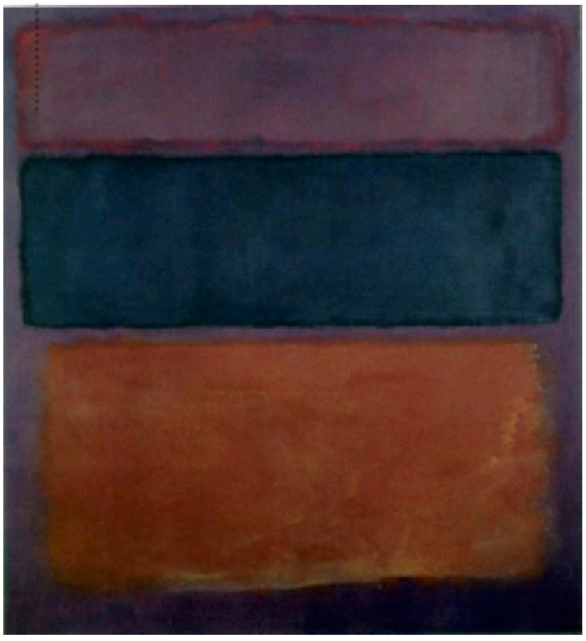


Photo 1: Nº 5, 1964, oil on canvas; Source: http://www.wikiart.org/en/mark-rothko/no-5-1964; Photo 2: Therme Vals Hotel and Spa; Source: http://homeli.co.uk/therme-vals-spa-by-peter-zumthor/;Photo 1: James Turrell: Bridget´s Bardo, 2009. Ganzfeld. Installation view at Kunstmuseum Wolfsburg. Germany, 2009. © James Turrell. Photo © Florian Holzherr.; Source: http://www.archdaily.com/380911/light-matters-seeing-the-light-with-james-turrell/51a7b480b3fc4b39ee000362-light-matters-seeing-the-light-with-james-turrell-photo;

PLATE 103: THE IDEA OF ATMOSPHERES

8.3.2.6. TRANSCENDENCE

Transcendence of the Self and The Spirit…

The idea of occurring a transcendence of the self into the realm of the spirit is present in several of the case studies in both artists and architects. It is a philosophical theme, however one that has an operative sense for some of the case studies. Analysed bellow are the views of Andrea Palladio, Frank Lloyd Wright, Barragan and Tadao Ando, whose theories greatly emphasize this point in architecture, and Mark Rothko, Anselm Kiefer and James Turrell, whose ideas also contribute to the same concept. In respect to the architects, they believed that spaces could create the necessary 'contact' for this connection to emerge.

- ***For Andrea Palladio***, through architecture there could indeed be a transcendence of the self; through the embodiment of the universal principles man would embrace these qualities, apprehend them, and be 'awakened' into that type of virtuous existence. Architecture could and should help man become, better than he is.
- ***For Frank Lloyd Wright***, the unity between Truth, Beauty and Nature, was a manifestation of the divine, of God. And creations that incorporated those views and the universal principles that sustained them, would play a part in the divine creation and thus aid man in returning to that vital part of himself.
- ***For Barragan,*** emotional architecture moves people through beauty and poetry, acting and changing the spirits of man.
- ***For Tadao Ando,*** it is metaphor, poetry and emotion, as an embodiment of universal truth that can let man to be in touch with his spiritual dimensions and allow him to transcend his own nature.

With reference to the artists, there is the same underlying belief.

- ***For Rothko,*** a transcendence of the mind and of the spirit occurs when the being encounters a piece of art that allows him to feel deep emotions that he hasn't felt before; the viewer is freed and expands emotionally and spiritually. He believed that art should be able to transcend the confines of 'ordinary' life and strive to elevate human life to another type of connection and realm.
- ***For Kiefer***, a transcendence of the self can occur when the self is confronted with 'new connections' through an artwork: the artwork awakens new understanding, and creates new connections perceived by the mind and the spirit, that transforms our sense of self and our sense of belonging to the world. Ultimately, he strives to create a shift between the physical life of man, and his understand of his own immortality: his spirit.
- ***For James Turrell,*** the installations create visual illusions and references that immerse the viewer and create the illusion of openings into another space, time or another dimension. This is an immersive experience that engages all the senses and mental capacities and promotes a state of meditative contemplation, allowing for an observation of the self, and a contemplative understanding of the world. Each space is like an envelope that shelters and encapsulates the 'being', like a cocoon, inviting for contemplation, but also creating another reality altogether.

Defining Transcendence …

In both artists and architects, there is this driving idea that the artistic creation can awaken the being into a deeper state of existence, and a transcendence of the self occurs into the spirit. This occurs either when the self is confronted with 'new connections' through an artwork, or when the principles contained in the work awakens man's spirit and generates an immersive experience that engages all the senses and mental capacities, promotes a state of meditative contemplation (a contemplative understanding of the world) and allows for the awakening of a new spiritual and emotional understandings. Transcendence thus can be defined by this ability to 'transcend' material realms and become immersed in the dimensions of the spirit.

8.3.2.7. FORM FOLLOWS SPIRIT

Form Follows Spirit (universal truth and expression) …

It is possible to announce another common idea: and that is the intrinsic notion that creation (and it's form) is led and guided by the spirit to the spirit. This is sustained by both artists and architects.

- ***For Andrea Palladio*** forms should follow the rules and laws of the universe; this meant that they followed innate rules of proportions and harmonies, rather than aiming to follow specific 'ideals' in regards to abstraction or representation. For him, architecture's aim is to create spaces that communicated virtue, wisdom and truth, and that, in doing so, elevate man into a higher dimension of spiritual life, thus architecture should follow the laws of spirit.
- ***For Frank Lloyd Wright***, all of creation to be in tune with the universe, nature, morality and a sense of spirituality, needs to possess that quality of beauty, truth, harmony and rhythm. Only in that way, can creation contribute to the divine order of the world. Thus, for him, architecture's aim is: to reunite nature with man's soul and it can only do that by following the 'rules' of spirit. Architecture, then, although might follow function at a primary level, ultimately, it is guided by the spirit.
- ***For Barragan,*** because architecture's aim, once dwelling is established, is to portray and capture significance and communicate that significance to the hearts of man and to allow for spiritual emotions and poetical encounters to emerge within the user, it needs to use and portray the principles and rules of the spirit and use faculties that permits for the spirit to emerge.
- ***For Le Corbusier,*** Architecture's aim is to communicate to man's spirit, and likewise, it can only do that (create emotions that act on man's consciousness and communicate universal ideals) if it is created according to the same ideals and principles.

Defining Form Follows Spirit (universal truth and expression) …

For the architects Palladio, Wright, Barragan and Le Corbusier, there is the overall idea that form doesn't necessarily follow a simplification process, but should follow the universal, natural and spiritual rules that define the world and the being. Only in that way can it fulfil it's purpose and communicate to man's spirit.

8.3.2.8. AMBIGUITY

What is ambiguity? And how is it understood?

The idea of ambiguity …

- ***For Wright***, architectures forms should be open and create a sense of ambiguity, just like nature. Architectural form is not enclosed (like a volume or a solid) but instead is composed of open ended forms, that intersect and interact with each other, creating an overall form that is perceived as ambiguous.
- ***For Ando,*** architecture achieves it's fictionality by stepping into the 'ambiguous realms of the human spirit'.
- ***For William Turner,*** atmospheres should be ambiguous in their character allowing for multiple interpretations to occur.
- ***For Hopper***, his spaces and his characters are always filled with a mystery and a sense of ambiguity. The characters and the sceneries are created in such a way as to be open to multiple interpretations, leaving the viewer without any certainty as to what the people are doing, feeling, or thinking.
- ***Kiefer's*** art possesses the quality of ambiguity that allow it to be always open to multiple interpretations and always constantly alive, like any other being of the universe (as he believed all art should be)[546]. Kiefer's work is this ambiguity: this openness of interpretation, the doubt of sureness that leaves man eager to complete, understand and always in search of answers.

Defining Ambiguity …

Ambiguity is a property used by both artists and architects that creates visual stimuli that is ambiguous in it's nature (inexact and imprecise) and is thus open ended, allowing for multiple interpretations to occur. Multiple interpretations allow for the artistic creation to be always constantly alive, like any other being of the universe.

8.3.2.9. CONSCIOUSNESS

Consciousness…

- ***For Le Corbusier,*** architecture's aim is to communicate to man's spirit by creating 'emotions' that act on man's consciousness, by being part of a universal order. Overall, art creates from the spirit emotions that convey order and communicate consciousness (universal principles)[547].
- ***For Tadao Ando,*** through his poetical spaces, messages are communicated: both in a direct and a in an indirect way. In doing so they generate human understanding and human consciousness.

[546] According to Rampley (2000) what creates these opposing polarities, is precisely the ambiguous nature of the works: '' (…) it is this very ambiguity which has provoked such a range of hostile responses. '' (Rampley, 2000, p. 34). However ambiguity is found at a deeper level: the paintings use a visual vocabulary that is ambiguous in it's nature: using morphed forms, changed and transformed that are always open ended in their essence (the forms are derived from the materials, rather from lines or geometry) thus creating an open ended interpretation.

[547] '' Being affected, we are able to perceive beyond raw sensation; then certain relations will come into being that act on our consciousness and put us in a state of bliss (consonance with the laws of the universe that govern us and which all of our act are subject), in which man makes full use of his gifts of memory, of examination, of reasoning, of creation.'' (Corbusier and Cohen, 2007, pp. 95, 96).

- ***For Peter Zumthor,*** phenomenology (the philosophical discipline that sustains his architecture) is the study of structures of experience, or the study of consciousness. In this sense, his architecture is deeply related to consciousness. In creating an atmosphere that is phenomenological, atmospheric and acts as a presence, he allows man to grow his awareness and his consciousness.

- ***For Rothko,*** art has the power to communicate to human consciousness and relieve modern man of his spiritual emptiness. Deeply influenced by Freud and Jung, he sustained that through myth and symbol, art would operate and communicate at a deeper level of consciousness, enabling man to find his place in the world once more.

- ***For Kiefer,*** through creation he expands his own existence and his own consciousness; art, thus, also allows for the viewer to become immersed and develop his own consciousness.

- ***For Turrell,*** in the same way, the spatial and perceptual experiences allow for the development of human consciousness.

Defining Consciousness …

Consciousness can be defined as that which is expanded in the artist in the creative process, and that which is developed in the viewer. It is the quality that defines art's power: art generates human understanding and human consciousness. Although it is a feature of the human being, it is an aspects that has a profound importance in both creating and defining significance and as an overall aim of the cration.

8.2.4.10. SPIRIT

Spirit …

- ***For Palladio,*** good architecture (a moral obligation) as a 'manifestation of virtue', possessed the power to inspire man and make man's spirit rise towards those 'virtues' materialised.

- **For Wright,** architecture was capable of promoting an interaction between the divine and man, and was able to elevate man's spirit. Architecture is in itself pursuit of a 'whole' unifying essence: between Nature, Man and Spirit. The purpose of art and architecture is to understand the inner nature, and express universal spirit.

- ***For Barragan,*** architecture is a deep spiritual connection to life. This is translated to architecture, in what he defines as an emotional architecture: an architecture that creates specific emotions of seclusion, solitude, serenity and beauty, allowing for the spirit and hearts of man to find stillness. To achieve these spiritual and metaphysical dimensions, Barragán uses colour and light, creating serenity and integrating the body with the spirit.

- ***For Le Corbusier,*** architecture's aim is to communicate to man's spirit. He sustained that through architectural abstraction a spiritualization of the 'brute fact' (that contains symbols and ideas) occurs[548]. Corbusier strived to create from the spirit and to the spirit of man, through his

[548] '' Architecture has graver ends; capable of sublimity, it touches the most brutal instincts through its objectivity; it appeals to the highest faculties, through its abstraction. Architectural abstraction has the distinctive and magnificent quality that, while being rooted

art, in whichever means of expression. For Corbusier the architect, just like the artist, is a 'creator of emotion, beauty and order'; creations, as art, create from the spirit emotions that convey order and communicate consciousness (universal principles).

- ***For Tadao Ando,*** *architecture* can '' '' (…) can provide a special point of energy ... to reclaim and nourish their spirit and soul.'''' (Kai, 2006, p. 10). ; Like any art, Ando stimulates the human spirit and the soul by awakening the sensitivity and emotional levels that are otherwise silent.

- ***For Turner,*** light is a 'reflexion' or signifies the 'emanation of God's spirit'; thus all art should convey light. Turner's landscapes strived for an expression of this 'spirituality' in the world.

- ***For Hopper,*** his art and his paintings are a very particular representation of the 'spirit' of his time. He further strives to capture human emotion, the baring of the deepest emotional conditions of the spirit and of the soul. Hopper's spaces and representations were merely a vehicle for the representations of the inner worlds of the soul and the spirit.

- ***For Rothko,*** the idea that each painting possessed its own meaning, as a spiritual essence that could communicate human emotions, they use psychological and emotional references of the human psyche and the human spirit. In order to generate a spiritual experience in the viewer, he, as the artist needed to portray a spiritual experience too. His desire was to express universal truths and spiritual connections.

- ***For Kiefer,*** the work of the artist was to transform material things into spirit (just like the alchemist)[549], elevating ordinary life into a spiritual realm.

- ***For Turrell,*** shifts of perceptions and experiences in art, would have a deep impact in the being at spiritual levels.

Defining Spirit and Soul …

For both the architects and the artists, Spirit is that which is created in the creative process (the artist is the creator of spirit, transforming matter into spirit) and that which is generated within the viewer. The role of art and architecture is to capture spirit (to convey the soul), and to communicate to the human spirit (to elevate man's spirit: it allows for the spirit and hearts of man to find stillness, to be inspired, and to be lifted into higher realms of existence).

in brute fact, it spiritualizes this, because brute fact is nothing other that the materialization, the symbol of an idea.'' (Corbusier and Cohen, 2007, pp. 101, 102).

[549] **Painting as alchemy:** "Alchemy is not to make gold, the real alchemist is not interested in material things but **in transubstantiation, in transforming the spirit.** It's a spiritual thing more than a material thing. An alchemist puts the phenomena of the world in another context.'' (Wullschlager, 2014).



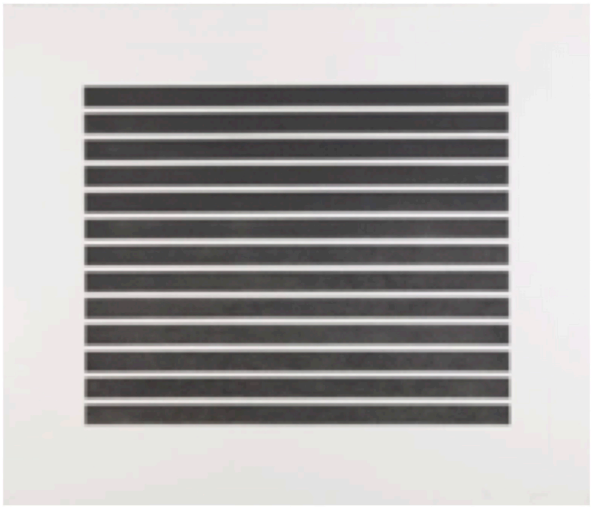




Photo 1:: Interior picture of the space; Source: http://forums.cgsociety.org/archive/index.php?t-943364.html;;Photo 2: The Interior of the Novy Dvur Monastey; Source: http://blog.archpaper.com/2010/07/john-pawson-crafts-new-show-museum-for-london/#.Vi_PcYRLFFI; Photo 2: [no title] 1980, Aquatint on paper, 508 x 635 mm, Tate Collection; http://www.tate.org.uk/art/artworks/judd-no-title-p07555

PLATE 104: ABSTRACTION AND SIMPLICITY

Synthesis: Chapter 8

1. *Although chronologically and geographically all the case studies differ, they establish connections with each other as direct influences on each other's work.*

2. *Both artists and architects use the same creation tools, the same conceptual frameworks, explore the same emotions and define the same values: 42% of the case studies create between 25 to 30 connections. Where as the low levels of 5 to 10 and 10 to 15 connections remain unused defining 0% of the case studies and the opposite extreme of 45 to 50 connections also defines 0%.*

3. ***In regards to creation principles:***

- *Intuition and Representation define 18% (being used by 9 case studies),*
- *There are two main types of creation (for both artists and architects): one led by instinct, imagination and expression and the other led by reason, rationality and principles (that drift away from personal expression) towards a more formal language.*
- *only Le Corbusier uses all the of the concepts and faculties.*
- *There is a trilogy of Freedom, Imagination and Expression that is present in multiple case studies (both architects and artists): Tadao Ando, Peter Zumthor, Le Corbusier, William Turner, Mark Rothko and Anselm Kiefer. Case studies that use this trilogy do not use rules and principles and rationality*
- *The idea of Representation is featured in both polarities: both reason and intuition.*
- *Each case study has an average use of three to four creative aspects.*

3. ***In regards to emotions:***

- *The emotion of contemplation is used by all of the case studies and defines a sum total of 30% of all of the emotions used.*
- *Following is the emotion of 'Depth' which totalizes 21% (being used by eleven of the case studies).*
- *The emotions of Depth and Contemplation are used in combination by eleven of the case studies.*
- *All of the case studies use multiple emotions as their driving aim and as an important factor of the overall creation (average of 4 out of 6).*

4. ***In regards to the conceptual frameworks:***

- *Tangible's are: colour, light, substance, materiality, space, movement, geometry, order, form, rhythm, proportions, seriality, tactility and perception.*
- *The tangible conceptual framework that is most used by all of the case studies is Space (used by thirteen of them), defining a total of 12% usage out of all the conceptual frameworks analysed, followed by Substance and Light. The least used are Seriality and Geometry.*
- *Intangible's are: : complexity, simplicity, purity, essence, atmosphere, spirituality, experience, sensitivity, human, memory/culture, nature, abstraction and time.*
- *The intangible conceptual framework that is most used by all of the case studies is Essence and Experience (used by eleven of them), defining a total of 11% usage out of all the conceptual frameworks analysed, followed by Spirituality .*
- *Five concepts define more than half of the usage of all the overall intangible concepts: Experience, Spirituality, Essence, Atmosphere and Purity.*

- *The least used is 'Simplicity' (used by five case studies) followed by Complexity, Sensitivity, Nature and Abstraction (used by six case studies).*
- *The case studies that establish most number of connections to most number of conceptual frameworks (both tangible and intangible), are Le Corbusier and Anselm Kiefer.*

5. In regards to the values:

- *In architecture both Tadao Ando and Le Corbusier incorporate and take into consideration a greater number of values (6 out of 8), and in the artists Kiefer incorporates all of the values.*
- *all of the artistic and the architectural case studies take into account a large number of values: either four, five or six values out of the eight that were analysed (except for Albers, which incorporates only two)*
- *Spiritual Values is the one value that is most considered by both artists and architects, (used by twelve out of fourteen) defining 17% of the total of values used, immediately followed by Sustainable values (present in all architectural values). and Philosophical Values, (both used by eleven out of fourteen case studies) defining 15% of the total of values used.*
- *The least used value by all of the case studies are the Symbolical Values (4 out of 14) defining 6% of the total of values used, followed by metaphorical values.*

6. Defining the Values:

- ***Philosophical Values:*** *are used as foundational ideas of life and of art: they define and guide the understanding of what the artwork and architectural work should do and how it should do it. It is a motor value that defines the foundations of the self and shapes the views on life, being, art and the universe.*
- ***Emotional Values:*** *are considered to the one aspect that grants art it's value, and allows for the development of consciousness and the union of the body and spirit; they are at the core the creation process, and allow for a link to be established with consciousness, promoting a union of body and spirit.*
- ***Spiritual Values:*** *are both incorporated into the creation and define the overall aim of the artwork or of the architectural space; they aim to capture the expression of spirituality in the world and to re-create the power of God on earth; they define the aim of art itself: to represent the spiritual life and create a connection with consciousness and spirit.*
- ***Poetical Values:*** *are related to the understanding of a frail and intangible essence that both frames the creation process as a goal and that is contained in the work itself; poetical values establish a deep connection with man's conscious, his emotions and with his spiritual dimensions.*
- ***Sustainable Values****: are driven by the duty (a moral obligation) to communicate and embody knowledge and wisdom in the creations in order to help man evolve into higher dimensions of his own existence; desire to help humanity evolve and change, psychologically, emotionally and spiritually, promoting a more sustainable existence.*
- ***Metaphysical values:*** *relates to the desire to make the creation belong to a universal and timeless condition allowing man to understand his place in the universe. It is by metaphysical values that man questions his own existence and understands his own place in the world and in the universe. It is a deep incorporation of metaphysical ideas that both question existence, and answer it through the artistic creation, permitting man to become more in tune with his own metaphysical existence.*
- ***Metaphorical values:*** *are used to relate and create connections to something other than itself. Both for the artists and the architects the artwork itself is a metaphor for universal truths, and contains universal truths and ideas in itself: thus the artwork works in a duality as a whole and as micro metaphors (just*

like for the architects). It is the metaphorical values that: communicating and emboding universal truths through metaphors embody multiple spiritual lesson and allow for the mind and the soul to understand new universal and spiritual truths.

- ***Symbolical values**: relate to elements (symbols) added to the space that create a symbolic reference to another quality, property, dimensions or value. Symbolical values should be considered at two scales of intervention: the creation as a symbol itself that represents the integration of all of man's faculties and spirit, communicates to the spirit, and allows for spiritual and emotional connections to emerge; and secondly the incorporation of individual symbols that can create new links and other references and associations depending on their symbolic nature such as the natural fields that represent lost paradise. The symbolic values communicate to human consciousness and spirit.*
- ***Value:** can be defined as that which defines man's existence and that which drives his creation process, guiding ever decision and way of creation until the very last end result. Values are also deeply connected to the desire to communicate to man's consciousness, and are profoundly rooted in the idea of aiding human evolution at all levels of existence. It is through values that art becomes art; being that in combinations, they create unique works, that respond to man's innate needs of existence.*

7. Defining Art and Architecture:

- ***Art is:** a creation of the spirit that communicates to spirit (Le Corbusier), the product of the 'most creative and forward-thinking intellects' (Pawson), a manifestation of God (Wright); that which elevates man through poetical emotions into a spiritual life, thereby granting meaning to life (Barragan), the means by which spirituality and God is manifest (Turner), a living organism (Kiefer), the creation of a spirit in itself (Judd), capable of creating a metaphor, of being a symbol, and acting as a reflexion of an inner life of the soul (Hopper), associated with fantasy, feeling and imagination (Albers), the capturing of the expression of spirituality in the world (Turner), what allows for a deeper spiritual connection to unravel (Rothko).*
- ***Architecture (as an art) is:** is a reflexion of divine harmony (Palladio), is an extension of God's creations (Wright), is an open living organism (Barragan), is an 'artistic fact' that deals with the stirring of emotion in the spirit (Le Corbusier), is the establishment of a connection between man and nature, man and spirit (Ando), is rooted in substance (Ando), is that which promotes a sense of consciousness and of belonging to a broader more universal existence (Zumthor).*
- ***The new merging of the arts is**: The synthesis of the arts as shared meaning (Le Corbusier, Donald Judd, Barragán and Andrea Palladio) and the emerging of a new sphere of artistic expression that combines the best of each world (Donald Judd, Anselm Kiefer and James Turrell). The arts should collaborate together establishing new ways of creating meanings and significances.*

8. Understanding more Principles and Theories:

- ***Timelessness:** defined as a quality of that which has no beginning and no end, as that which is eternal and always everlasting and as that which is permanent*
- ***The Living Organism:** the artistic creation as a living organism (open, changing and constantly evolving in meanings and significances)*
- ***Abstraction**: used as a quality that can find the real essence and substance of the creation.*

- ***Universal principles:*** *the aim to represent and re-create universal principles: as form and harmony, as emotion, as spirit, as a metaphysical dimension or as a cosmological one*
- ***Atmospheres:*** *an elusive Metaphysical, Poetical and Spiritual Quality, refering to the overall mood and feeling of a place or space portrayed in an artwork or lived as architecture.*
- ***Transcendence:*** *the driving idea that the artistic creation can awaken the being into a deeper state of existence, and a transcendence of the self occurs into the spirit.*
- ***Form follows spirit:*** *the driving idea that form should follow the universal, natural and spiritual rules that define the world and the being.*
- ***Ambiguity:*** *visual stimuli that is inexact and imprecise and is open ended, allowing for multiple interpretations to occur.*
- ***Consciousness:*** *as that which is expanded in the artist in the creative process, and that which is developed in the viewer.*
- ***Spirit and Soul:*** *that which is created in the creative process (the artist is the creator of spirit, transforming matter into spirit) and that which is generated within the viewer*

Summary Chapter 8:

In the present chapter 5, a comparative analysis of the various case studies was undertaken, in order to arrive at an understanding of the main driving principles and values that define a common ground between them. Various analyses were conducted and according conclusions were outlined. The differences, the similarities and uses, in the creative process, in regards to emotions, to conceptual tools and in values were undertsood. We further evaluated values and defined the eight types of values that sustain the case studies individually: arriving at a final definition of what each value is and what 'value' in itself is. Lastly, common theories and ideas were analysed: firstly, the essence of art and of architecture, followed by the comparison of views, and the definition of a new field of art; secondly it was established a series of generalities and principles that sustain the creations: such as the idea of ambiguity and how consciousness and spirit is defined.

BIBLIOGRAPHIC REFERENCES: Chapter 8

Corbusier, L., Cohen, J.L. (2007). *Toward an Architecture.* Los Angeles: Getty Publications.

Kai, G. (2006). *Concrete Resistance: Ando in the context of critical regionalism*. Available at: http://www.andrew.cmu.edu/user/gutschow/theory_course/Xiang%20Hua%20Ando%20Paper.pdf [Accessed 15 Jul. 2014].

Rampley, M. (2000). Anselm Kiefer and the Ambivalence of Modernism, in: *Oxford Art Journal,* 23, pp. 79–96.

Wullschlager, J. (2014). Interview with Anselm Kiefer, ahead of his Royal Academy show, in: *The Financial Times* [online]. Available at: http://www.theartstory.org/movement-color-field-painting.htm [Accessed 26 Apr. 2015]

PART IV

Findings

Introduction note:

Part IV of the thesis is defined by one main chapter: chapter nine, which establishes a comparison between theory and practise, part II and part III, in the various points of analysis, and then constructs a union between all the concepts derived from that comparison. The union of these concepts is defined as 'the diagram of creation' (9.3.). Lastly, part IV finishes with some ending remarks and a series of directions for future research.

SO THEN WHAT DO WE REACH AND UNDERSTAND?

PART IV
Findings

findings and conclusions

Chapter 9:
COMPARATIVE ANALYSIS BETWEEN THE CASE STUDIES

cross analysis between the case studies and theory; defining results and findings

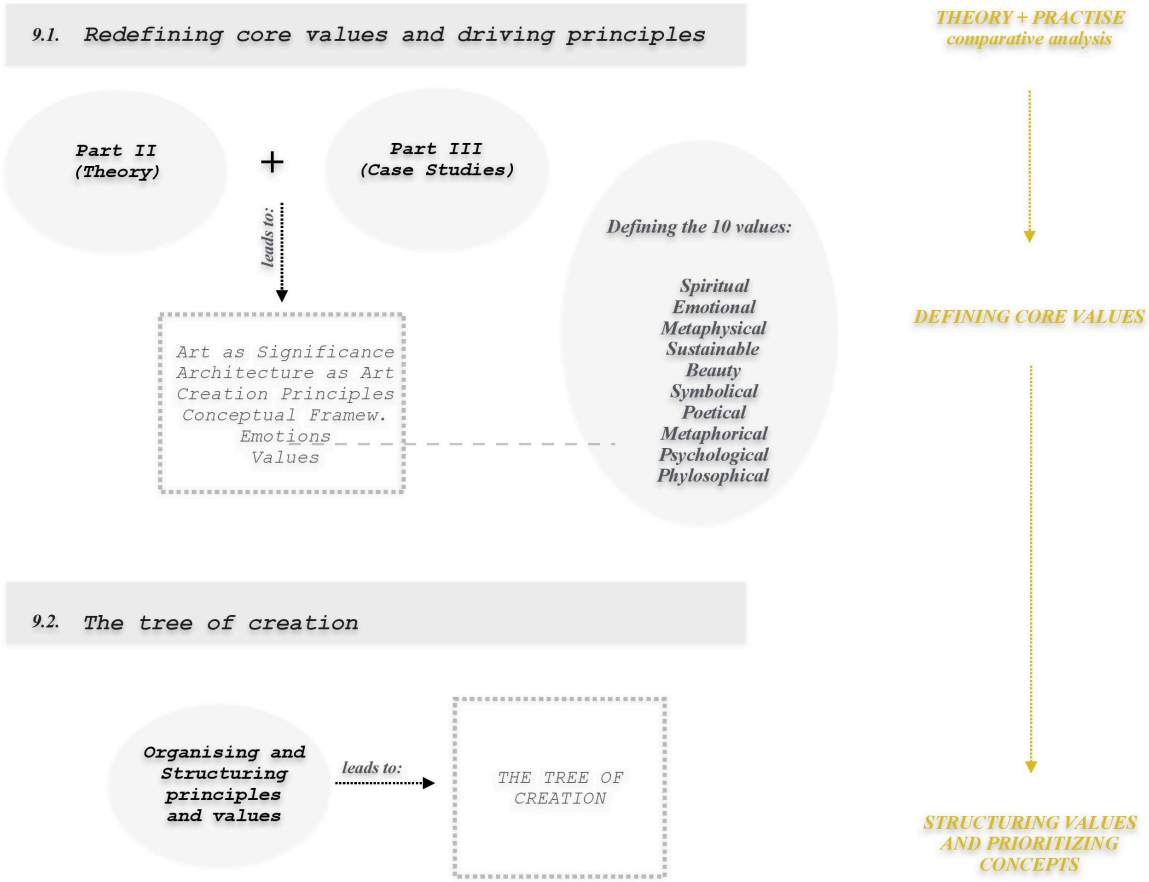


Figure 27: Diagram of Part IV of the research.

CHAPTER 9

FINDINGS AND CONCLUSIONS

Introduction:

In the present chapter firstly a comparative analysis of Part II and Part III is defined (9.1), then the diagram of creation is composed (a diagrammatic union between all the different concepts, essences and values), followed by an in-depth analysis of the tree in it's multi-layered components and lastly, a series of ending remarks are conducted, as well as some pointers for future research.

9.1. COMPARING THEORY WITH PRACTISE (Part II with Part III): REDEFINING THE CORE VALUES AND THE DRIVING PRINCIPLES

The logic followed in both Part II and Part III was similar, so, likewise, the analysis and joining of both spheres will follow the same sequence: firstly an analysis of the theories and understandings (defining what art is as significance and what architecture is as an art), followed by the creation principles that sustain the significant creation, and the principles that define experience; secondly an analysis of the core values and principles announced in each part (redefining the core values) and in third place, announcing a series of principles that can be summarized from both parts.

9.1.1. ART AS SIGNIFICANCE

Then what is art for the theorists?

For the theorists…

For the theorists *(see Glossary),* art is that which creates and is significance. Everything is creation, as we saw, however only some creations possess significance. These specific types of creations, as was defined and observed of study of the present thesis, are defined as art. We also saw, that although everything can signify something, only Art can create multiple signfiicances, at various levels (establishing various 'values' and principles).

With Collingwood (1938) one saw that, creations, thus, can be organized into higher art forms (art) or lower creation forms that use craft, representation (skill), magic (ritual) and are designed for amusement (entertainment), polluting the world. Whereas high art, or simply art, is that which contains significance and meaning and generates an aesthetic experience. The work of art, then, communicates and creates significance, content and meaning, within an aesthetic experience (Collingwood (1938), Scrutton (2009), Cary (1984), Pallasmaa (1996) and Saarinen (1984)).

One also saw, that the significance that the work of art contains is presented as a whole, (inseparable and indivisible), it connects to 'pre-verbal meanings of the world' and dwells on the 'riddle of existence' (Pallasmaa (1996)), connects to the senses and the sensibility of man (Carey (1984)), can be associated to a kind of religious experience (Saarinen (1948)) and grants us a sense of belonging allowing us to relate to out highest nature (Scrutton). This significance that further describes the work of art is dependent on the values and principles that the artwork possesses, from which it springs from as a sum total. It is these values and principles that define the artwork's significances, and establish links to consciousness, allowing man to expand and grow at various levels of existence (emotionally, psychologically, and spiritually).

Then what is art for the case studies?

For the Case Studies…

With the case studies, it was seen that both artists and architects have similar views of what art is: art is that which creates from and to the spirit (Le Corbusier) and is a manifestation of God (Wright and

Turner) and allows for a unique experience to occur. For some of the architects, this connection to spirit was derived of the arts belonging to a universal order and in this sense, the task of art is to discover the underlying principles that define humanity and nature thus guiding civilization to higher ideals (Palladio, Wright and Le Corbusier). Some of these universal principles are understood as 'emotions, beauty and order' (that are generated by the creations in the human being); in doing so, the artist becomes part of the universal order (Le Corbusier). For other architects, architecture as art connects to intellect (art is simply a product of the 'most creative and forward-thinking intellects' (Pawson)) and to poetry: art is that which elevates man through poetical emotions into a spiritual life, thereby granting meaning to life (Barragan). For the artists, art is also something that connects to the spirit, however instead of being connected to universal principles, there is the underlying idea that it expands human consciousness. Essentially, they consider art to be a living organism (Kiefer), an alive spirit in itself (Judd) and is thus the means by which spirituality and God could be made manifest (Turner). It is art that can create complex metaphors and symbols reflecting inner life (Hopper), can be associated to feeling and imagination (Albers) and create complex sensations (Judd). Through art, a unique experience occurs: that communicates both intellectually and emotionally (Albers) that allows for a state of consciousness and contemplation to occur and for a spiritual connection to unravel (Rothko), expanding our own existence in metaphysical and spiritual ways (Kiefer and Turrell), by allowing for a self-understanding to emerge (Hopper) and a re-discovery of truths (Turrell).

Defining Art…

Overall, both the ideas proposed by the theorists and by the case studies are identical. However, whereas the theorists use the word significance to describe art, the case studies use the word spirit in most cases. Both understand Art as a significance (connected to the spirit) that communicates to man's highest faculties.

Art

Theory	***Case Studies***
*- uses the word **significance** to describe art*	*- uses the word **spirit** to describe art*
*- uses the word '**aesthetic experience'** to describe the experience of art*	*- uses the word **consciousness** to describe the experience of art*
- art is that which creates and is significance.	*- art is that which creates from and to the spirit*
- significance is connected to 'pre-verbal meanings', values and principles.	*- spirit is connected to universal order, emotions, beauty and order (values and principles)*
- relates to a sort of religious experience	*- relates to a spiritual and metaphysical experience*

Table 35: Art differences and similarities between Theory and Case Studies

The theorists describe the significance of the work itself as something that is pre-existing, connects to the senses, is associated to a religious experience and is defined by the values it uses; where as the case studies define the 'spirit' of the work of art as that which embodies universal principles, emotions, beauty, thoughts and metaphors (and symbols of the inner life) and is associated to the

imagination (which can also be understood as values). Both definitions complete each other. Both further explain that through the experience of art (a unique experience), something transcendental occurs; the case studies explain that it expands human consciousness, allowing for a spiritual (and metaphysical) connection to unravel.

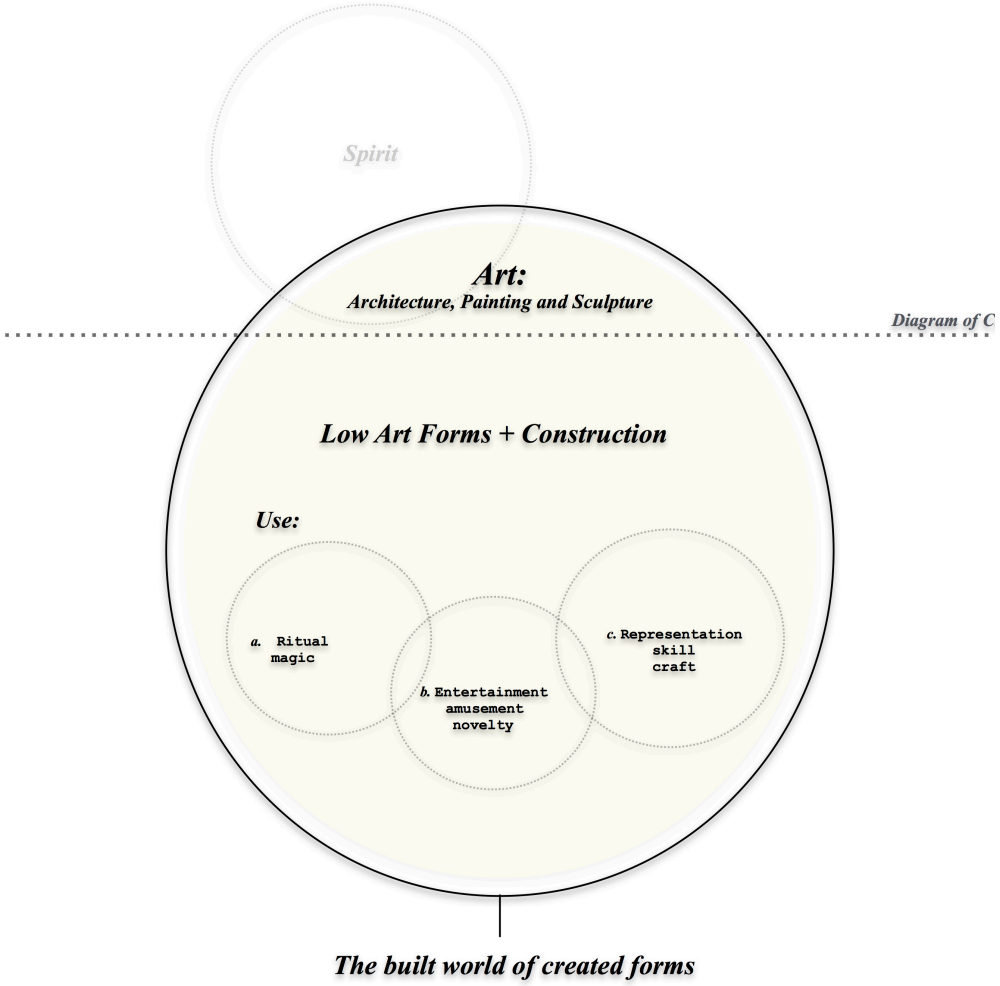


Figure 28: Diagram exemplifying the difference between Art and other forms of creations

The diagram above aims to clarify the above ideas in a visual way; clarifying that not all creations possess significance within them. An example of these low art forms created for entertainment purposes rather than the creation of significance in architecture are the architectural spaces of Disney. Although this distinction was already made clear in Beaux-Arts system, and was sustained by Ruskin, it is still important to clarify, not so that it can be revived, but so that there is an understanding of what types of creations should exist and why.

9.1.2. ARCHITECTURE AS ART

Then what is architecture for the theorists?

For the theorists….

For the theorists, architecture is an art that creates and is significant in a specific way. In general architecture is defined by a main specific aspect: the creation of a space that allows for 'dwelling'. Architecture, creates the possibility of dwelling which implies the establishment of meaningful relationships between man and a given environment; it is in 'dwelling' that man finds himself, and a sense of being-in-the-world is established. Dwelling implies an act of identification (the establishment of a sense of belonging to a place), and orientation (spatial interrelationships) through which significance emerges. (Norberg-Schulz (1985)).

Just like other art forms, it has a lower type (construction and building) and as an art (architecture) that begins with the adding of elements (beyond functionality) that add values, principles, and significances (Ruskin (1849), Scruton (2009), De Botton (2008)). Thus, Architecture once it has established the primary function of dwelling is intrinsically significant and meaningful in itself (Scrutton (2009)); it is based on the duality of both 'use' and artistic freedom (Kant (1976)) and is defined by the principles and values it incorporates (Ruskin (1849) and Scrutton (2009)). Other ideas are brought forth, however all of them are considered an extension (they define examples) of the values and significances it incorporates: creates poetical and cosmological values (Perez-Gomes (1994)), creates insights, understanding and truth (poetry) that affect the viewer (Zumthor (2006)), communicates beauty and is a sensuous expression of divine and human freedom, just like any other art (Hegel) and lastly communicates cosmological, ontological and existential values and principles that allows man to understand his place in the world (Pallasmaa (2009)). Steiner adds a spiritual value: Architecture addresses the human spirit, and allows for a connection with the soul (allows for the departure of the soul) (Steiner (1992)).

Then what is architecture for the case studies?

For the case studies…

For the case studies, architecture as an art, is the creation of an aesthetic emotion that communicates to man's consciousness and spirit (Le Corbusier). It is defined by being a reflexion of divine harmony (Palladio) and an extension of God's creations as universal order (Wright); secondly it is an open living organism (Barragan), an 'artistic fact' that deals with the stirring of emotion in the spirit (Le Corbusier). Just like all arts, it establishes a connection between nature, man and spirit (Ando, Wright), promotes consciousness as a sense belonging to a broader more universal existence (Zumthor) and creates sublimity and aesthetic emotions that appeal to man's highest faculties (Le Corbusier). Architecture thus, allows for a deep connection between the self and it's spiritual higher self (Ando) by acting psychologically, emotionally and spiritually, on the viewer transmitting those specific emotions and significances (Pawson). Lastly, architecture's aim is: to inspire man and make man's spirit rise towards the 'virtues' (Palladio), to reunite nature with man's soul (Wright), to portray and capture significance and communicate that significance to the hearts of man (Barragan), to allow for spiritual emotions and

poetical encounters to emerge (Barragan), to communicate to man's spirit (Le Corbusier), to embody universal truths, through poetry, emotion and metaphor (Ando), to allow for man to become immersed in another sort of dimension (Pawson), to provoke emotions, evoke perceptual experiences and permit for the emergence of a new sense of reality (Zumthor).

Although one could argue that what these case studies are talking about and defining is a sort of exceptional Architecture, it is important to understand that without this understanding as an aim, spaces of everyday life could be composed without any significance within them (example, some of the multiple apartment units that define our contemporary world or shopping centres which are focused on self promotion rather than significance). It is also important to note that both Le Corbusier and Wright tried to use these ideas of significance of architecture and apply them to these spaces of everyday life; for them, these are fundamental aspects of architecture.

Defining Architecture…

Overall, both the ideas proposed by the theorists and by the case studies are identical. However, whereas the theorists use the word significance to describe art, the case studies use the word spirit (just like in the arts). Both understand Architecture as a significance (connected to the spirit) that communicates to man's highest faculties and that generates consciousness through it's experience. Theorists understand Architecture as being significant in itself, as that which exists beyond functionality (decision making as values), as possessing artistic freedom and being defined by the principles and values it incorporates. It communicates beauty and is a sensuous expression of divine and human freedom.

Architecture

Theory	***Case Studies***
*- uses the word **significance** to describe architecture*	*- uses the word **spirit** to describe architecture*
- describes architecture as an art as that which uses values for decision making (beyond functionality)	*- describes architecture as an art as that which communicates to man's consciousness and spirit (values need to be incorporated*
- architecture addresses the human spirit and allows for a connection with the soul	*- architecture establishes a connection between nature, man and spirit*
- is defined by the principles and values it incorporates (poetical, cosmological, beauty, ontological and existential)	*- is defined by reflecting universal order, containing spiritual emotions, and poetical encounters (values)*
	*- appeals to **man's highest faculties***
*- **communicates beauty** and is a sensuous expression of divine and human freedom.*	*- **communicates spiritual and metaphysical connections***

Table 36: Architecture analysis, differences and similarities between Theory and Case Studies

Architects focus on the aims of architecture, as different types of values that architecture can allow to emerge; they relate architecture to a universal order, and understand it's aim as the emergence of spiritual and metaphysical connections through universal truths, poetry, emotion and metaphor.







Photo :The Wall of Nishihara by Sabaoarch, Tokyo, 2014; Source:https://pt.pinterest.com/pin/251075747954737534/; Photon 2: Church of St. Moritz Interior Renovation; Source: http://www.archdaily.com/456312/interior-remodelling-st-moritz-church-john-pawson; Photo 3: Cy Twombly's house and painting in Rome; Source: https://pt.pinterest.com/pin/251075747955702398/

PLATE 105: THE EXPERIENCE OF SIGNIFICANCE: GENERATION OF CONSCIOUSNESS

9.1.3. THE CREATION PRINCIPLES AND PROCESS

How is the creation process understood?

For the theorists….

For the theorists, the creation process is understood as the expression of the union of three faculties (intuition, instinct and imagination) through emotions and feelings in a sort of automatism that uncover the unconscious processes and experiences (Saarinen, Pallasmaa).

Instinct is understood as the natural ability to know without learning. Intuition (a central faculty of the creative process in multiple art theories, considered to be the one thing that defines art) is considered to be that which expresses the artist's consciousness or spirit establishing direct contact with the primary truths (above all other forms of knowledge), expressing what it perceives (sensations, geometries or spirit) creating a link between consciousness and unconsciousness and granting art its significance (Saarinen, Croce, Carey, Afonso, Schelling).

Imagination (also a central theme in many theories), is important in two ways: firstly as the thing being expressed by the creative process (Fry, Collingwood, Ruskin); secondly as being the essence of art: for art is an imaginary thing (that exists in the mind of it's creator at it's most pure form), that creates by the use of imagination (defining another life for man) which is always unique (in a constant search), alive and vivid, contemplative and free (acting intuitively) and establishes a connection to emotions, morality, consciousness, truth and soul (Collingwood, Ruskin).

Lastly, expression is what describes the creative process, and the means by which art communicates and possesses significance. Art expresses, through intuition and imagination both cognitive (ideas and thoughts), and emotional (emotions and feelings) substances and in this duality, lies art's significance.

For the case studies….

For the case studies, one saw that the creation process was defined not only by the three faculties of (intuition, instinct and imagination) but also through the faculties of reasoning (that defined principles and rules and guided the creation process in an intellectual way. Both these views were used independently (except for Le Corbusier that used all of them), defining two types of creative processes: those more focused on defining a rational understanding of the world and of art, and those more focused on creating a more intuitive, instinctive and imaginative understanding. Where as the first case tends to create based on rational ideas such as thoughts, order and geometry, the second tends to generate art that is more connected an emotional, expressive and free condition.

Defining the creative process….

While the central faculties that create art (connection to spirit and significance) can be understood as being related to imagination, instinct and intuition (as defined by both the theorists and the case studies) it is equally important to clarify that the faculty of reason and rationality also has a vital key role in some of the creative processes (defining rational creation methods) or in all of them (defining and

sustaining the psychological values) and guiding the decision process. It is also important to clarify that although there is a difference between the design process (Architecture) that deals with functions, locations and other pragmatic aspects, and the artistic creations process (Painting and Sculpture) that is more free and independent, (as analysed in chapter four), they both coincide in terms of the creation of significance, relying mainly on imagination, instinct and intuition to grant the creation with aspects that are inaccessible to reason. The diagram below, thus, is an illustration of these ideas: summarizing the views analysed by both the case studies and the theorists. Both intellectual faculties and the so-called spirit faculties act together in the creation of significance.

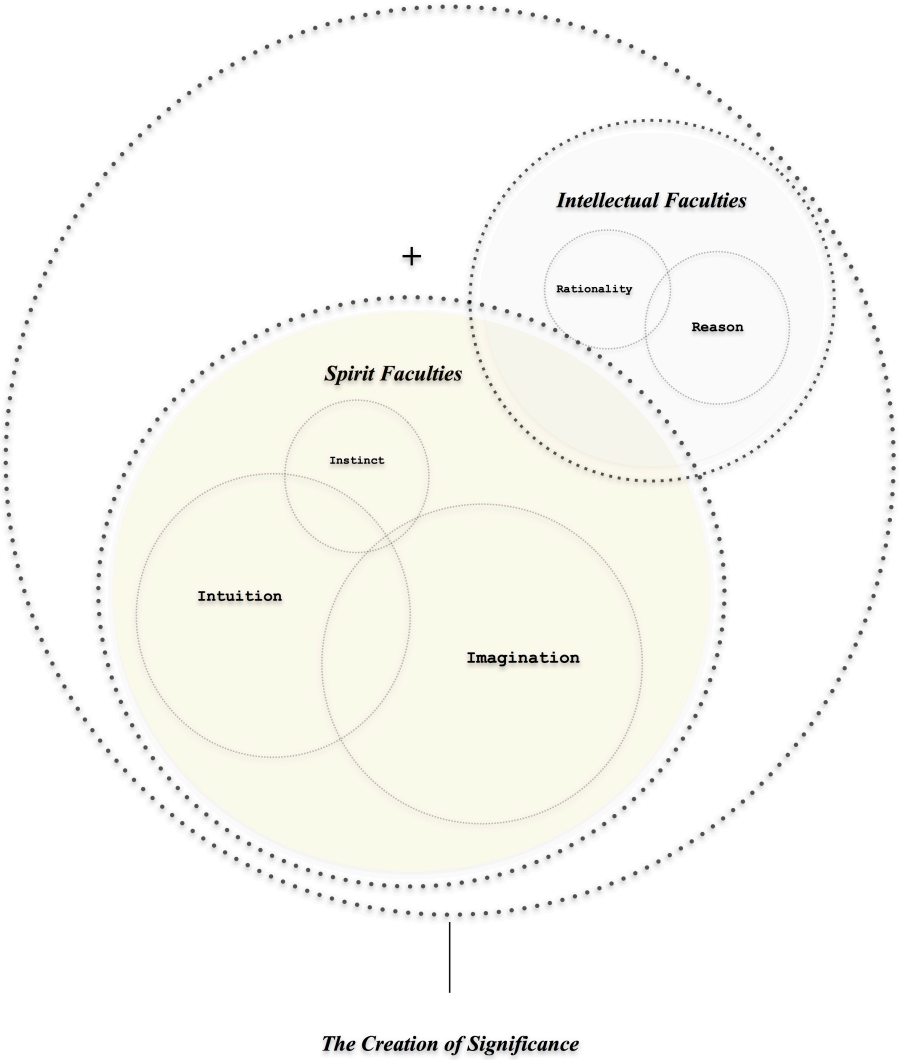


Figure 29: Diagram clarifying the creation of art.

9.1.4. THE EXPERIENCE OF SIGNIFICANCE

How does the experience occur?

For the theorists….

For the theorists, the experience of an artistic object is related to the aesthetic experience: it is through the aesthetic experience that the significance can be understood, perceived and lived. The aesthetic experience is considered to be the fullest type of experience that can be lived by man: it generates both emotional and cognitive content (connected to psychological and emotional values), it involves both a sensuous experience (senses) and an engagement from the viewer in an active participation (reconstruction of symbols, judgment, creation of connections through imagination and critical taste), allows for the understanding of the self and establishes consciousness (Carey, Scrutton, Goodman, Pallasmaa). Kant also defined that it involves a specific judgment (composed of a complex interplay between mental faculties) of which results a pleasurable feeling, and possesses a universal validity understood as judgments of beauty; it occurs when a sensuous object stimulates our emotions, intellect and imagination, activated together in a 'free-play' (Kant). It is the aesthetic experience that allows us to understand art as the communication of meanings and significances to the viewer (Dewey) and as a sort of beauty that resembles nature and is guided by 'genius' (Kant). In order for the aesthetic experience to occur, in art, there is a need to for the existence of: (1) the openness quality, defined as 'the open work' (allows for multiple 'open' stimulus to occur because of it's ambiguous nature incorporated into the creation) (Eco), (2) open fields of perception (the inability to attain closure) (Bloomer) and (3) phenomenology (engagement of the senses, incomplete ideas and cosmological understandings) (Holl).

For the case studies….

The case studies are not specifically concerned in describing the aesthetic experience in itself, but in understanding what occurs (what happens) with the experience of the artwork. For the architectural case studies, the process of experiencing architecture, allows man: to rise towards virtues (Palladio), to evolve into other realms of existence (Wright), to find a place where he can feel at 'home' in order to grow psychologically, emotionally and spiritually (Barragan), to re-encounter his own consciousness helping him expand his awareness and understand his own spiritual dimensions (Ando, Le Corbusier, Pawson) and to be rooted in the world, and to understand his own existential condition (Zumthor). For the artists, in the same way, the artistic experience is that which allows man to realize his own misconceptions of the world and realize the 'mistakes' of his own perceptions (Albers), to feel emotions that he hasn't felt (Rothko), to awaken to other realities, through transformative emotional and perceptual experiences (Turrell) and to understand his place in the universe, by creating new connections and new meanings (Kiefer).

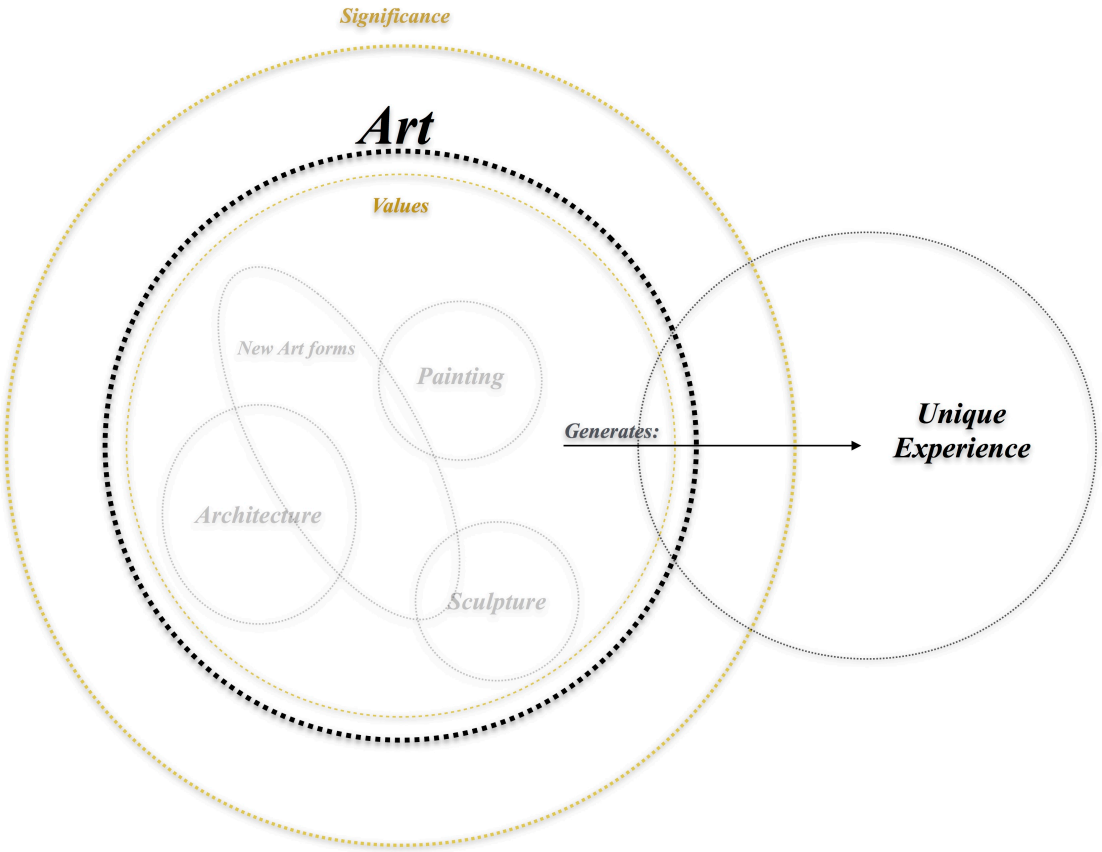


Figure 30: Diagram explaining the generation of the unique experience in art.

Defining experience…

Experience then is defined in two distinct ways: for the theorists it is an understanding of the aesthetic experience in its complexity (a universal phenomenon that engages multiple faculties in a free-play and establishes consciousness), whereas for the case studies the experience is more connected to what it allows and generates: it allows for man to awaken to other realities, through transformative emotional and perceptual experiences and re-encounter his own consciousness helping him expand his awareness and understand his own spiritual dimensions.

(see diagram that follows)

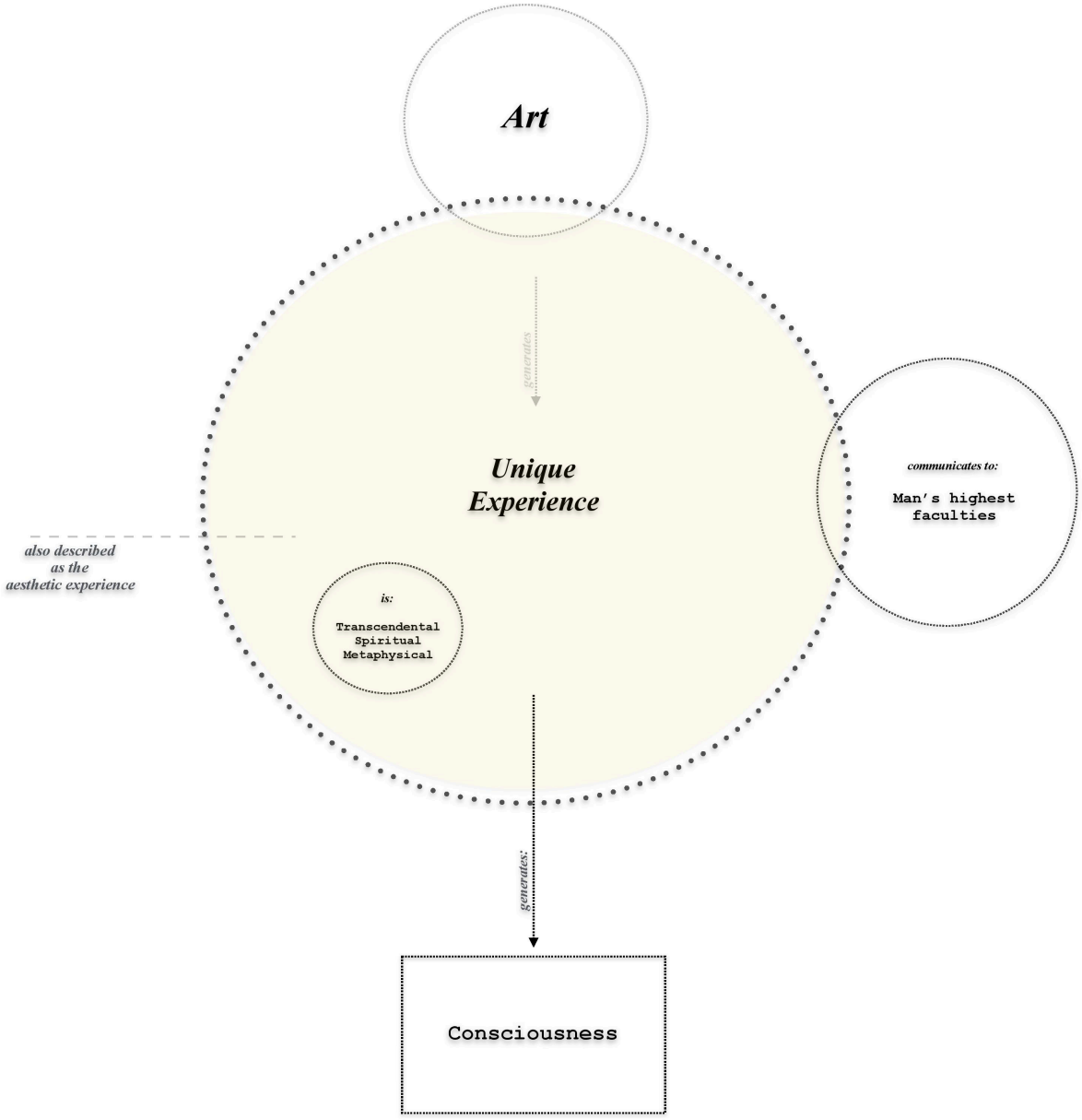


Figure 31: Diagram clarifying experience in art as the generation of consciousness

The diagram above clarifies the above findings. It uses the word unique to describe the aesthetic experience of significance, because as we have seen, the experience of significance is a 'unique' encounter: filled with properties and values that can only be transmitter by Art. Thus, that experience generates consciousness and communicates to man's highest faculties.

9.1.5. REDEFINING VALUES

At this point it is vital to continue to define the evolving concept of value. From both the case studies and the theorists, we saw that values were the core aspect that was embodied in significance. Following is the individual summary/analysis of both.

For the Theorists…

On defining value, Scruton claims it is the pursue of what is right and just, the outcome of though and education: '' A value is characterized not by its strength but by its depth, by the extent to which it brings order to experience.'' (Scruton, 1979, p.32). From philosophy, we also saw that values are a founding aspect of the conceptions of the world and of life, and can be perceived and understood through a non-intellectual mechanism. We also understood that the types of values associated to art are always incomparable and incommensurable because they are abstract values. They are timeless (as most values are, which relates them to idealistic natures), what matters in their understanding is the fact that they are valuable and they add to each other rather than cancel each other out.

The authors that were analysed, that related values to architecture and the arts in general (Alain de Botton (2008) and Louis Armstrong (2008) and Juhanni Pallasmaa (2010)), agreed that values are indeed embodied and evocated as significance in the works of architecture, painting and sculpture: they are the core significance of the artwork. However, the approaches of both authors differ: Pallasmaa (1996) accentuated that values are more than symbols and metaphors, because they are not something that is evoked but rather they are something real and alive; when values are embodied, they are both an 'imagined reality' and something that defines the observer's existence. For de Botton (2008) and Armstrong (2008), it is values that allows for significances to emerge and communicate to emotional and psychological aspects of the human being and these values can be understood as a means of 'compensation' for our innate emotional and psychological 'weaknesses' and our encounters with art 'fill emotional lacks' (seven functions). There was the underlying idea that there are indeed numerous operating values, embodied in artistic creations (and creations in general) which can be materialized in different ways, that indeed, sustain the creation's significance. Lastly, it was of the essence to understand that values are something that is embodied and evocated through the artwork itself, as part of its own essence.

For the theorists, value, then is something that is embodied, expressed and communicated in art, and is that which grants it it's significance. Thus, significance can occur according to each value: as beauty, as poetry, as emotional and psychological content, as metaphysical, symbolical or spiritual understanding. It is in embodying values that art establishes it's significance, allowing humanity to evolve into greater realms of consciousness, by connecting to those sides of himself. Values in art, are real alive entities (rather than merely being signified they are embodied).

The Case Studies…

Value, in general, was seen as the underlying considerations that guide the actions and creations of the case studies. We saw that each individual case study, was guided and driven by various of these 'values'. We also understood, from the case studies, that values can also be understood as desires for

something, and the creation of connections towards something. Thus, for the case studies, value is the same idea: it is something that is both expressed and contained within the work of art, which derives from the artists creative process and existence, and leads the viewer into a better understanding of his own existence. From the case studies we defined eight values corresponding to eight categories: metaphysical (desire for the universal), philosophical (desire for truth), sustainable (desire for goodness), symbolical (desire for symbolic connections), spiritual (desire for the spiritual), emotional (driven by emotions), metaphorical (desire to create and establish metaphors), and poetical (desire to create poetic connections).

Value then…

Value, then, can be defined as that which defines man's existence and that which drives his creation process, guiding every decision and way of creation until the very last end result. It is values (in their various forms and types) that create a link with man's spirit elevating human consciousness and allowing art to establish a connection between the material and the spiritual dimensions. A value is both a driving motor for the creator (manifested as a desire to understand and to create) and is something that is both expressed and contained within the significance of the creation. Values thus, both drive the creator's frame of existence and are embodied in the creation. At it's various aspects, it is values that together (and with the principles) define significance. *(see glossary for a brief description)*.

Besides the eight categories or types of values defined by the case studies (metaphysical (universal), philosophical (truth), sustainable (goodness), symbolical (symbolic connections), spiritual, emotional, metaphorical, and poetical), two other values (categories, desires, embodiments) need to be added at this point, derived mainly from the theorists: the value, desire or embodiment, of beauty (shining qualities and properties) and psychological values. After the brief synthesis a couple of diagrams summarize these points wich will be followed by the analysis and explanation of each individual 'value'.

In total ten values will be summarized and identified, as that which:

- defines psychological ideas (Psychological)
- defines a sort of truth (Philosophical),
- defines a desire to help and aim humanities growth (Sustainable),
- establishes a deep emotional connection (Emotional),
- desires a spiritual dimension of the world and of the being (Spiritual),
- defines a poetical intangible essence (Poetical),
- is driven by the understanding of our existence in the universe (Metaphysical),
- defines connections to something other than itself (Metaphorical),
- creates associations (Symbolical), and lastly,
- defines an overall idea of beauty as shining qualities (Beauty).

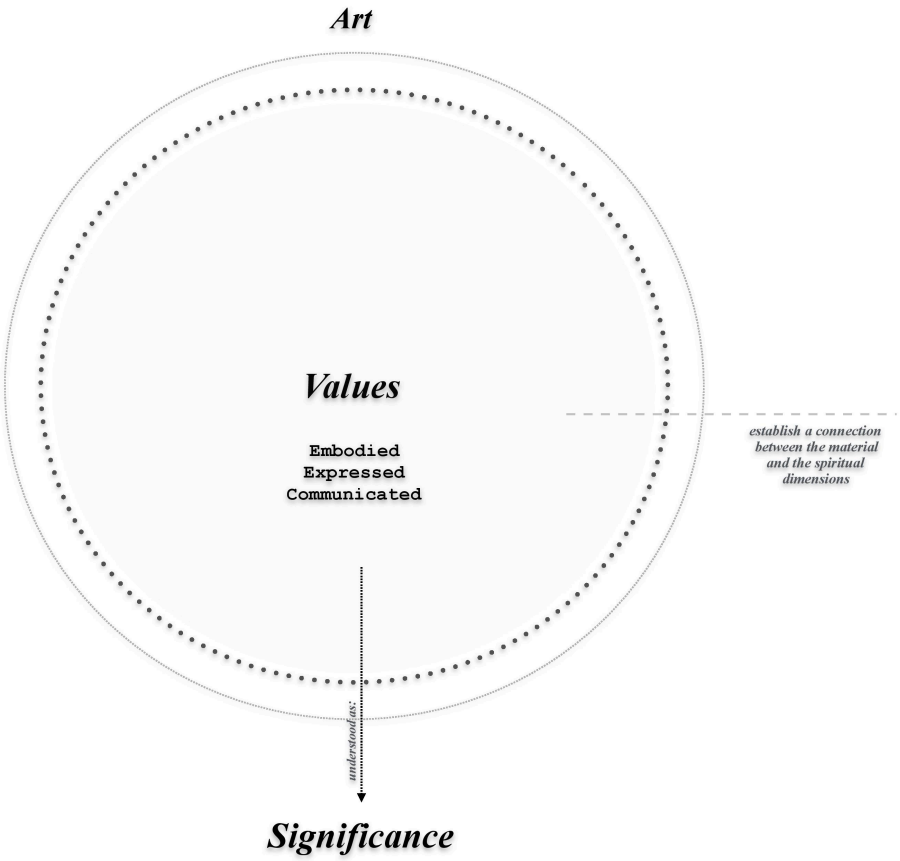


Figure 32: Diagram clarifying values as significance.

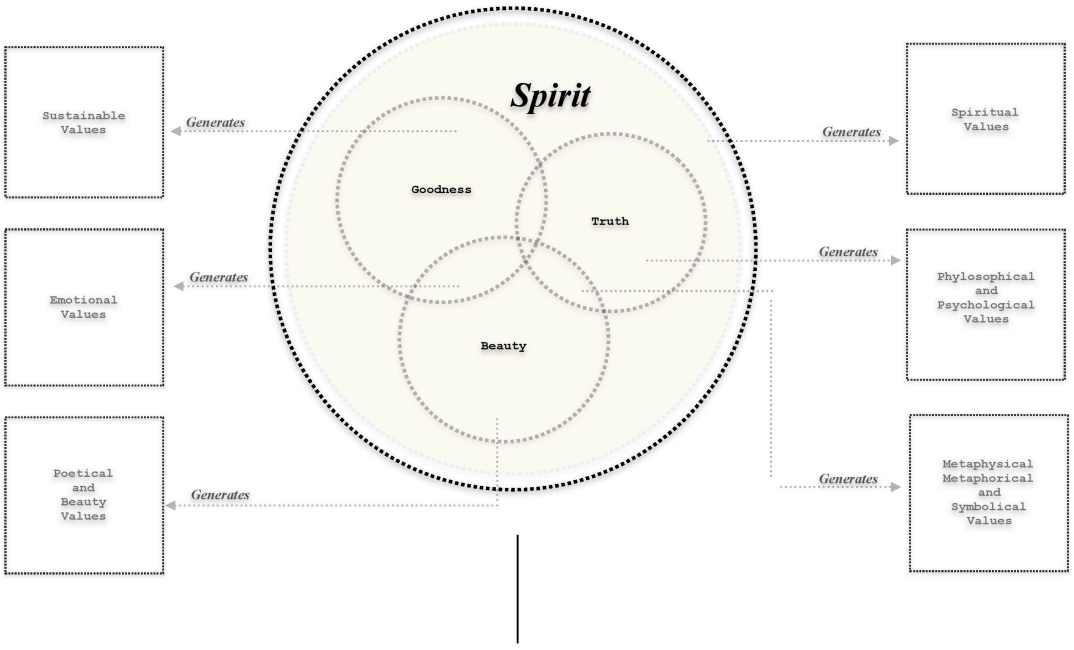


Figure 33: Diagram clarifying the origin of values.

9.1.5.1. SUSTAINABLE

The idea of what the experience of significance generates (which is consciousness) is deeply connected to sustainable values, for both the theorists and the case studies. In other words, sustainable values are present because there is the underlying desire to help humanity grow and evolve.

The concept of sustainability as a value is here applied in a specific way: in general, sustainability refers to '' (…) the long-term viability of a community, set of social institutions, or societal practice.'' In contemporary debate, sustainability often serves as a synonym for sustainable development, and discussions on sustainability centre around the environment and creating a more sustained environment; however, in the present thesis, the idea of sustainable development defined and proposed by the case studies is a development of the self (emotionally, psychologically and spiritually), which in turn, creates a more sustainable world because it promotes self development, self consciousness and the development of a more significant world. Therefore, sustainable values, are those values that define the self and guide its conduct in order to create a more sustainable existence for himself and for humanity in general, through his creations.

It is important to establish, also, that sustainable values could also be considered to be related or synonymous to ecological values, since ecology has it's root the greek word *oikos*, which means house. Therefore, ecological considerations such as taking care of our 'house', our world, can be coincidental with the word sustainability and with the sustainable values thus far defined. However, sustainability is considered to have a more encompassing sense, as it also includes considerations with the self, and the overall well-being of humanity and the planet.

For the theorists…

Sustainable values can be derived from the above understanding: when they define the aesthetic experience as the unique experience that engages complex faculties and that allows man to establish consciousness, they are defining sustainable values. For without art, those encounters wouldn't occur and man could not grow into his own higher faculties. Thus, indirectly, theorists describe sustainable values as being a core aspect of art, when defining significance and how it relates to consciousness.

For the case studies…

For the case studies, as previously seen, sustainable values were both directly and indirectly defined. One saw that the architectural sustainability was driven by the idea that it was the architect's duty to create as an extension of universal unity and principles, and establish a connection to the soul, thereby creating poetical, emotional and spiritual connections that expand and transform man's consciousness and his sense of existence, by creating a connection to his higher self (Wright, Palladio, Le Corbusier, Ando, Pawson and Zumthor). As for the artistic sustainability, it is very similar: the artists sustain that it is art's role and it's main aim to create new connections and establish principles that allow for man to feel new emotions, understand new perceptions and to understand his place in the universe (Kiefer, Rothko, Albers).

In all, for both artists and architects, sustainable values aim to allow for a transformation to occur in man, from the inside out, allowing him to open up to more spiritual and emotional levels of his own existence, helping him re-encounter his own consciousness and expanding his own awareness. Art and Architecture does this through the experience: by creating new connections and new meanings, by creating transformative emotional and perceptual experiences, by embodying universal values, emotional (sense of home) and poetical values and by creating a bridge into man's spiritual dimensions.

Thus, Sustainable Values can generally be understood as the creation of experiences and perceptions that enable man to expand his own consciousness, sense of self and place in the world.

Defining sustainable values…

Sustainable values, are those values that define the self and guide the conduct in order to create a more sustainable existence (for man, through his actions and through his creations). The above definition derived from the case studies analysis holds true and valid for both the case studies and the theoretical ideas of Part II. However it was through the case studies, that have a deeper connection to this value, that we really understood sustainability as value that is embodied in creation. The case studies consideried it a core part of what they do, and take it upon themselves to transmit those values into the creations (embodying them with 'sustainable values') in order to help humanity grow, evolve and change towards a better understanding of life and a better future.

Overall, sustainable values can be defined as considerations and desires that define the self, that aim to help humanity evolve and change (psychologically, emotionally and spiritually); they define the thoughts and the emotions that guide actions and creations, thus developing consciousness and promoting a more sustainable existence. As a value, it is deeply associated to the goodness, and to moral conducts. However, it differs from the traditional idea of morality in the partocular sense that it is associated to individual freedom, arising from within rather than as a set of imposed rules.

(see diagram in the following page, Figure 33)

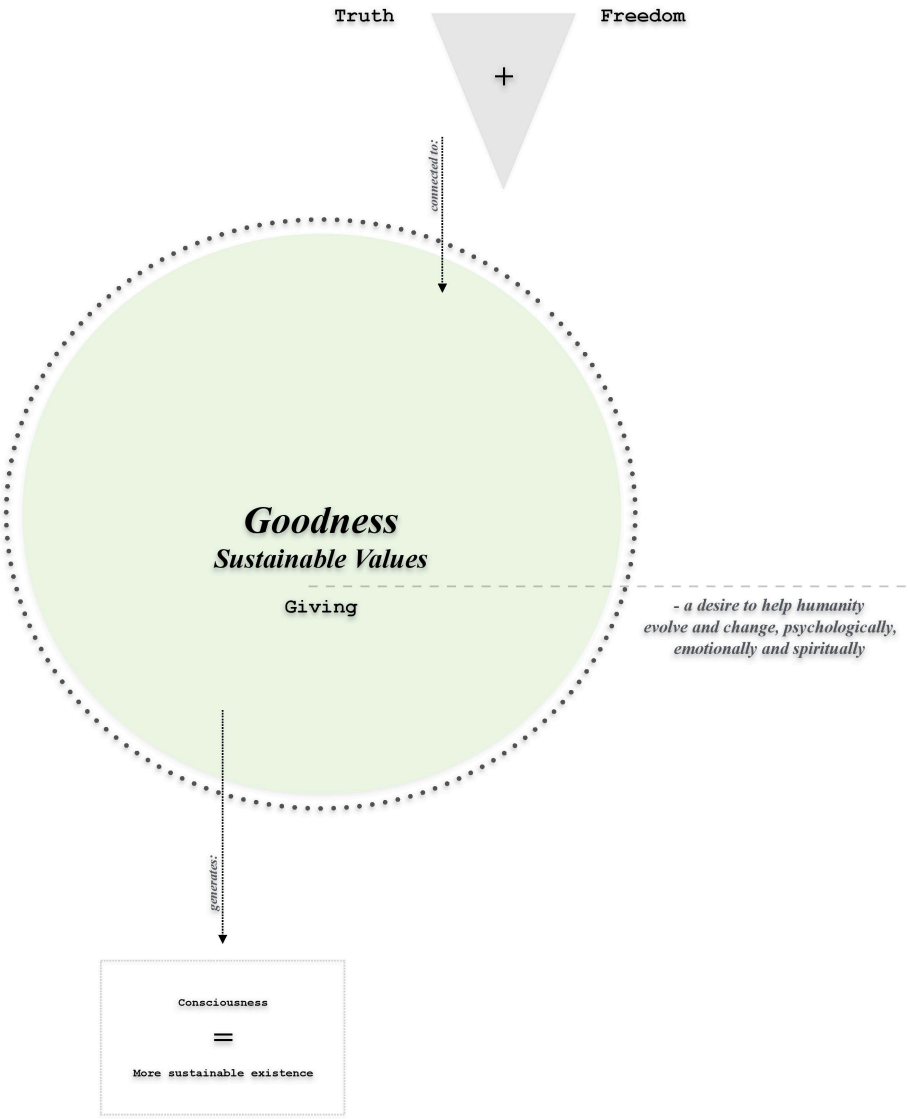


Figure 34: Diagram clarifying sustainable values.



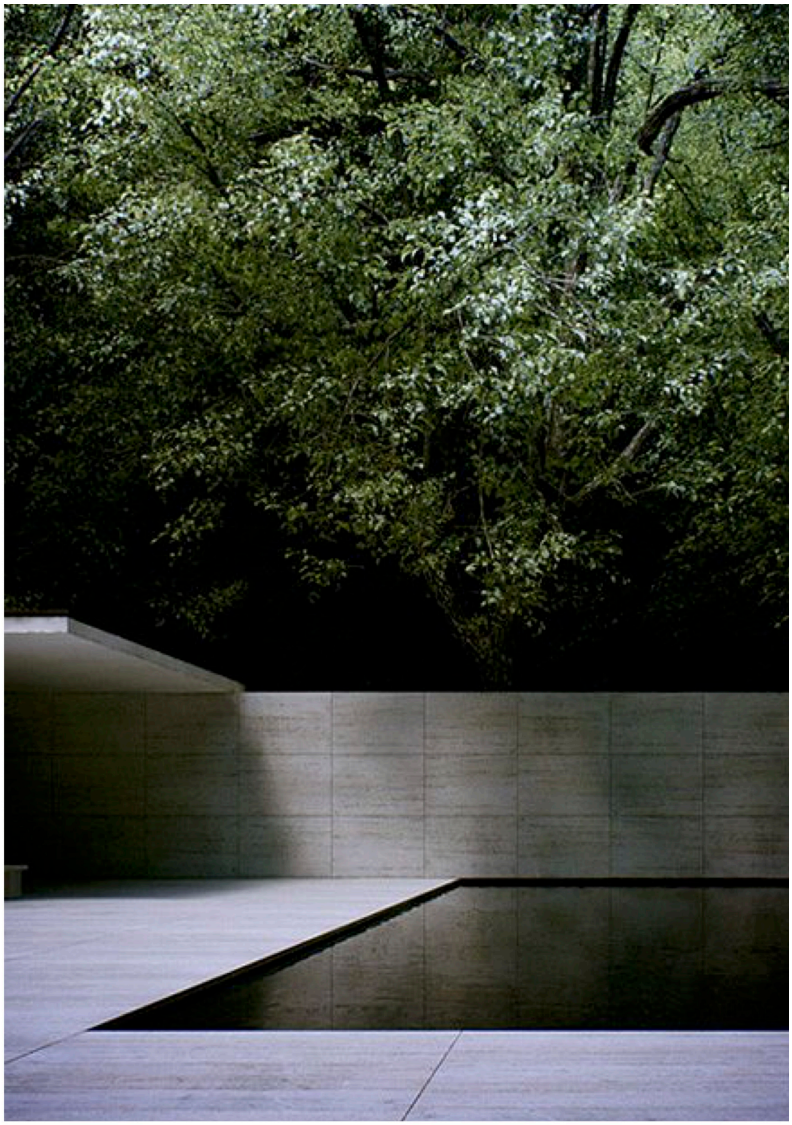


Photo: Luis Bárragan, Las Asboledas, Mexico City, 1963; Source: https://pt.pinterest.com/pin/251075747955026399/; Photo 2: Mies van der Rohe Pavilion; Source: https://pt.pinterest.com/pin/251075747955026402/; Photo 3: Oscar Niemeyer, Canoas House, 1953; Source:https://pt.pinterest.com/pin/251075747955026406/; Photo 4:Wayfarers Chapel in Palos Verde California. Designed by Lloyd Wright; SOurce: https://pt.pinterest.com/pin/251075747955023806/



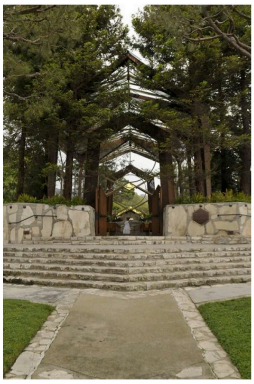


PLATE 106: SUSTAINABLE VALUES AS ARCHITECTURE AND NATURE IN COMPLETION OF EACH OTHER

9.1.5.2. SPIRITUAL

For the theorists…

For the theorists, there is not such a strong connection to the spiritual values as the case studies establish, however there are still some connections: for them, spiritual values emerge as a result of all the other values, for example, for the Platonists, and the aesthetic theories that followed (Ficcino, St.Augustine, etc.) beauty is the value that leads to a spiritual understanding. For others such as Heidegger, spiritual values emerge as a result of both poetry and truth; for Hegel, art in itself is connected to spirit, and thus spiritual values define the very core of art. What all of them have in common, is the idea that spiritual values emerge from other values and define the cornerstone that defines art and it's significance.

For the case studies…

For the case studies, spiritual values is that which defines the underlying goal (aim), idea and methods of art. For the architects, spiritual values can be understood as an architectural aim: to achieve a spiritual harmony (wholeness) and to communicate spiritual values and principles (order, harmony, virtue, wisdom, truth, emotions of serenity), to man's spirit, thus elevating man into a higher dimension of spiritual life, through the union of nature man and God (Palladio, Wright, Barragan, Le Corbusier, Ando and Pawson). In order for this to be achieved, architecture needs to follow nature's principles (Palladio and Wright), use emotion (Barragan), use forms, shapes, symbols and ideas (Le Corbusier), embody values and emotions combined with poetry (Ando and Pawson). With the artists spiritual Values can also be considered an artistic aim: it is art's aim to make spirituality manifest (capturing it's expression in the world, recreating the power of God on earth, reflecting and representing the innate spiritual condition of life) thus creating a spiritual connection within the viewer that allows man to be more in tune with his consciousness, with his spirit and his spirituality (Turner, Hopper, Rothko, Kiefer, Turrell). In order to achieve this, arts needs to be manifest intensities of natural phenomena (Turner), understand the metaphysical and emotional life (Hopper and Kiefer), embody spiritual truths (Rothko). Mainly, there is the inherent belief that architecture and art belong to the spiritual world, by embodying principles, values, emotions or ideas, and in being an extension of it, allows man to belong there too, elevating him into a higher spiritual life: allowing man to find a state of consciousness and contemplation that creates a deeper spiritual connection and to find a place where the spirit is alive.

Defining spiritual values…

Thus, the general idea that had been derived from the case studies holds true. Spiritual Values can generally be understood as the creation of a connection to a spiritual life: through the embodiment of the multiple values, ideas, emotions and views within the creation, allowing man to find a state of consciousness and contemplation that creates a deeper spiritual connection and to find a place where the spirit is alive. *(see diagram that follows)*

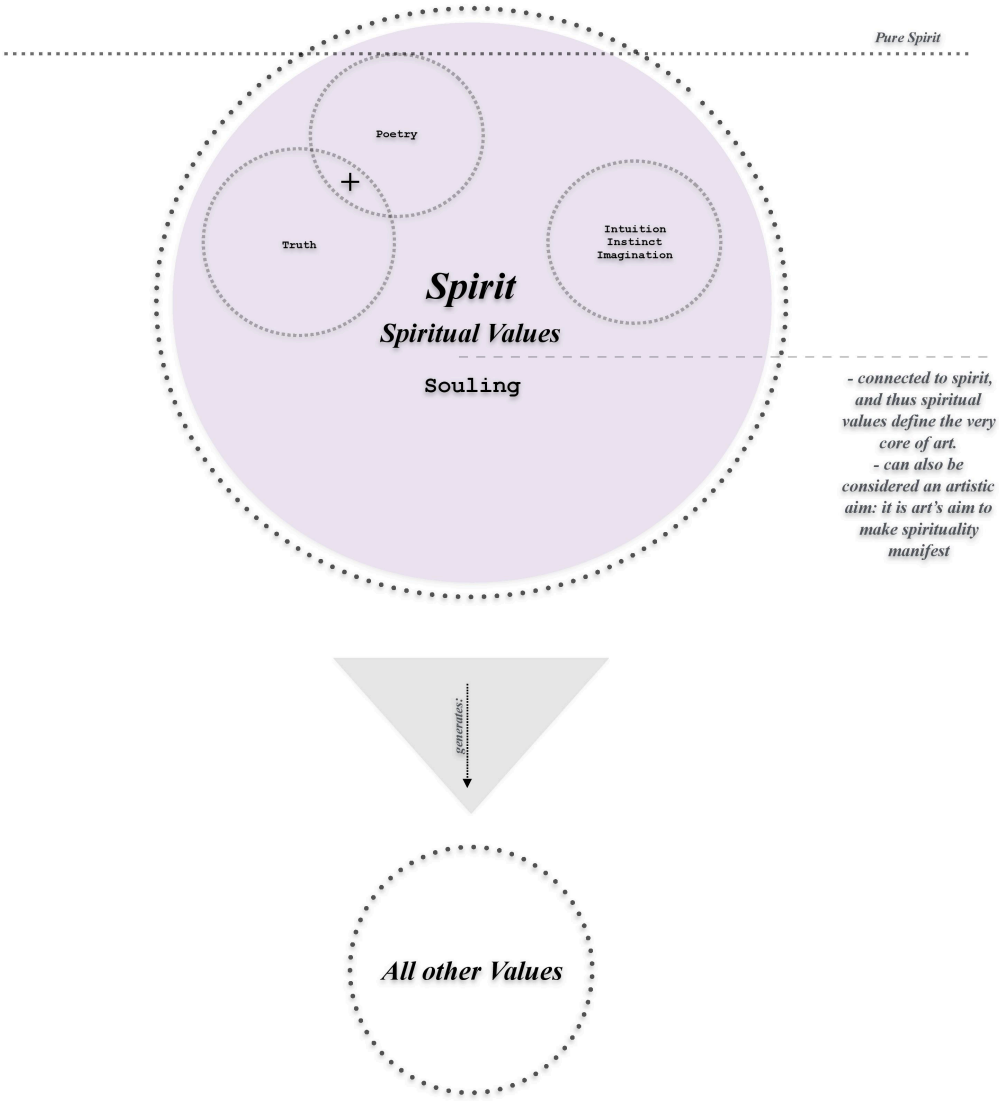
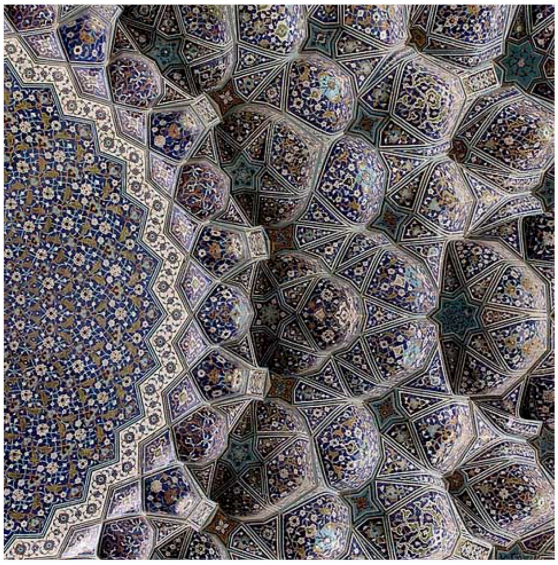
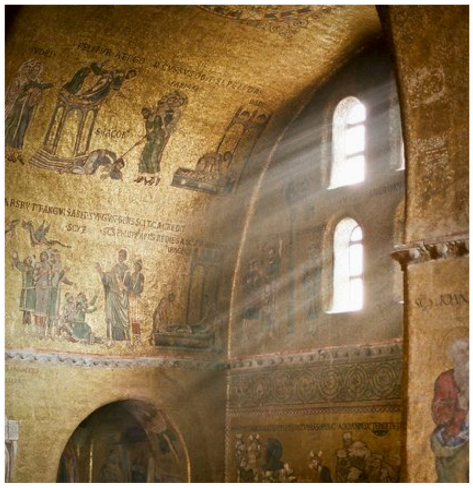


Figure 35: Diagram clarifying spiritual values.







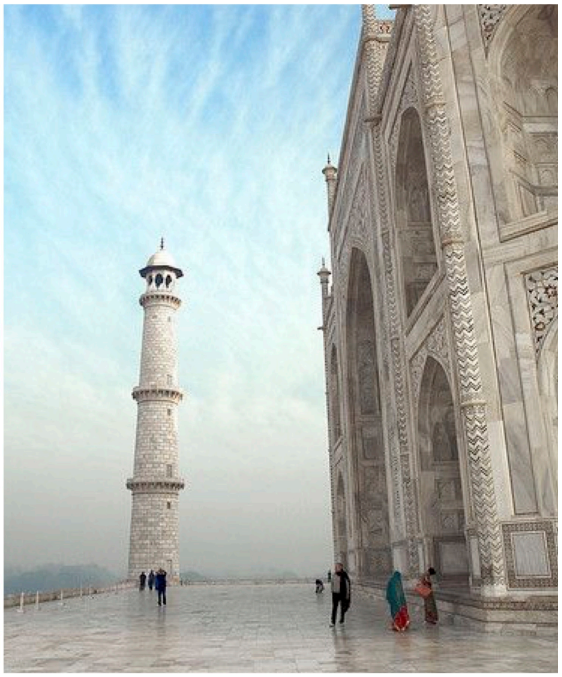




Photo 1: Columns of Karnak Temple, dedicated to Amon-Ra, Egypt; Source: https://pt.pinterest.com/pin/251075747955054906/; Photo 2: Shah Mosque, Isfahan, Iran; Source: https://pt.pinterest.com/pin/251075747955054817/; Photo 3: St. Marks, Venice; Source: https://pt.pinterest.com/pin/251075747952144404/; Photo 4: Taj Mahal, India; Source: https://pt.pinterest.com/pin/251075747955054629/; Photo 5: Ankor Wat in Camboja; Source; https://pt.pinterest.com/pin/251075747955054612/

PLATE 107: SPIRITUAL VALUES MATERIALISED IN SACRED ARCHITECTURE ACROSS THE WORLD

9.1.5.3. METAPHYSICAL VALUES

For the theorists…

We found the idea of being immersed in a cosmological and metaphysical understanding expressed by multiple authors, but it was most present, in the theories defined by Juhanni Pallasmaa. For him, it is the cosmological dimensions, rooted in the understanding of our own existence, that grants architecture it's significance. Heidegger also emphasizes this dimension, when he accentuates ontological values (defining existence and the essence of existence).

For the case studies…

Metaphysics is generally connected to the understanding of our place in the universe and in the world, trying to define our own existence as human beings. For the architects, a metaphysical understanding of the world and of the self emerges, when the creation echoes nature's universal laws, and when it creates as part of the universal order (Frank Lloyd Wright and Palladio). For the artists, one saw that metaphysical values are incorporated in a broader and more specific way: art doesn't have to reflect universal laws in order to reflect metaphysical understandings and create metaphysical encounters, it can also emerge through poetic encounters or in the echoes of the dualities of existence (life and death); either way it occurs when a metaphysical view of the self is embodied and sustains creation within the artwork (expressing a metaphysical meaning); it is deeply connected to art's role, being that, through art (and the incorporation of metaphysical values) man understands his own existence and his own place in the world (Turrell, Judd, Rothko, Hopper).

Defining metaphysical…

Thus, Metaphysical Values, in general terms, as it relates to art, can generally be understood as the desire to make the creation belong to a universal and timeless condition allowing man to understand his place in the universe (seeing dimensions and understanding what otherwise would be hidden) and in himself. It is by metaphysical values that man questions and understands his own existence and so creating a more complete understanding of his place in the universe. Creations express a metaphysical meaning

(see diagram that follows, figure 36)

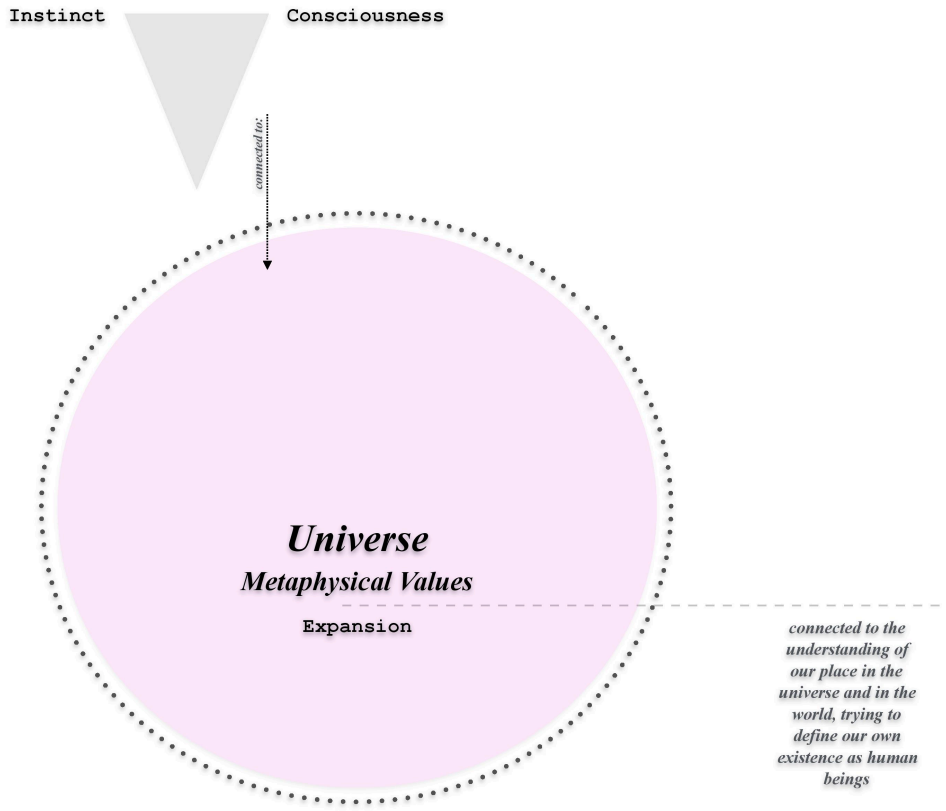
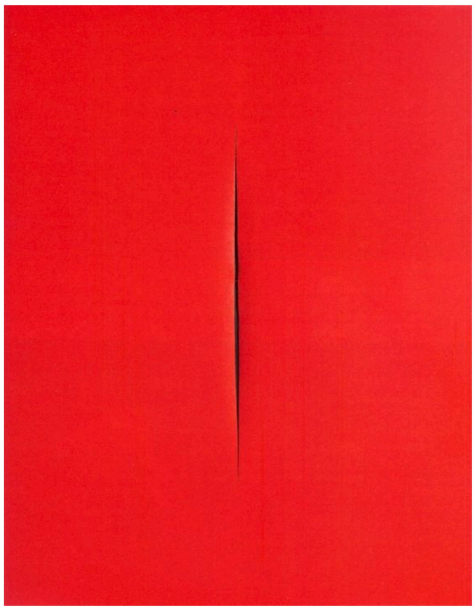
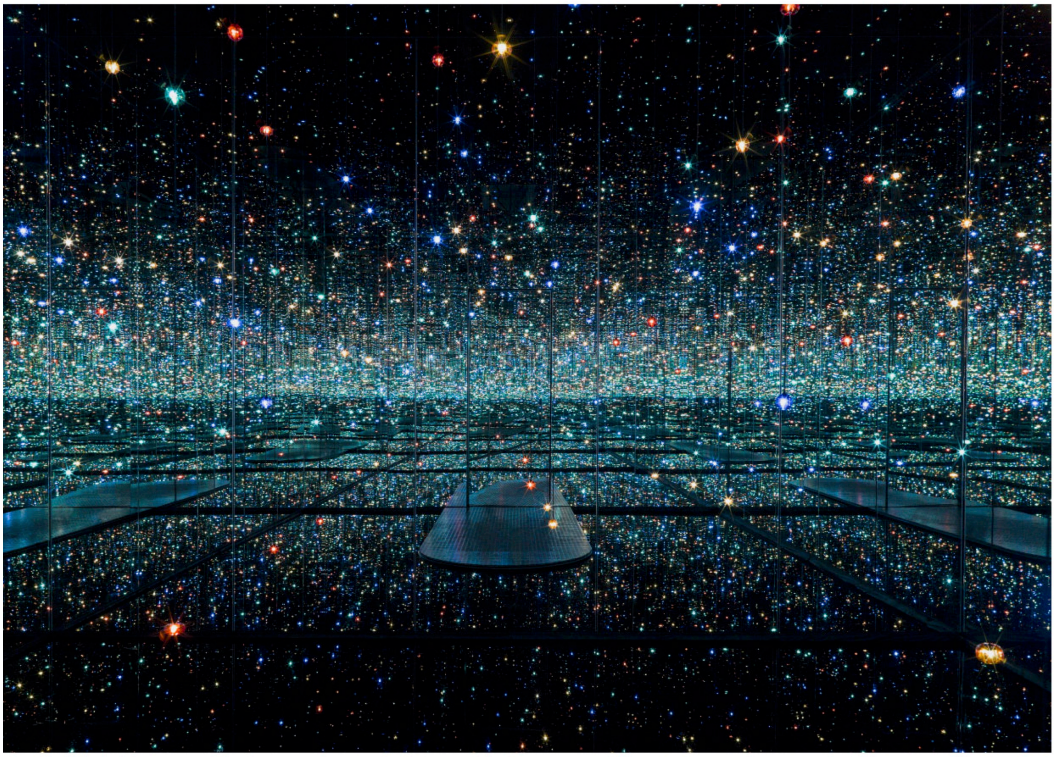


Figure 36: Diagram clarifying Metaphysical Values







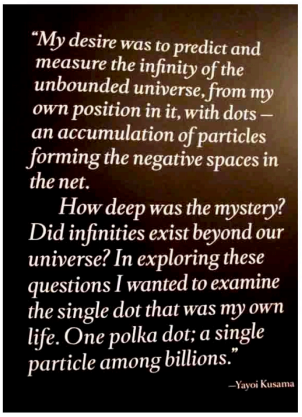


Photo 1:Lucio Fontana painting; Source: https://pt.pinterest.com/pin/251075747951840573/; Photo 2:Moroccan Architecture; Source: https://pt.pinterest.com/pin/251075747955054798/; Photo 3:Descriptive text featured in an exhibition by Yayoi Kusama, 2014; Source: https://pt.pinterest.com/pin/251075747955036295/; Photo 4: ayoi Kusama "Infinity Mirrored Room - The Souls of Millions of Light Years Away" 2013.; Source: http://design-milk.com/45-seconds-infinity-yayoi-kusama/;

PLATE 108: METAPHYSICAL VALUES: REFLECTING THE UNIVERSE

9.1.5.4. BEAUTY

It is the theorists that consider beauty a central aspect of the arts. The case studies do not define beauty, neither as a value nor as an aim: what can be understood is that it is the word itself that is being avoided rather than what the word describes.

For the theorists…

From the theorists, one arrives at multiple ideas of beauty as a main value in art. One understands that beauty as a value of significance cannot be understood as something formal but as an intangible quality. Firstly beauty was defined as: that which sets an open-ended want (no fulfilment), as that which creates a connection to the sacred things of life and exists in degrees of intensities and lastly, as possessing a 'shining, self-revealing quality', that allows for the true nature of the world to come forth relating to both consciousness and unconsciousness and to the inner life of the soul (Steiner and Scrutton). Secondly, beauty in art, has a central position as a value: it is through beauty that works of art convey their messages and their significances, (Scrutton and Hegel); beauty emerges as content, expression of freedom and establishes a connection to the spirit and it is a sort of emanation of the intangible world of the absolutes (perceived by love) thus relating to truth (Hegel, Plotinus, St. Augustine and Ficcino) and therefore is a quality of the spirit. Beauty, as meaning and significance (related to the artistic object) is something deeper than mere physical attributes: it is a quality of the spirit, and thus connects to the attributes of the spirit (freedom and truth). In this way, beauty, is a shining of the soul, and is the value that grants art it's main significance and from which all the other values are articulated.

For the case studies…

As previously stated, the case studies do not describe beauty as a main value, however there are two case studies that make a reference to it. Firstly Palladio, that has a classic understanding of the word beauty itself, following the Renaissance tradition and the philosophers that associated beauty to the realm of the divine (Platonic world of forms); beauty thus, is considered to be an elusive quality that establishes a link with the pure spiritual world. Secondly, for Le Corbusier, beauty is one the main principles associated to architecture: it is connected to emotion and to consciousness, and is considered as an intangible quality that defines the overall architectural essence. For both these case studies, beauty is an intangible quality that is vital importance and connects to the spiritual values and to the emotional ones.

Defining beauty as a value…

The theorists describe beauty more profoundly, but both ideas are in fact identical: both the theories and the case studies consider beauty a central value, as an illusive quality that relates to the spirit and generates consciousness. Thus, at this point it is possible to define the value of beauty more accurately. Firstly, beauty is a 'shining, self-revealing quality' (allows for the true nature of the world to come forth), creating connections to the spirit and to the sacred things of life; it exists in degrees of intensities in the world, depending on the degree in which it connects to the inner life of the soul. The value of beauty can be defined as: is a quality and value of the spirit, a shining of the soul (connected to

freedom and truth); it is that which conveys messages and significances, bridging a link between the physical world and the spiritual world, enabling for man to establish a connection with the divine, expanding his own existence (his consciousness) and growing emotionally and spiritually. Connects to the spiritual values and to the emotional ones.

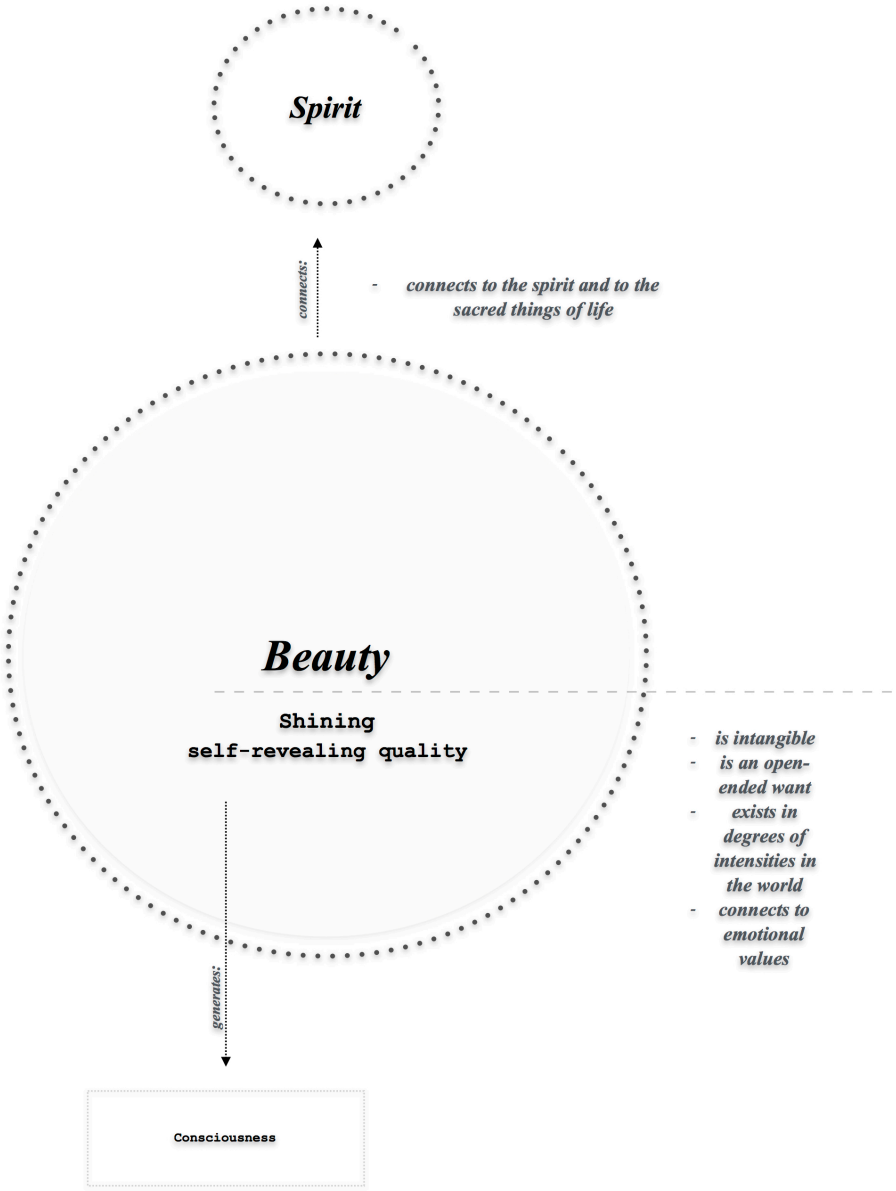


Figure 37: Diagram clarifying the value of Beauty

9.1.5.2. TRUTH: THE CORE OF PHILOSOPHICAL VALUES

For the theorists…

From the theorists, one arrived at multiple ideas of what truth in art is. It was considered to be the one thing that defined the work of art, from which significance emerges (what lets all the other significances to emerge) (Saarinen, Heidegger, Ruskin). Art, as the creation of the spirit allows for truth (and beauty) to emerge, revealing freedom as it communicates to man's spirit through consciousness. Truth in art, was also understood as: that which possesses an expressiveness of meaning and character, as that which reflects modes of existential and embodied thought (primitive ways of thinking and being) and connects with the sense of self (search to the mythical understandings of the world), as that which communicates great ideas and is associated to the imagination (Ruskin and Pallasmaa). Truth is also a value that is both 'timeless and supratemporal' and emerges through a combat between the creation of 'world' (being), and 'earth' (matter) (Heidegger). It is truth that allows man to understand his own spirit as freedom thus growing and expanding his consciousness (Hegel), and that allows for 'states of soul' to emerge, revealing themselves through poetry (Heidegger).

For the case studies…

The case studies do not specifically refer to truth as a word, however they incorporate the understanding of life as part of the a sort of philosophical system that sustains their existence and their creations. This incorporation of a vision of life and of the world was thus converted into the philosophical values. We saw that Philosophical values are used as guiding principles, as foundations for both the artists and architects, that define their ideas of life and of art: they define and guide the understanding of what the artwork and architectural work should do and how it should do it, therefore guiding the creative process and every decision making of the project. It is a motor value (cornerstone) that defines the foundations of the self and shapes the views on life, being, art and the universe and defines the belief system at all levels of existence: metaphysical, emotional and spiritual.

Philosophical values (that are manifest either by creating a new philosophy, existential questions or connected to other philosophical systems), determine what art is and coordinate every decision making of the artistic process (both intuitive and rational).

Defining philosophical values and truth…

Consequently, it is possible to establish a connection between the philosophical values and truth: philosophical values are a search for truth, and they define a position of 'truth' for life and for art. Truth on the other hand, is a more specific entity: not only is it the object of study of philosophical values, but it is also a complex entity in itself: it is timeless and supratemporal, it expands consciousness, permits for states of soul to emerge, and is related to an honesty of meaning and character, as it reflects modes of existential and embodied thought. Thus, philosophical values defines the framework for which truth can emerge (that which establishes a connection to consciousness, spirit and existential understanding).

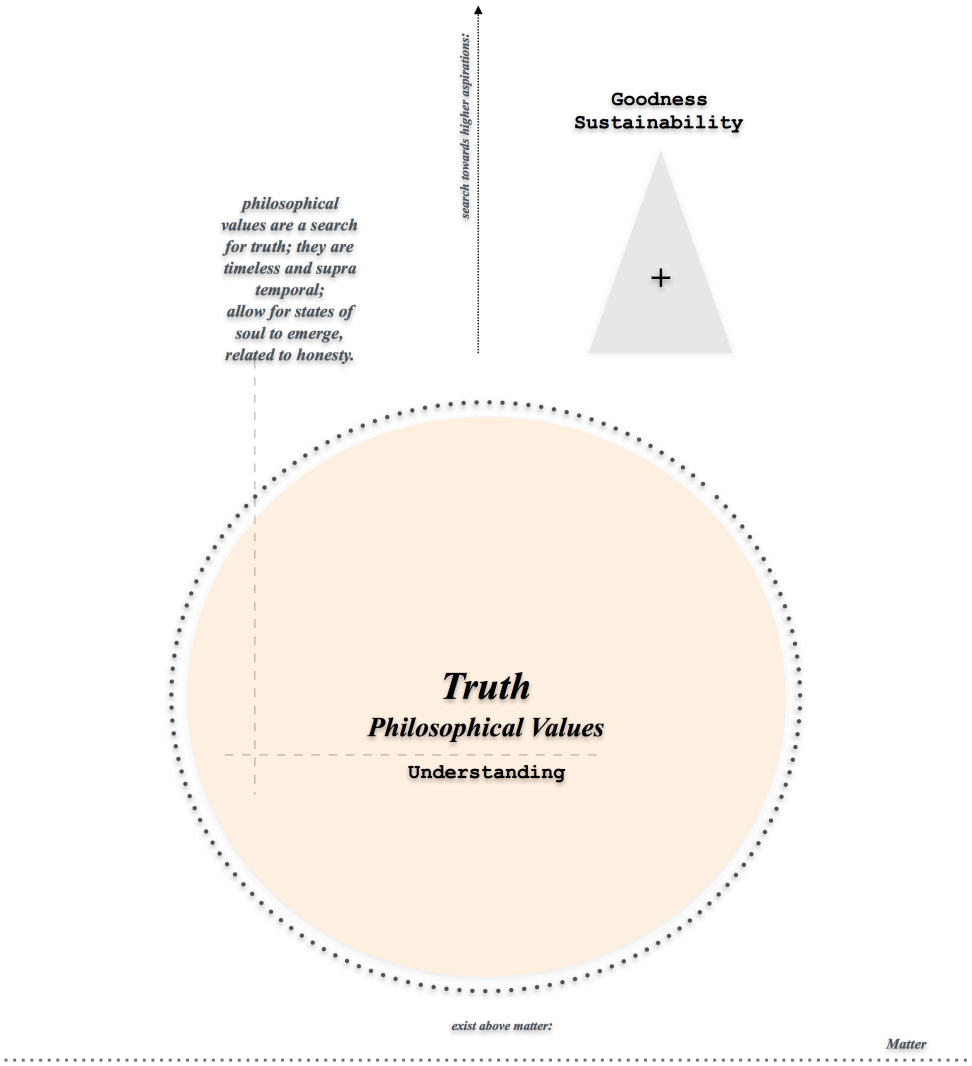


Figure 38: Diagram clarifying Philosophical Values.





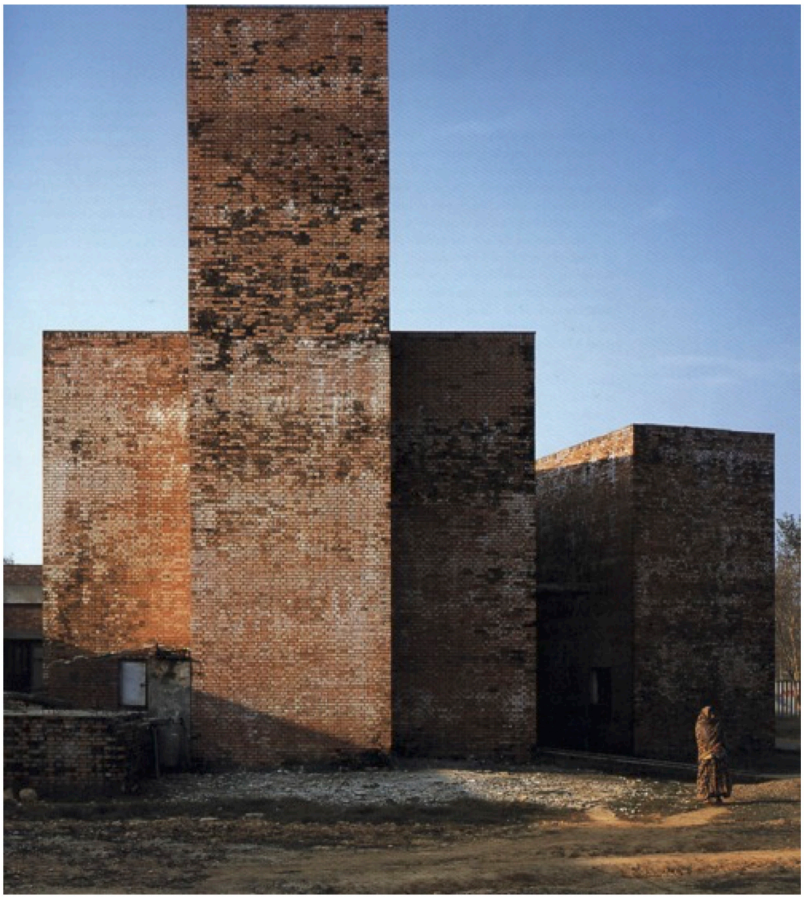




Photo 1: North Atlantic Ocean, Cape Breton Island, 1996, Gelatin silver print, by Hiroshimi Sugimoto; Source; http://www.thisiscolossal.com/2014/04/reflected-landscapes-by-victoria-siemer/; Photo 2: Frank Duminil painting; Source: https://pt.pinterest.com/pin/251075747953884766/; Photo 3: Siddhartha Children and Women's Hospital, Butwal, Nepal,1998, by Tadao Ando; Source:http://referentz.tumblr.com/post/230613726 92/siddhartha-children-and-womens-hospital-butwal; Photo 4: Yves Klein painting with gold leaf; Source: https://pt.pinterest.com/pin/251075747951989188/

PLATE 109: TRUTH AND PHILOSOPHICAL VALUES: THE SEARCH FOR THE TIMELESS AND THE SUPRA-TEMPORAL

9.1.5.6. SYMBOLS: SYMBOLICAL

One other principle and value identified was that of signs and symbols (for the theorists) which is concurrent with the symbolical values (defined by the case studies). Following is a brief analysis of both to clarify if both ideas were complete, or if a deeper understanding can emerge.

For the theorists…

It was seen that art has a symbolic nature, and that artworks can both incorporate symbols (which act together as wholeness) and be symbols in themselves; the significance of the artwork emerges from a totality of all symbolic references, and the process only remains alive as long as the symbols remain a mystery (which is why it has to be deeply complex) (Hegel, Merleau-Ponty, Goodman and Eco). For symbols to denote (to refer to something) in art, they need to grasp a significant relationship of what they symbolize (rather than formal aspects). Also, symbols possess a universality to them (what makes them significant and that expresses significance), which is that which is used in art; this universality can be understood as very complex entities that create an endless cycle of significances and associations, that define the collective unconscious, and that are genuine symbols (ambiguous and full of significance). A specific type of universal symbol is the archetype. (Jung, Eco, Pallasmaa and Handa).

For the case studies…

For the case studies the same dichotomy was found (that symbolic values and symbols can be understood in a two folded way): firstly the incorporation of specific symbols into the creation and secondly the artistic creation acting as a complex symbol in itself. We further saw that both artists and architects used these two ideas: on one hand the incorporation of symbols occurred from nature and culture as references; on the other hand, the artwork acts as a symbol of emotional and spiritual life, of the spirit, or as a totality of emotions, intellect and soul (Le Corbusier, Tadao Ando, Barragan, Rothko, Turner). So, for the case studies, what the creation denotes or what it symbolizes is the universal emotional and spiritual realms of existence, and the complexity of human life in the midst of it.

Defining Symbolic Values and Symbols…

In general terms Symbolic Values relate to symbols and to the main idea that art is deeply rooted in its symbolical nature, because it can be in itself a symbol and because it incorporates symbols: what both cases establish is a correspondence (denotation, association, reference) to the spiritual and emotional realms of existence (the integration of all of man's faculties and spirit, communication to the spirit, and allows for spiritual and emotional connections to emerge). The incorporation of individual symbols creates new links and other references and associations depending on their symbolic nature such as the natural fields that represent lost paradise (however all of them denote to the same idea). It is these symbolic values that communicate to human consciousness and lets man feel deep emotions; because they are universal and timeless, they make it possible for man to create a link with his own spiritual dimensions.

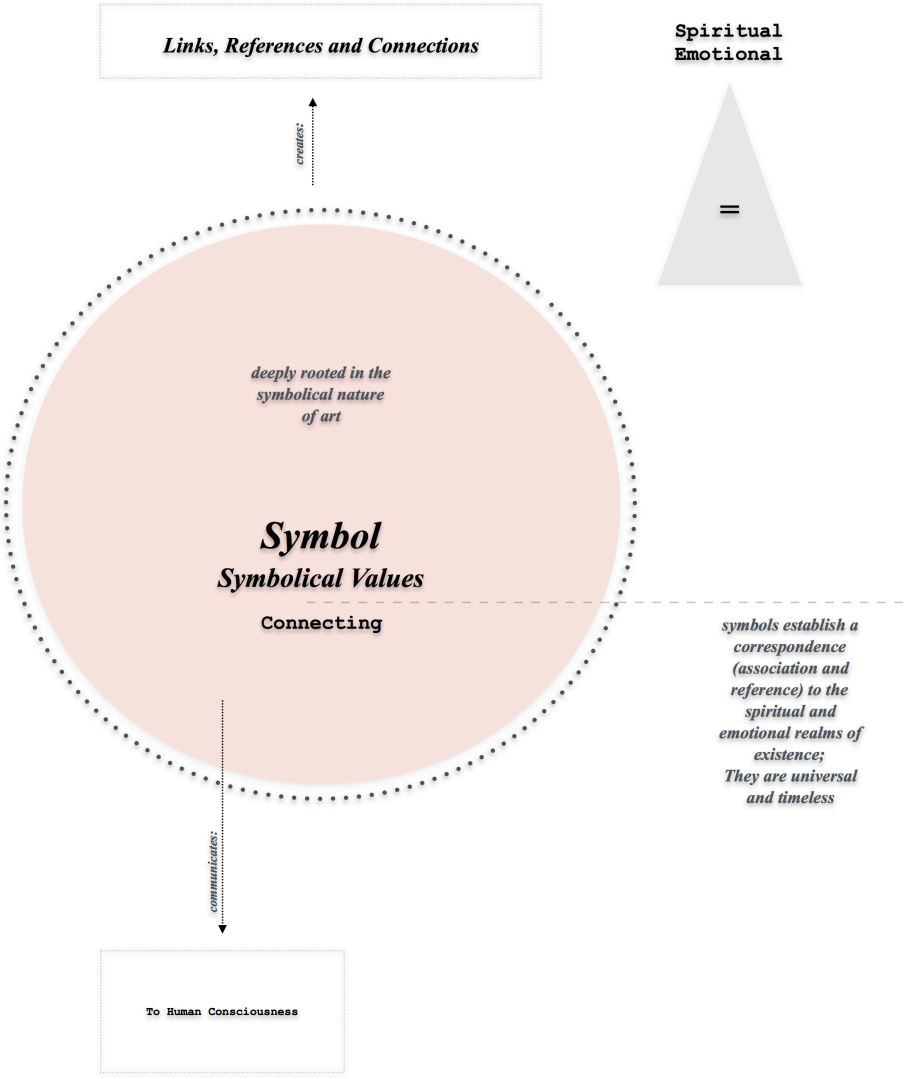
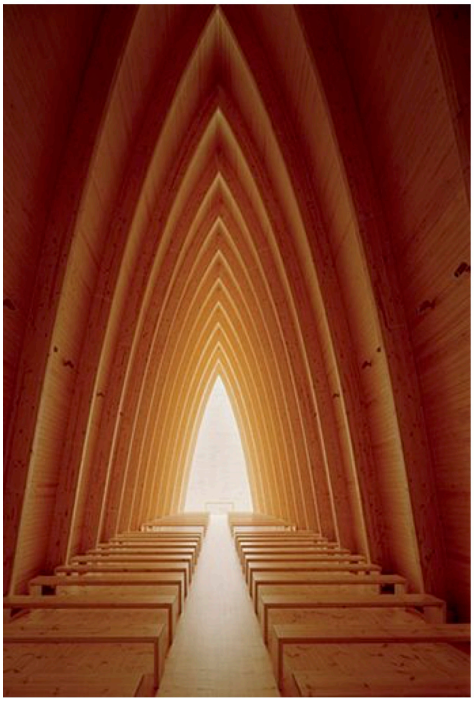


Figure 39: Diagram clarifying Symbolical Values.





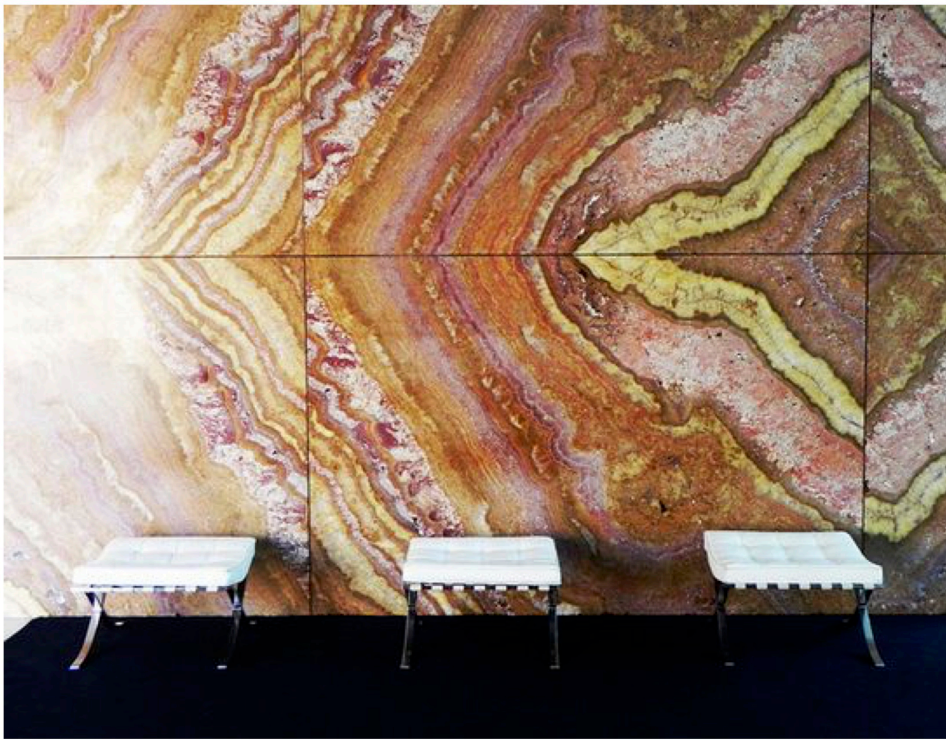


Photo 1:St. Henry's Ecumenical Art Chapel (Turku, Finland) by Sanaksenaho Architects; Source: https://pt.pinterest.com/pin/251075747947337228/; Photo 2: Planar House by Steven Holl Architects; Source: https://pt.pinterest.com/pin/251075747955042929/; Photo 3: Barcelona Pavilion, Mies van der Rohe Interior 1929;. Source: https://pt.pinterest.com/pin/251075747955778223/ Photo 4: Anselm Kiefer, Dat rosa miel apibus, 2010-11; Source: https://imageobjecttext.com/tag/white-cube/



PLATE 110: SYMBOLICAL VALUES: SYMBOLS OF THE ETERNAL

9.1.5.4. METAPHORS: METAPHORICAL

One other principle and value identified, was that of metaphor (for the theorists), which is concurrent with the metaphorical values (defined by the case studies). Following is a brief analysis of of the two, in order to clarify both ideas.

For the theorists…

Just like what is considered with the symbols, the theorists defined that artworks are metaphoric in their nature, and they both incorporate metaphors and are themselves metaphors, and it is through this metaphoric nature that significance is transferred and understood. A metaphor, then, is a means by which we comprehend abstract concepts, is a transference of truth, is ambiguous, possesses movement, combines the new with the old, carries varied meanings (figurative, objective, literal and spiritual) and occurs through recognition, reconstruction and interpretation. In art, metaphors possess and transfer truth (related to existence and to imagination), a high degree of ambiguity and expression qualities, create a family of concepts and establish a vitality; they establish an endless cycle of interpretation by evoking and strengthening thoughts, emotions and establishing new connections (Fez-Barringten ,Goodman, Ricouer, Pallasmaa). Creation transforms philosophical and psychological principles into metaphors.

For the Case Study…

With the case studies the same dual idea holds true: firstly that art and architecture is in itself a metaphor (they embody metaphors) for universal truths and ideal conditions of existence, relating to the metaphysical and spiritual existence, and secondly that it incorporates multiple other individual metaphors within itself that also echo the same realms. Metaphors thus act as 'windows' into our essence and spirit embodying multiple spiritual lessons and communicating universal truths (Ando, Wright and Palladio, Turner, Rothko, Kiefer). Metaphorical ideas are present through the union of different concepts (Kiefer), are understood through the creative spirit and need poetical values to emerge (Ando).

Defining metaphor and metaphorical values…

Artworks are metaphoric in their nature and both possess metaphors and act as metaphors, creating connections to something other than itself. Metaphorical Values, thus are embodied in the creation (as a whole and in the parts) embodying multiple spiritual lessons and communicating universal truths. Metaphors possess and transfer truth (related to existence and to imagination), a high degree of ambiguity and expression qualities, create a family of concepts, establish a vitality and create new connections, from which the new understandings can emerge.

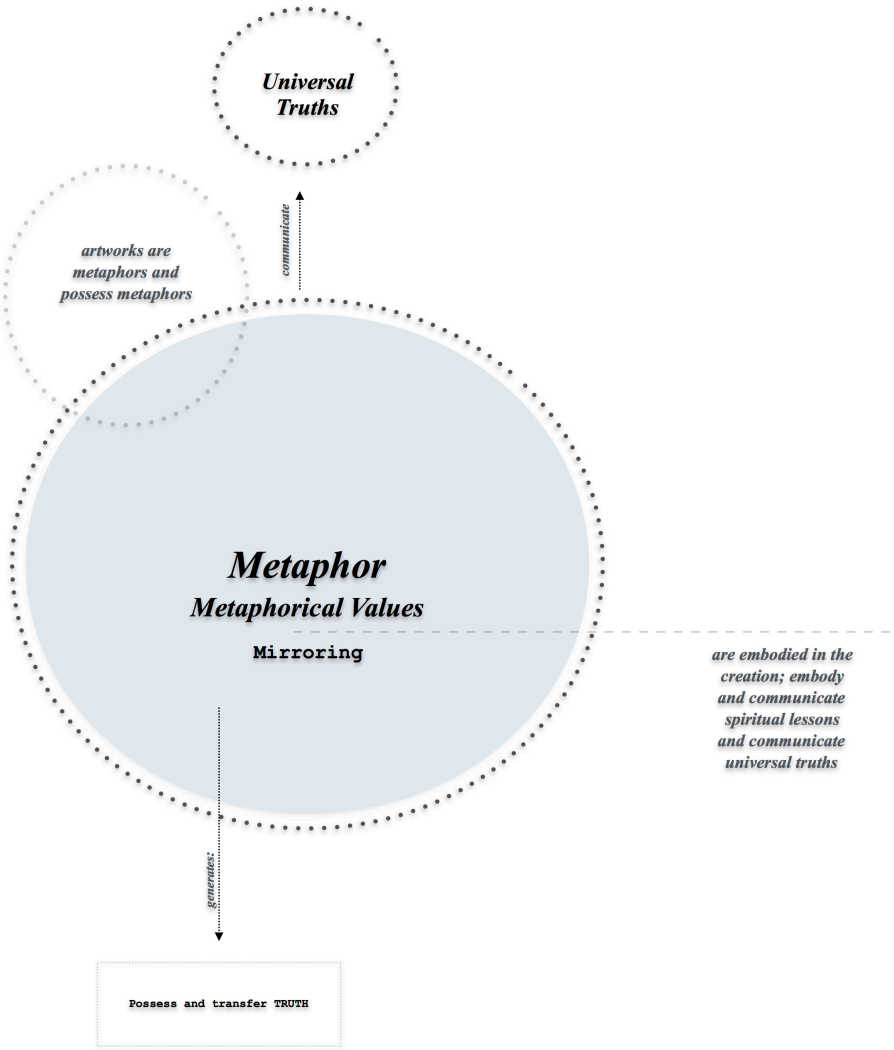
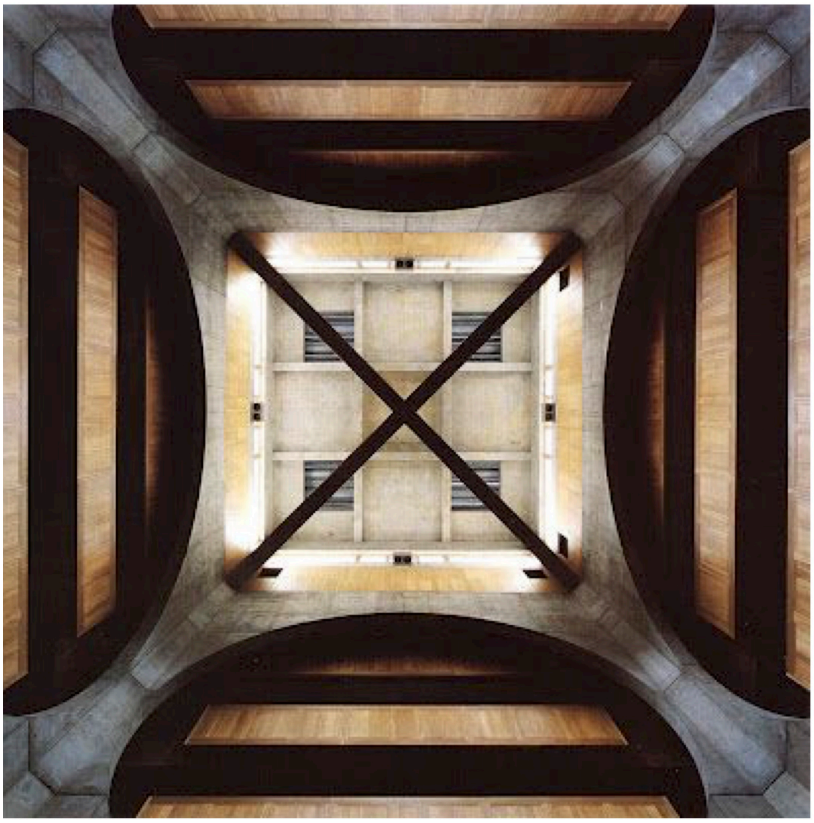
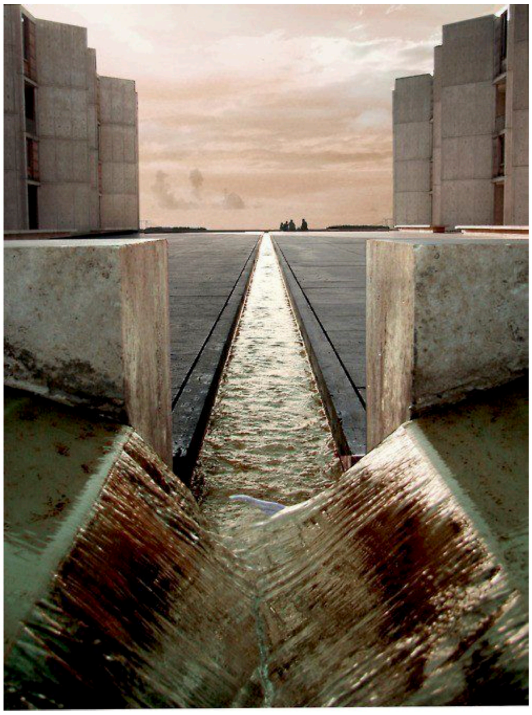


Figure 40: Diagram clarifying Metaphorical Values.









REFLECTING HEAVEN ON EARTH



Photo 1: The celling of the Exeter Library by Louis Kahn; Source: https://pt.pinterest.com/pin/251075747955042977/; Photo 2: Chartres Labyrinth Mosaic Stepping Stone; Source: https://pt.pinterest.com/pin/251075747955768442/; Photo 3: The Salk Institute, by Louis Kahn; Source: https://pt.pinterest.com/pin/251075747955042961/; Photo 4: Anish Kapoor, Sky mirrors (in nature and in New York City), 2006; Source: https://commons.wikimedia.org/wiki/File:SkyMirror_NYC.jpg; Photo 5: Anish Kapoor, Descent into Limbo, 1992; Source:https://pt.pinterest.com/pin/62839357272330112/;

PLATE 111: METAPHORICAL VALUES: COSMOLOGICAL AND EXISTENTIAL

9.1.5.8. POETRY: POETICAL VALUES

One other principle and value identified was that of poetry (for the theorists) which is concurrent with the poetical values (defined by the case studies). Following is a brief analysis of both.

For the theorists…

The theorists consider poetry a vital condition and a principle of all art, without which significance couldn't occur (increases significance). Poetry is considered to be a frail and fleeting essence that alludes reasoning, that arises from freedom (connects with imagination), reflects metaphysical and ontological values, and possesses multiple significances. In art, poetry is linked to consciousness, communicates through 'indeterminacy' and is 'ambiguous' (a sort of organized disorder), generates a sense of 'reverie' and belongs to two realities: 'physical reality of perception' and the 'unreal sphere of imagination' and generates various kinds of openness and meanings. Allows the viewer to define an imaginative projection (re-creation in himself that involves identification) and allows him to be integrated within himself; it defines man's existence in the world, creating new connections and understandings (Bachelard, Pallasmaa, and Eco).

For the case studies…

For the case studies, poetry (and poetical values) is a natural condition that emerges naturally and creates a link with man's spirit elevating human consciousness. The architects accentuate it as: being connected to emotional and metaphorical values, resulting from the various stages of creation as a condensation of substances and it is an important value that establishes a deep connection with man's spiritual conditions (Ando, Le Corbusier, Barragan). For the artists, poetry is a more operative and vital value (an underlying quality that permeates the work) of equal importance; it can be expressed as a combination of the other values, it can be a driving force of the creation, it can also be expressed as an intense experience and it can be understood as a quality (Rothko, Kiefer, Judd and Turrell).

Defining Poetry and Poetical Values…

Poetical Values can generally be understood as the creation of a poetry that generates a link with man's spirit elevating human consciousness. Poetry is generally understood as a frail and intangible essence (a vital condition and a principle of all art), that alludes reasoning, that arises from freedom (connects with imagination), reflects metaphysical and ontological values (can arise from the combination of other values), possesses multiple significances and communicates through 'indeterminacy' and 'ambiguous' natures or essences.

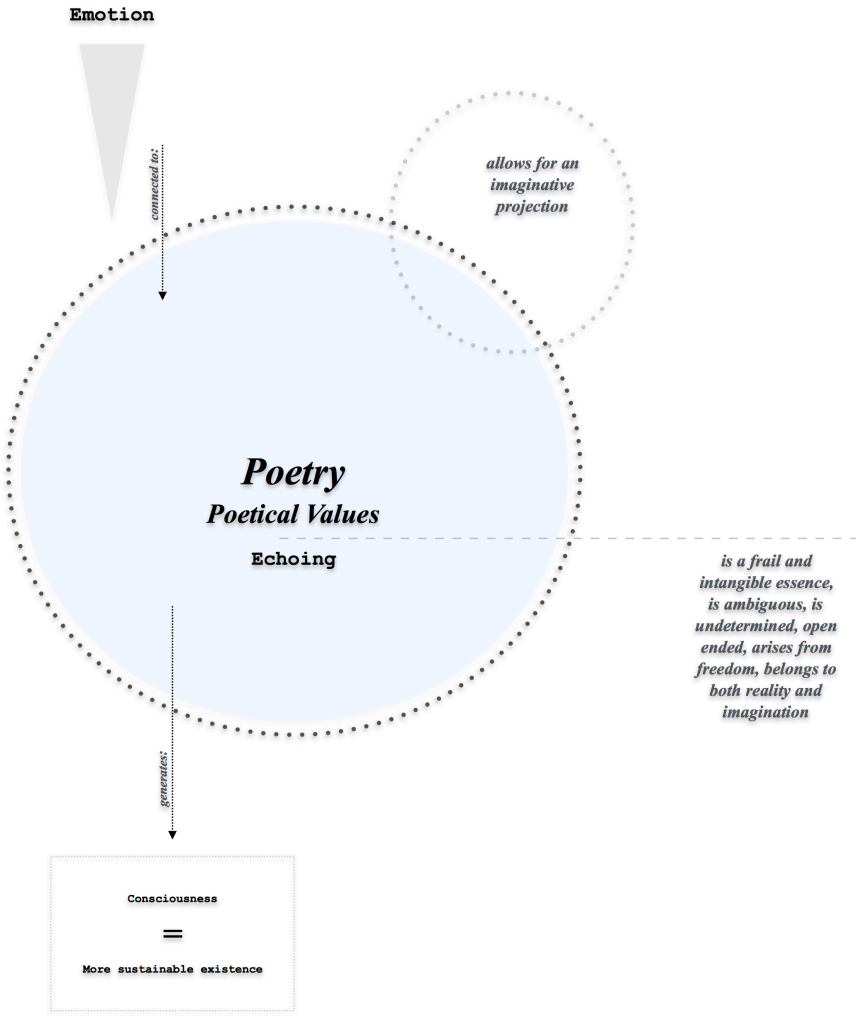
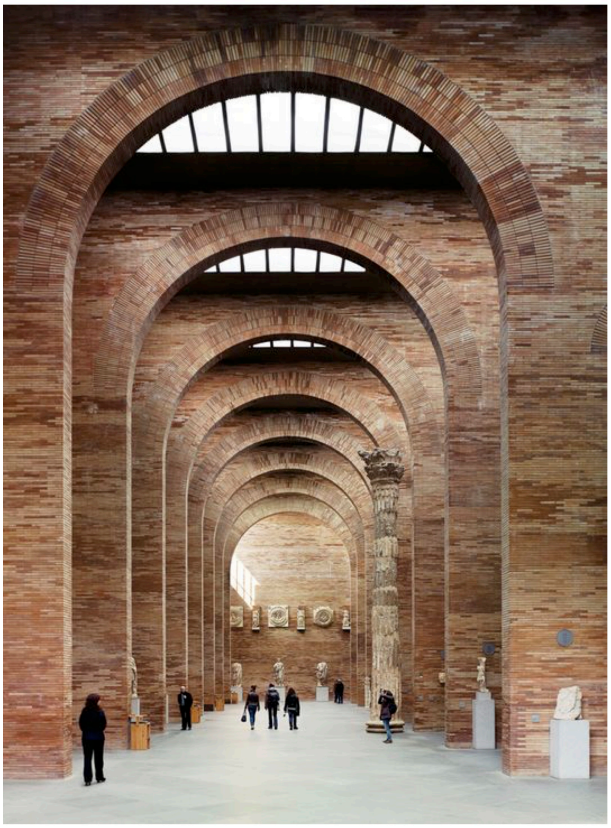


Figure 41: Diagram clarifying Poetical Values.





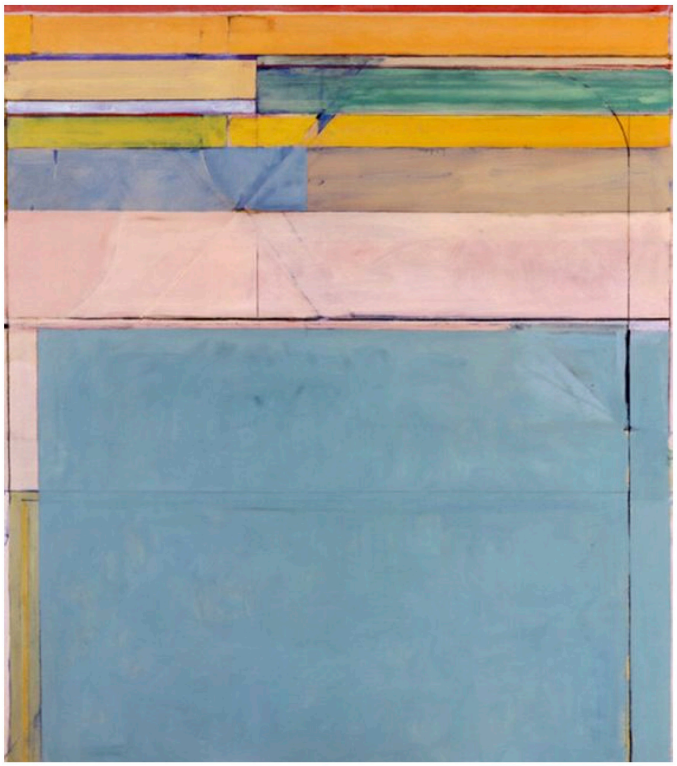


Photo 1: Rafael Moneo - Towering arches of thin Roman brick line the inside of the National Museum of Roman Art.; Source: https://pt.pinterest.com/pin/251075747955778227/; Photo 2: Light and darkness, interior view of ground floor space next to the library; Source: Sarah Frances Dias Photography, photos taken by the Author. ; Photo 3: Richard Diebenkorn painting; Source.; https://pt.pinterest.com/pin/106679084894745285/

PLATE 112: POETICAL VALUES: THE POETRY OF SPACE THROUGH LIGHT AND FORMS

9.1.5.9. EMOTIONAL

One other principle and value identified, was that of emotions (for the theorists) which is concurrent with the emotional values (defined by the case studies). An analysis of the two will be presented.

For the theorists…

The conveying and embodying of emotions are considered to be the main significance of the work of art. Emotions in art are used freely, are communicated as 'infectiousness' (infects the viewer that feels the same emotions), are associated to both imagination and consciousness, are externalized as expression (emotions are brought to light by the artist in the creative process), creates a unity between people and era, conveying something universal, timeless and immortal; they are complex, act together as meta-emotions, relate to the aesthetic experience and also function cognitively. Kristina Borjesson (2006) points out, that in order for an emotional based creation to be sustainable (and 'timeless'), it needs to function on a 'behavioural level' and in a 'reflective level' [550]. What denies an emotional value is emotional numbness (sort of blindness), what it generates is a self-knowledge and what defines great emotional value and content is 'deepness' and 'complexity' allowing them to become a symbol for integration. (Naar, Collingwood, Tolstoy, Nelson Goodman).

For the case studies…

Emotional values are considered to be, for the case studies, the one aspect that grants art it's value, allowing for the development of consciousness and the union of the body and spirit. The architects, accentuate emotional values as 'emotional architecture', as 'architectural emotion' and also as creating an emotional reaction in the viewer/user; all of them sustain the belief that architecture embodies and generates multiple emotions associated to the spiritual life (promoting mystery, enchantment, stillness, meditation, awe, imagination and discovery) through a kind of a poetic instance that acts on consciousness and spirit and that together, emotion and poetry define spiritual values (Tadao Ando, John Pawson, Barragan, Le Corbusier and Zumthor). The artists, likewise, consider emotions to be that which is embodied and reflected in the creation and that it creates an identical emotional reaction in the viewer and awakens deeper levels of existence; it is emotions that define, reflect and capture the human spirit, creating new connections to life and defining a sort of metaphysical understanding (Kiefer, Rothko and Hopper).

[550] '' There is a growing body of knowledge on emotion and design but as far as is known no definition of affective design as yet, which from time to time is used as a synonym for emotional design. Emotions are not stable as sources which actually cause their arousal might be transient, which also is a point made by Norman (2004). However, he continues to argue that emotion only is a way to relate a product to the user: to evoke his or her interest. This can easily become jaded if the product does not function on the 'behavioural level' and finally, and most important, on the 'reflective level'. Emotional design is in its fundamental form thus not sustainable.'' (Borjesson, 2006, p.16)

Defining Emotion and Emotional Values…

Emotional values can generally be understood as the creation of specific emotions, the embodiment of emotions in the creation, in order to, generate those emotions in the viewer. These emotions relate to poetry, to a spiritual and metaphysical understanding, allowing for the development of consciousness and the union of the body and spirit. It is emotions that define, reflect and capture the human spirit, creating new connections to life.

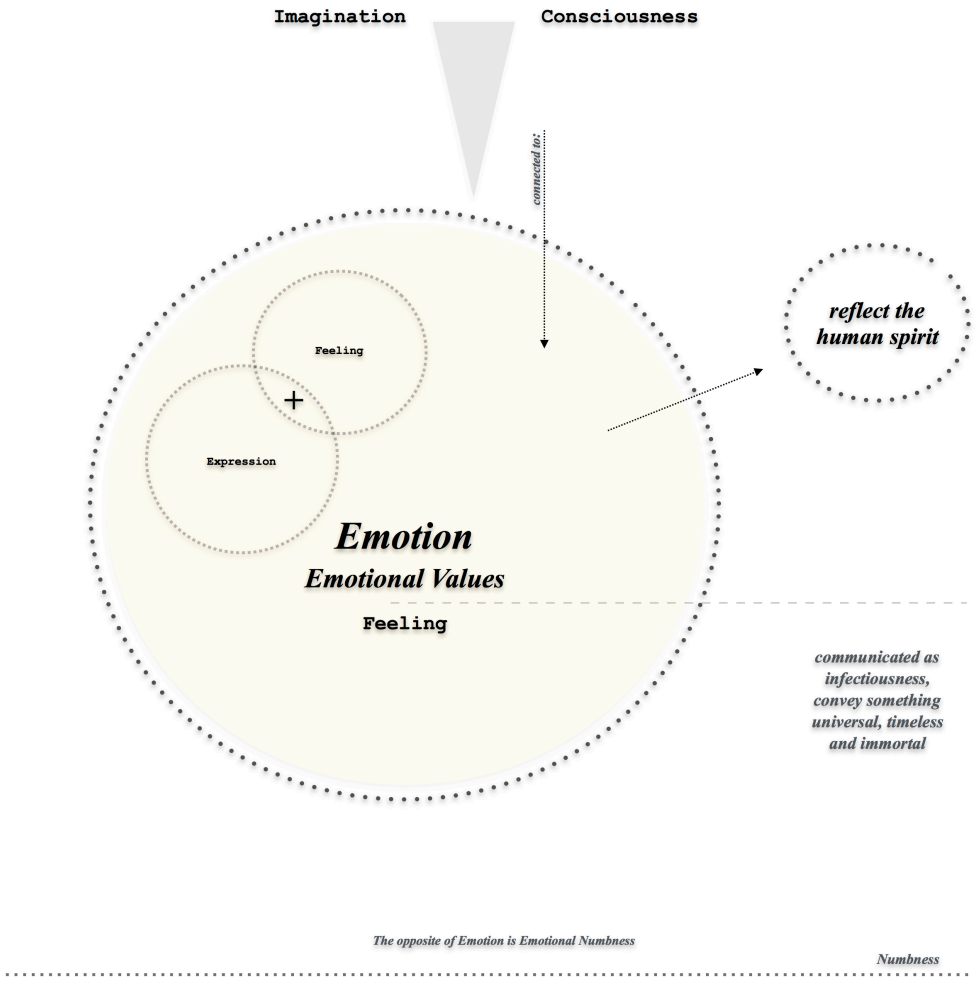
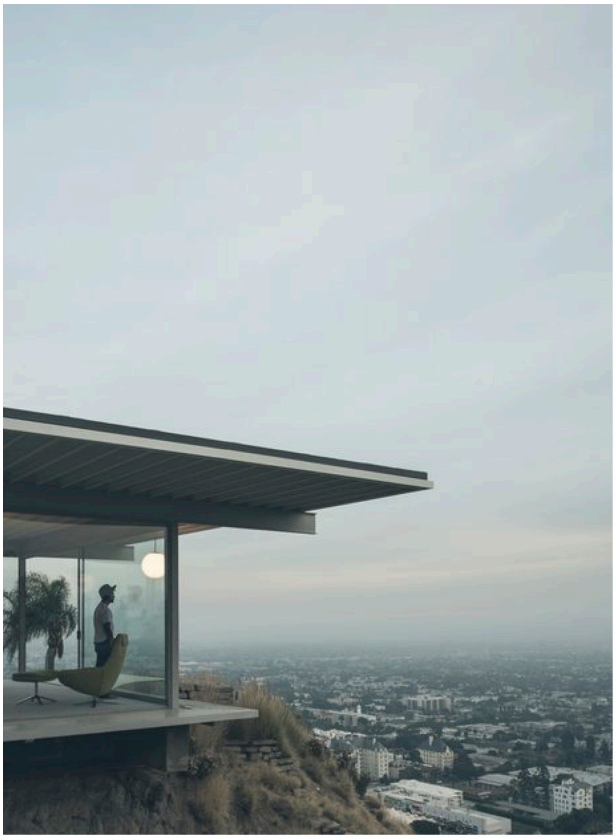
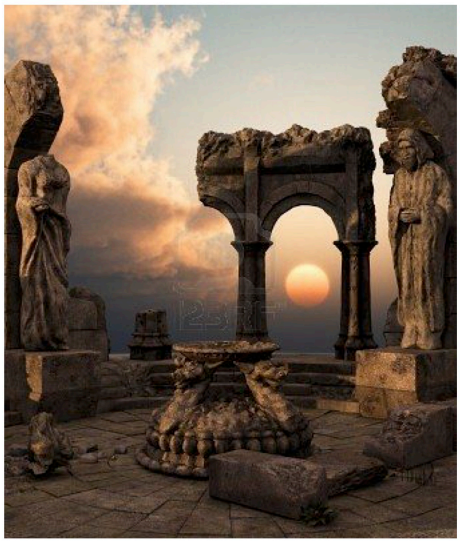


Figure 42: Diagram clarifying Emotional Values.







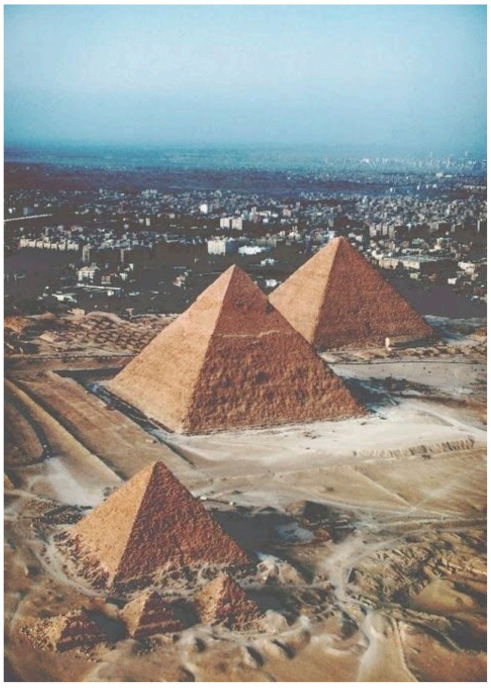


Photo: The Stahl House:by architect Pierre Koenig, 1959; Source:https://pt.pinterest.com/pin/251075747955026411/; Photo 2: The ruins of old Nor, Veracruz; Source: https://pt.pinterest.com/pin/251075747952921548/ Photo 3: Gustave Doré's Illustrations fo Dante«'s Divine Comedy, 'Circle of Angels'; Source: http://www.openculture.com/2013/10/gustave-dores-dramatic-illustrations-of-dantes-divine-comedy.html; Photo 4: The pyramids in Egypt; Source: https://pt.pinterest.com/pin/251075747955768284/

PLATE 113: EMOTIONAL VALUES: MAN STRIVING FOR THE EMOTION OF TIMELESSNESS AND IMMORTALITY

9.1.5.10. PSYCHOLOGICAL

For the theorists…

It was seen, that for the theorists, art expresses, through intuition and imagination both cognitive (ideas and thoughts) and emotions, and in both of those realms lies their significance. It was also seen that the aesthetic experience relates to both cognitive and emotional content, and thus, to the psychological value of art: allowing for the understanding of self and secondly for the mastering of chaos (a defensive activity).

For the case studies…

From the case studies, we saw that the faculty of reason and rationality has a vital role in some of the creative processes (defining rational creation methods such as geometry) and in defining and sustaining the psychological values. For Pawson, architecture connects to intellect and art is simply a product of the 'most creative and forward-thinking intellects'. For Palladio, in a similar way, architecture should reflect reason, psychological and cognitive dimensions, in order to portray the universal order. Le Corbusier, likewise, was guided equally by both emotional and rational and cognitive decisions. Other case studies that used cognitive values as a basis of their creation method were for example Josef Albers (whom sustained most of his design process in cognitive based decisions), Donald Judd (whom also based his creations in rational decisions) and James Turrell.

It is of value to point out that psychological values are not only associated to cognitive based decisions, but also to the overall understanding of the world and of existence that is based in an intellectual assessment, followed by the adequate constructions of thoughts and logics that accompany those intellectual analysis. In other words, to synthesize, psychological values are defined by a logical view of the world and by the thoughts and ideas that define existence.

Defining Psychological Values…

Psychological values, thus, are defined as values that are connected to reason, to the intellect, to man's ability to articulate and interpret events in a rational and cognitive way. They are associated to the cognitive dimensions of the human being, and thus are expressed as a rational and cognitive construction. These values are used at all stages of the design creation, and are conveyed through the whole artistic or architectural creation. To summarize: psychological values are defined by a logical view of the world and by the thoughts and ideas that define existence.

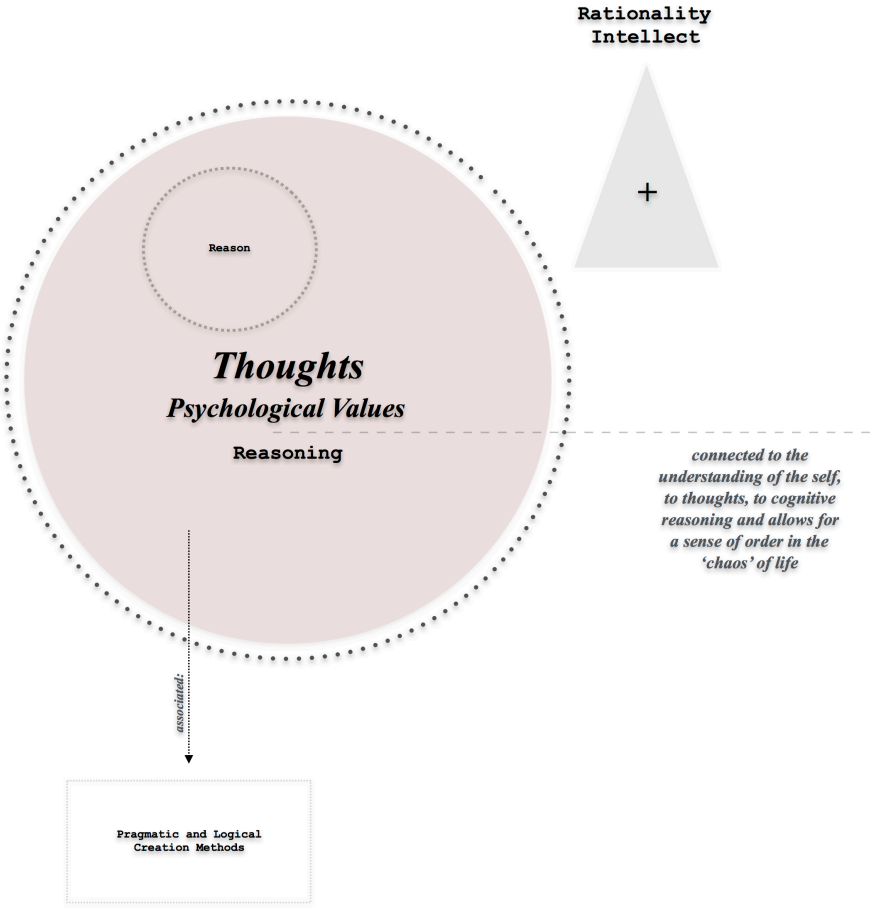


Figure 43: Diagram clarifying psychological values

9.1.6. RE-DEFINING PRINCIPLES

Re-defining principles aims to, as the chapter has been carried out, join the ideas defined by the theorists with those proposed by the case studies, thereby arriving at a new common idea of each of the principles proposed.

9.1.6.1. FORM

Form was more generally defined by the theorists. There was the understanding that pure form is a quality that grants art its meaning and its significance: that grant's art its soul (Saarinen, Pareyson, Paul Klee). Pure form can be defined as: 'meaning', significance and 'soul' that is innate to human life and that is expressed and generated through (a process of form development), through art. It is dependent on the qualities and values that originate it (spiritual, metaphysical, etc.), is a result of the instinctive power and essence of its creator, and is a reflection of man's own understanding of life; it possesses principles of expression and correlation (derived from nature) and principles of vitality (derived from man); it's generation process (a process of 'forming' that invents new laws and is related to intuition and emotion) is retraced by the viewer, and allows for multiple significances to emerge. Pure form further echoes universal laws, and should resemble nature in a 'free and unstudied' manner (Kant, Saarinen, Pareyson, Klee). The significance of form is in the values it incorporates.

9.1.6.2. COLOUR

Mainly, there is the idea that colour is in itself a significance that is deeply important in the arts, in both the theorists and the case studies. For the theorists, there was also the understanding that colour is a quality that grants art its meaning and its significance: it is colour (combined with form as expression) that captures and embodies the significances of art and that gives forms their souls. Colour itself was defined as fundamentally intangible, complex and fleeting essence that pertains to all things; it is also comprehended as a significant language associated to life and to a spiritual dimension, that connects to beauty, imagination, inspiration and intuition. The essence of colour can be perceived as healing (healing properties), as symbolic (creating associations) and as being universal (communicating independently of culture); colour also communicates to man's sensitivities as significance. In regards to art, they defined that colour guides the artistic process (through intuition and creativity) of which it is an intrinsic part of, through a universal understanding of the intrinsic qualities of colour itself; it is based on observation, feeling, sensitivity and sensations and their transformation through instinct; it lets symbolic associations to emerge, connected to poetry, beauty, emotions and the soul, by revealing a spiritual essence. (Matisse, Steiner, Birren, Saarinen)

The main case studies that studied and reflected on the phenomena of colour were Albers and Le Corbusier. For Albers colour was an essence understood through experience, and had the strength to carry multiple associations. For Le Corbusier, colour in art allows each creation to be turned into a 'symbolic machine'; it is colour that can create a system of signs that have their own significance, and allow the work to communicate to (and in) a transcendent dimension.

9.1.6.3. THE MULTI-DIMENSIONALITY OF THE HUMAN BEING

It was understood that consciousness is a level of intermediate experience between the psychic (emotional) and the intellectual, and as the activity that generates the artistic experience, (Collingwood (1938) and Pallasmaa (2010)). However, as one also saw, consciousness is more than that: it relates to the complexity of the human being: connecting the spirit, with the soul and with the body. The diagram below summarizes this idea.

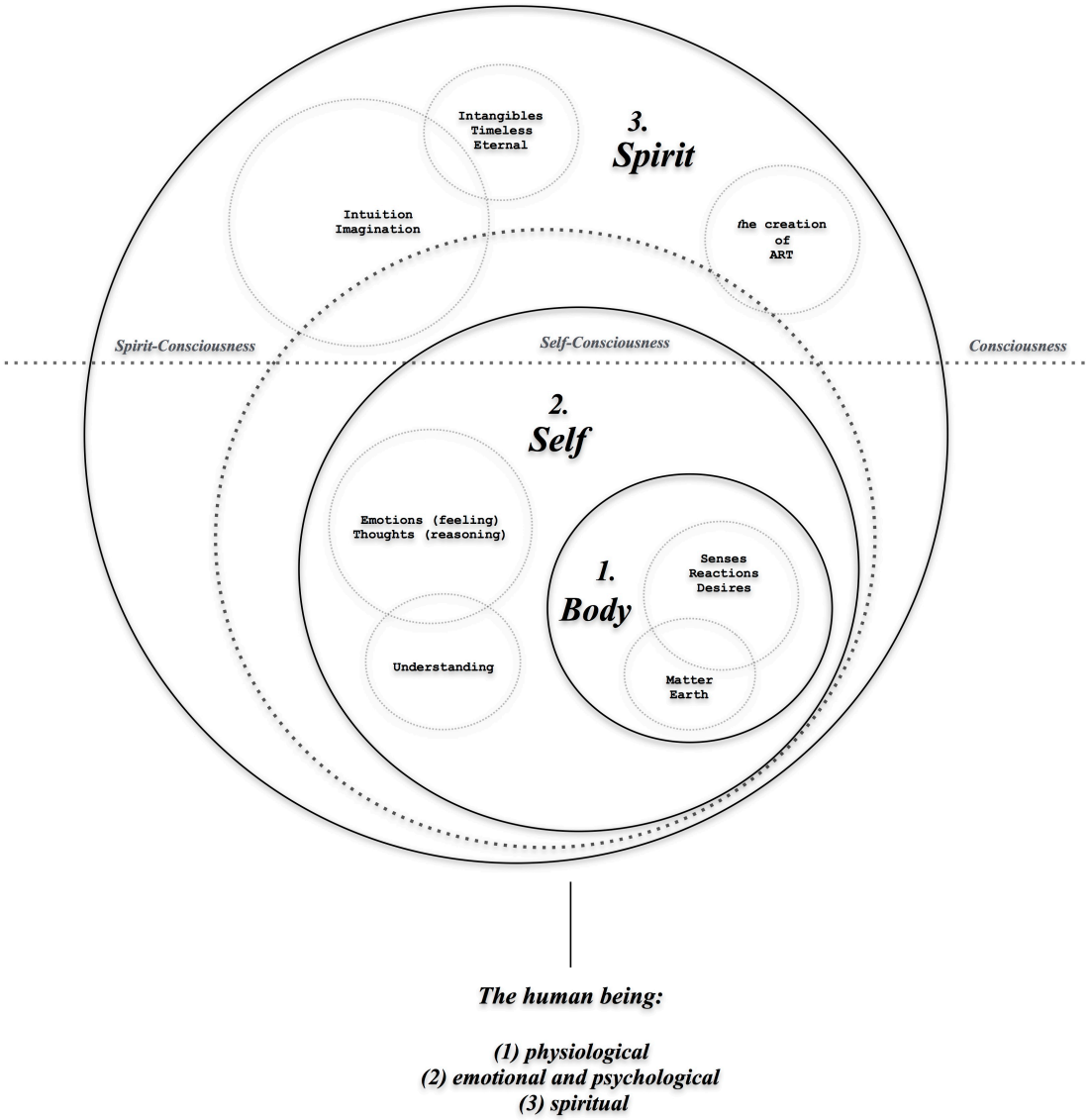


Figure 44: Diagram summarizing the different spheres that define the human being: all of which need to be addressed in art.

Thus, it is possible to also define the spirit, in relation to the body, as the main component of the human being that is used in art. As clarified by the following diagram.

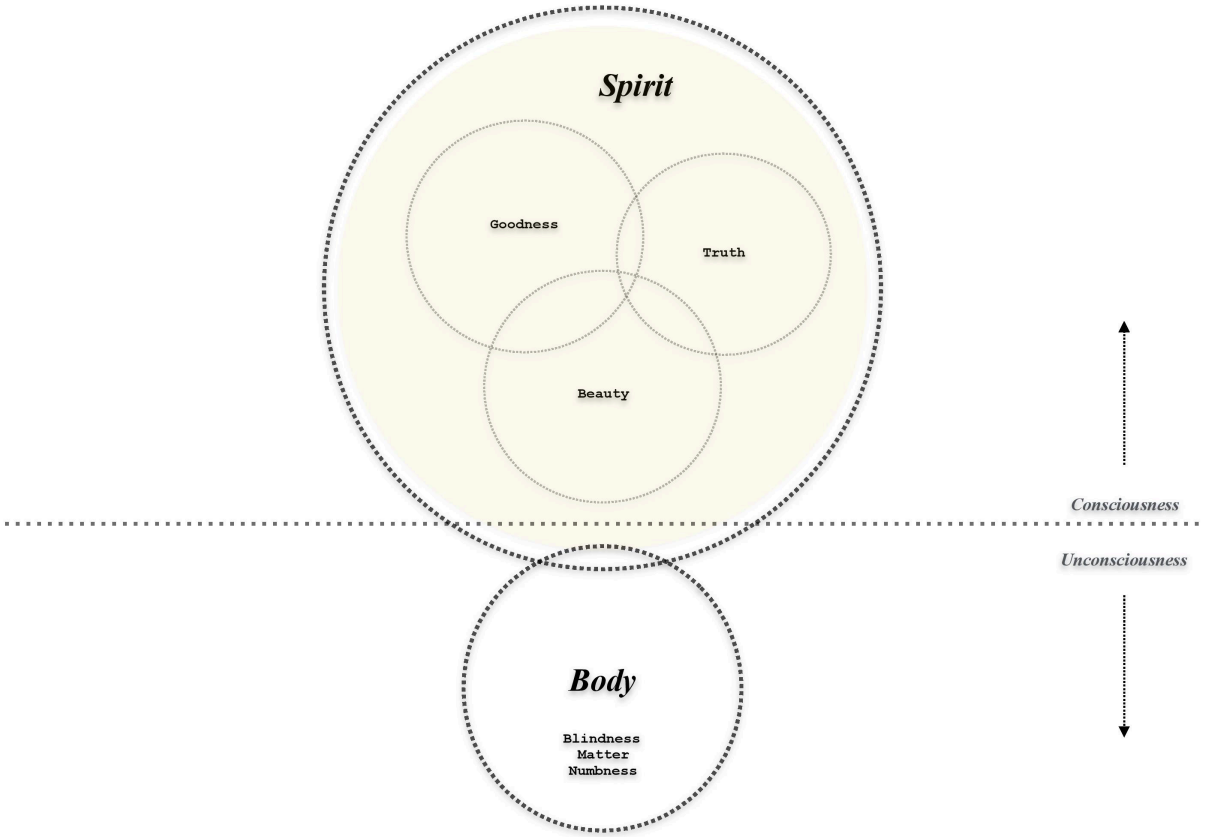


Figure 45: Diagram summarizing the difference between body and spirit.

The diagram above shows the difference between consciousness and unconsciousness, as it relates to man's faculties: unconsciousness is connected to the body, to matter, to blindness (inability to see and understand) and to numbness (inability to react and create); where as consciousness is connected to the spirit and to man's highest faculties: those of beauty, goodness, and the search for truth. They represent man's ability to aspire to the greatness of the spirit.

9.1.6.4. TOTALITY AND WHOLENESS

Another aspect or principle that is derived from the analysis of both the case studies and the theorists which is of vital importance, is the notion of totality and wholeness. Although this idea wasn't presented or analysed individually by any author or by any of the case studies, it was always present as an underlying principle or idea.

For the creation to be significant, it needs to possess a sense of wholeness. This sense of wholeness can be understood as a sense of completion that simultaneously allows for open ended cycles of interpretations. In other words, it has to possess a sense of a totality, an entity, a closed essence, which is whole and complete, however, simultaneously, it needs to possess enough incompletions that allow for an openness to occur endlessly by the viewer. The sense of wholeness can be given by many aspects, such as the form or the colour, but mainly, it first and foremost, is derived from the values used and the significance they carry within themselves.

9.1.6.5. TRANSCENDENCE OF THE REAL

Another aspect or principle (that is derived from the analysis of both the case studies and the theorists) is the idea of the transcendence of the real, which needs to be summarized. We saw, throughout the thesis, that multiple authors and case studies announced the importance of the idealizing nature of art as a core aspect of its significance. Indeed, this idealization nature of art can be now clarified as a transcendence of the real: the significance of the creation lies greatly in the fact that it combines values in order to transcend the reality of life and clarifies ideals (ideals of ways of life, spiritual ideas, etc.). It is this transcendence that allows man to be elevated (and educated) into another possibility that exists beyond the real.

9.1.6.6. NATURE AS A GUIDE

One last aspect or principle needs to be defined, and that is the idea that nature is always the founding guide of every creation process. We saw that in regards to form formativity, nature was indeed the ultimate source from which proportions, harmonies and ideas were drawn from. We also saw that nature was a fundamental aspect of the understanding of the complex living entity. However, nature is a guide in one other way: it is nature that establishes a link to the ultimate spiritual dimensions, and it is through nature that man can be in harmony within himself and with the divine. Therefore, nature is used at all scales as the ultimate guide, serving as the cornerstone from the core values derived from, which in itself are all human creations and deal with human aspects (emotion, reason, psychology, etc.). However, nature is always a guide.

9.2. THE DIAGRAM OF CREATION

One main idea that can be drawn from the above analysis is the fact that not all values connect to each other in the same way: some values are more general and embracing, deriving from the connection of others (spiritual values derive from the union of poetical and emotional ones, and from beauty for example) where as others possess a more peripheral position (symbolical values), as others establish a grounding position from which all the other derive from (philosophical and sustainable). Thus in order to connect all these values correctly, the idea of creating a 'tree of life' emerged.

Following the idea of creating a diagram like a tree that unites all the concepts so far announced, a diagram was created that establishes connections between the ten values identified and establishes twenty-two connections between the values. Some of those connections were identified previously as principles, but others were drawn up as new ideas, since the diagram allowed for a dynamic understanding and an abstract comprehension of what was missing and still needed to be defined. As follows is the presentation of the diagram and various analyses that both summarize all of the views and the conclusions, and also establish new conclusions and ideas.

Firstly the ten values and the twenty two connections will be presented by the same order and numbers used in the diagram:

The Substances:

1- Spirit (ensouling)
2- Universe (expanding)
3- Emotion (feeling)
4- Poetry (echoing)
5- Metaphor (mirroring)
6- Beauty (shining)
7- Symbol (connecting)
8- Thought (reasoning)
9- Goodness (giving)
10- Truth (Understanding)

The Connectors:

11 – Instinct, 12 – Intuition
13 – Imagination, 14 – Consciousness
15 – Openness, 16 – Shock
17 – Aliveness, 18 – Awe
19 – Awareness, 20 – Timelessness
21 – Magic, 22 – Ambiguity
23 – Energy, 24 – Essences
25 – Love, 26 – Sharpness
27 – Expressiveness, 28 – Narrative
29 – Abstraction, 30 – Discovery
31 – Intellect/Reason, 32 – Freedom

In he following two pages the diagram of significance is presented.



Figure 46: The diagram of creation of significance: connections and values.

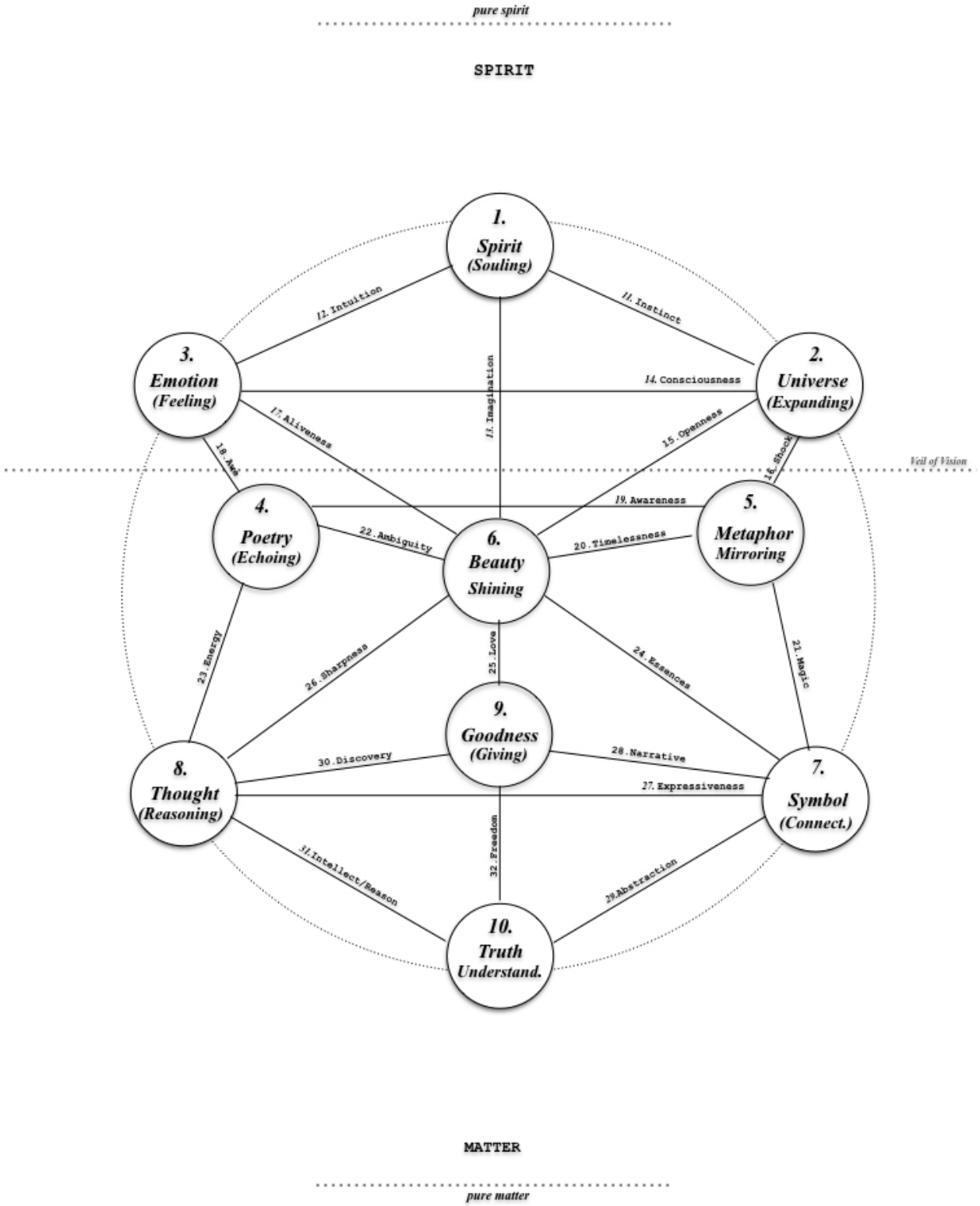


Figure 47: The diagram of creation of significance: without connections.

The analysis and explanation of the diagram of creation will follow specific criteria so that all the issues are described and understood.

(1) Location of Values….



Figure 48: The diagram of creation of significance: location of values

The first thing that needs to be clarified is the location of the values. Each value has it's own specific situation that cannot be changed, for they all depend on the locations of each other. Establishing the highest position is the (1) Spirit with it's function of 'Souling' or to en-soul (to give a soul), defining the location of the spiritual values; the value is the closest to pure spirit; in it's opposite location is (10) Truth with the function of establishing understanding which defines the philosophical value; these are the closest to Matter and to pure matter (absence of humans), and comprise the primal questions that define existence. These two values define the two polarizing ends of the diagram: on the one hand matter or earth, and on the other hand soul or heaven. Immediately after Spirit is (2) Universe, with it's function of expanding, which corresponds to the metaphysical values and is connected to a cosmological

understanding; derived from Spirit is (3) Emotion in it's most highest form, which corresponds to the function of feeling and establishes the emotional values (connected to energy of feeling). At the opposite end deriving from (2) Truth, is (9) Goodness, which establishes the function of giving and is connected to sustainable values; once questions of existence have been answered, to externalize a creation is the driving essence of giving, or the desire to do good and contribute to the expansion of the world. The connector value between (9) Goodness and (1) Spirit is (6) Beauty which corresponds to the function of Shining defines the beauty values; beauty values are guided by that which shines and the desire to create that quality of shining. Both (10) Truth and (9) Goodness, give rise to another two essences or values: that of (8) Thought with it's function of reasoning which establishes psychological values (constructions of ideas) and (7) Symbols, with it's function of connection, which defines symbolical values (construction of connections and links). Both of these also connect to the central essence of (6) Beauty, and to the last two essences which are: (4) Poetry with the function of echoing what establishes poetical values (guided by intangibility and by the essence of (3) Emotion to which it also connects) and (5) Metaphor with it's function of mirroring, which establishes metaphorical values (guided by a reflection of (2) Universe to which it also connects).

Beauty (6), then links to four main essences that can be considered to be manifestations of this core value: (4) Poetry, (8) Thought, (7) Symbol and (5) Metaphor. In other words, the essence of beauty, can be reflected by these four functions: that of reflecting reasoning, that of establishing connections, that of mirroring metaphorical understanding and that of echoing poetical values. But beauty also connects, as one has seen, to the essences of (3) Emotion and (2) Universe, sustaining both emotional and metaphysical values: it is the essence of beauty that propels the creator into an understanding and expression of emotional values and metaphysical values. Also, as seen, beauty is the core essence derived from (9) Goodness, which means that propelled by the sense of giving, creations are led to beauty. And lastly, it is beauty that also connects directly to spirit. It is this elusive essence of beauty that establishes a higher number of connections in the tree.

Overall the ten essences, and their locations, are all interdependent on each other, and define the whole creation tree. It is not only the essences themselves that are important, but also the connections they establish between them. From these essences, and their organizations derive a series of other ideas and principles that are analyzed next sections.

(2) The Endless Cycle…

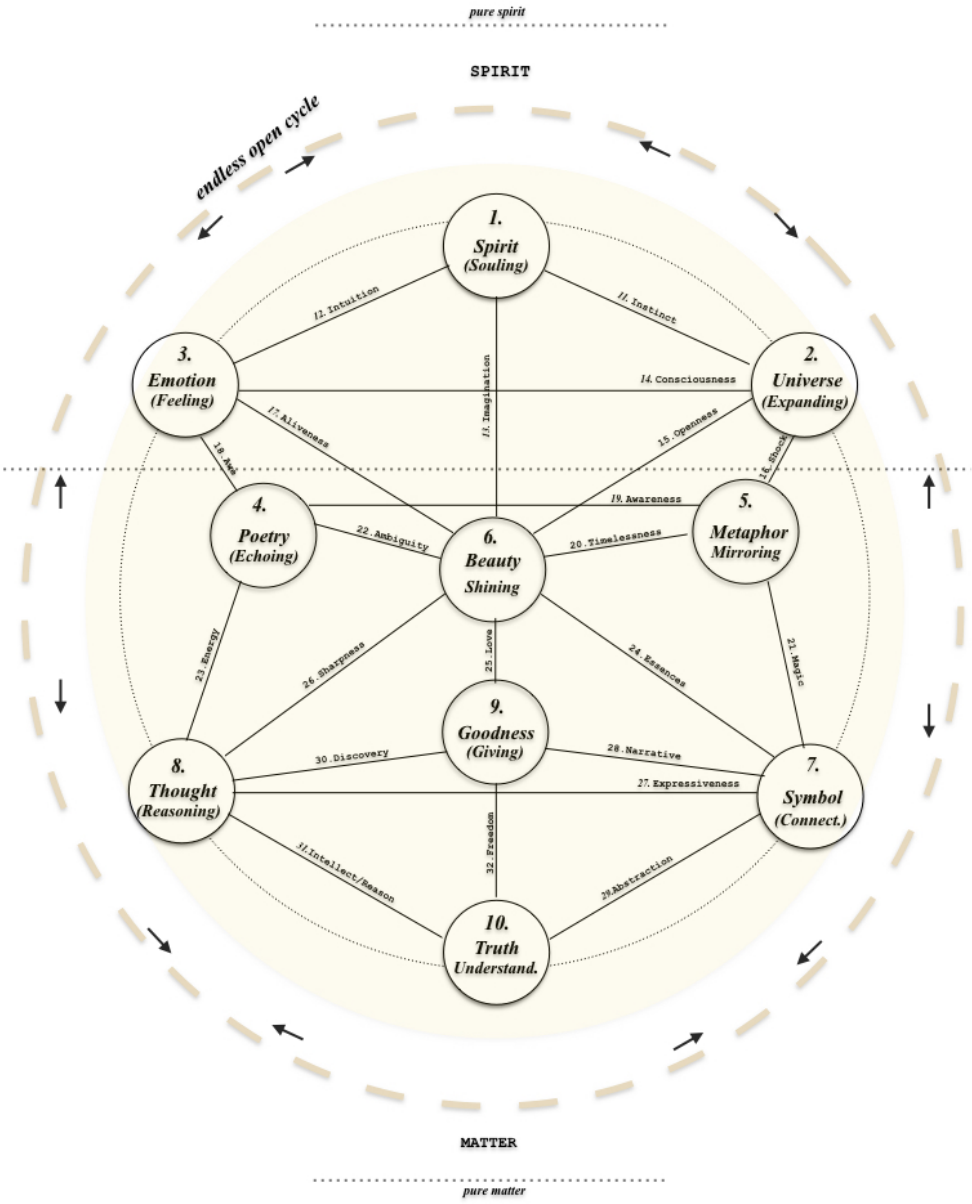


Figure 49: The diagram of creation of significance: the endless cycle.

One essential aspect that should be analyzed before understanding anything else defined by the diagram, is the idea that the diagram can function in a very unique way. Firstly, the evolution of the diagram (the passing through the different essences as the diagram grows, or as creation is developed) can occur in two ways: it can go from spirit to matter (top to down) or from matter to spirit (down to top). And secondly, it also defines an endless open cycle, functioning in every direction and following the values freely. In other words, the numbers do not correspond to the development of the creation but exist exclusively for organizational purposes.

(3) The Pillars of Creation….

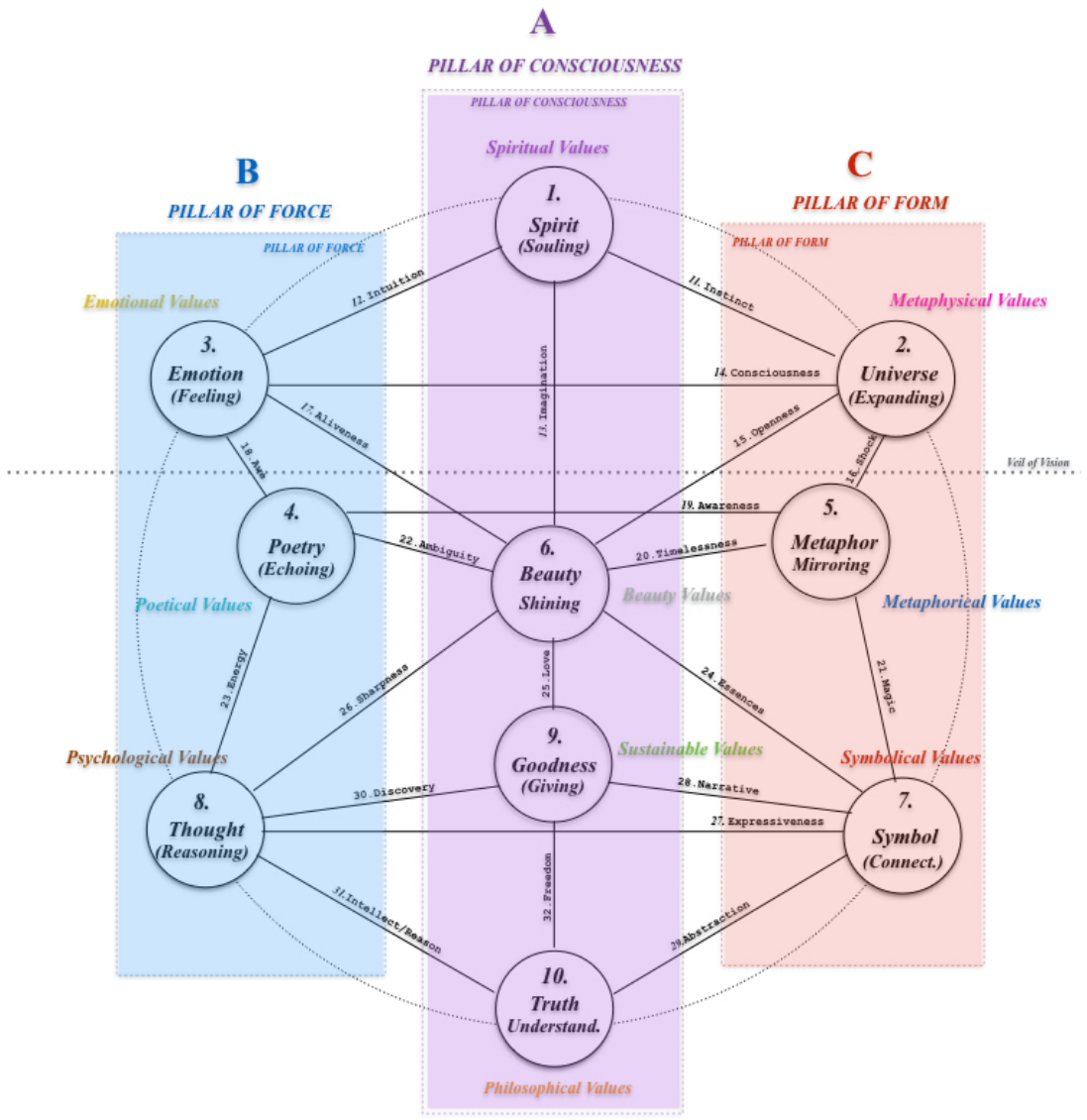


Figure 50: The diagram of creation of significance: three pillars of creation.

Another important aspect of the tree that needs to be clarified is the establishment of the three pillars of creation. There are three pillars that organize all the values: the main pillar is the (A) pillar of consciousness, which establishes a central position in the tree, and is comprised of the main core essences: (1) Spirit, (6) Beauty), (9) Goodness and (10) Truth. This pillar defines the core values of consciousness and is thus composed of the essences that are most intangible and more connected to the whole self. The second pillar is the (B) pillar of force which establishes a lateral (left) position in the tree, and is comprised of three essences: (3) Emotion, (4) Poetry and (8) Thought. It defines the essences that are connected to 'force' (defining depth) and lastly, the (C) pillar of form which establishes a lateral (right)

position in the tree, and is also comprised of three essences: (3) Universe, (5) Metaphor and (7) Symbol; this pillar of form is what is more connected to the manifestation of the essences as form. Where as the pillar of force defines depth, the pillar of form defines how that depth is manifest and both are sustained by the pillar of consciousness.

(4) The Slabs of Growth….

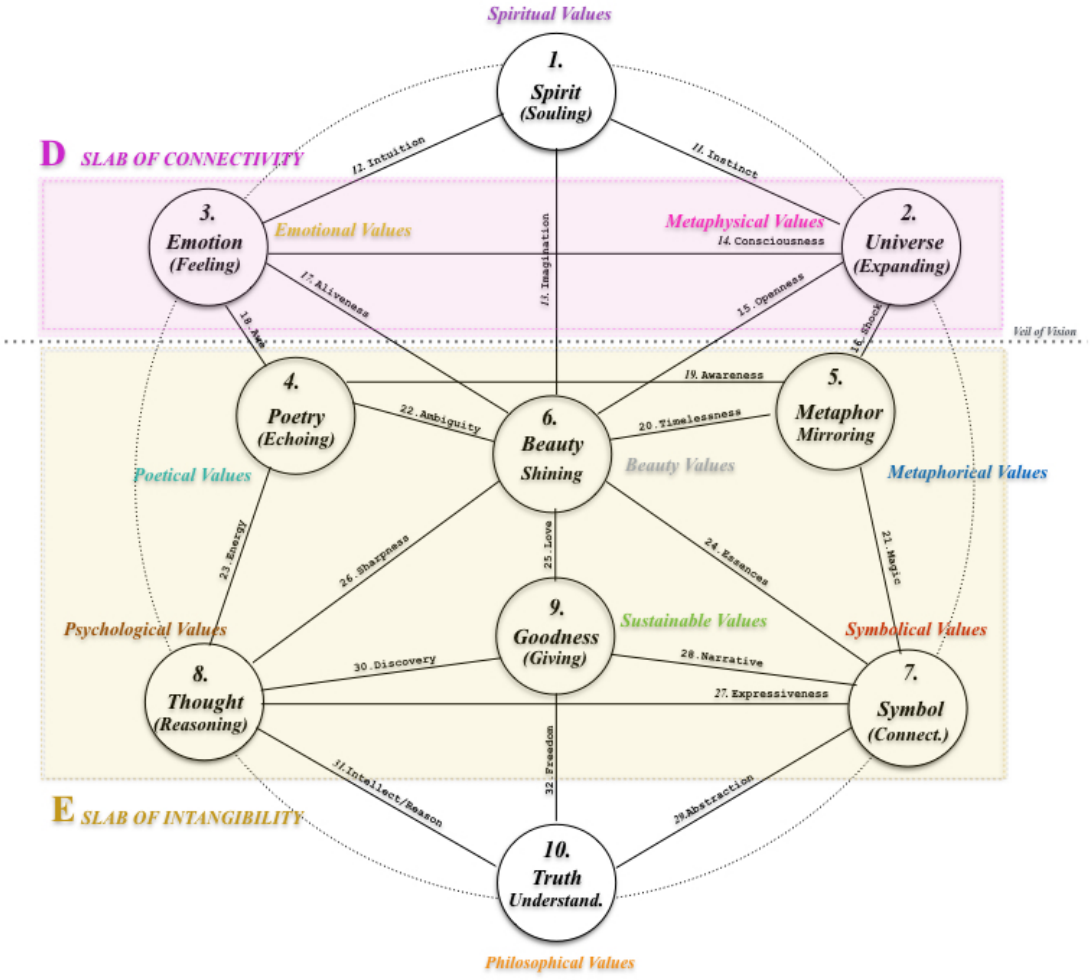


Figure 51: The diagram of creation of significance: the two slabs of growth

It is also possible to define, two other horizontal pillars of growth: the first (D) pillar of connectivity, is defined by (3) Emotion and (Universe), and is the pillar that establishes a link to the higher essence of spirit; the second (E) pillar of Intangibility, defines the central part of the tree and is composed of (6) Beauty, (8) Thought, (4) Poetry, (5) Metaphor and (7) Symbol; this central section is defined by it's striving towards intangible essences.

(5) The Connections between values….

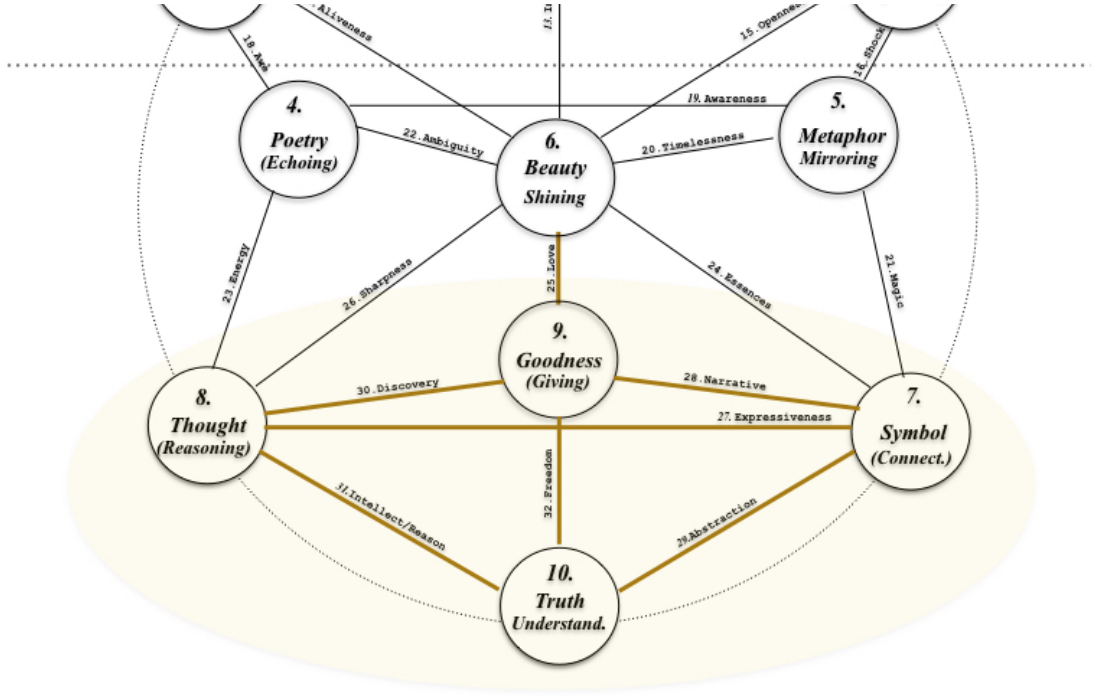


Figure 52: The diagram of creation of significance: the base connectors

At this point it is of the essence to define the connections established by each of the values. Firstly an analysis of the base connectors will be presented. These base connectors are composed of:

32 – Freedom: which connects (10) Truth to (9) Goodness; it is the phenomenon of freedom that allows for understanding to be transformed into giving.

31 – Intellect/Reason: which connects (10) Truth to (8) Thought; it is through the intellect and reason that questioning is converted into thoughts.

29 – Abstraction: which connects (10) Truth to (7) Symbol; it is through a process of abstraction that questioning finds answers in the world as symbols.

28 – Narrative: which connects (9) Goodness to (7) Symbol; what connects to symbol is the idea of narrative, of story telling as symbols.

30 – Discovery: which connects (9) Goodness to (8) Thought; it is the desire to discover that connect goodness to reasoning (defining thoughts and logics).

And lastly,

25 – Love: which connects (9) Goodness to (6) Beauty; it is the phenomena of love that propels the good to search for beauty (the shining of the soul).

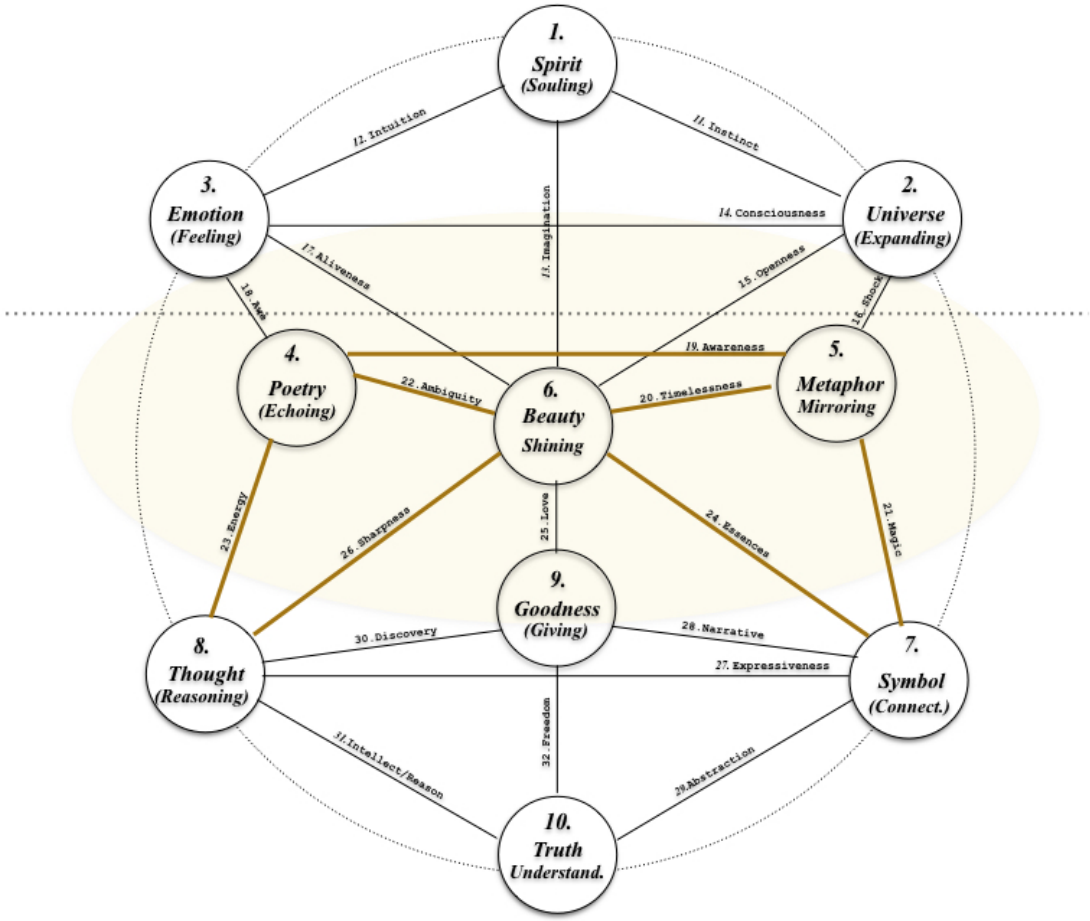


Figure 53: The diagram of creation of significance: the mid-connectors.

The mid-connectors are defined by:

23 – Energy: which connects (8) Thought to (4) Poetry; it is the phenomena of expression and the idea of expressiveness, that propels thought into its symbolic manifestation.

26 – Sharpness: which connects (8) Thought and (6) Beauty; it is sharpness and the idea of clarity, that propels beauty into thought.

27 – Expressiveness: which connects (8) Thought to (7) Symbol; it is the phenomena of expression and the idea of expressiveness, that propels thought into its symbolic manifestation.

22 – Ambiguity: which connects (4) Poetry to (6) Beauty; it is the phenomena of ambiguity (openness and intangibility), that connects the essence of beauty to Poetry.

24 – Essences: which connects (7) Symbol and (6) Beauty; it is the phenomena of the search for essences, that connects the essence of beauty to Symbol.

20 – Timelessness: which connects (6) Beauty and (5) Metaphor; it is the idea of timelessness, that allows beauty to be manifested as metaphor.

And lastly:

21 – Magic: which connects (7) Symbol to (5) Metaphor; meaning that it is the phenomena of the unexplained and the mystical that leads symbol into metaphor.

19 – Awareness: which connects (5) Metaphor and (4) and poetry; which refers to the phenomena of awareness that allows for poetry and metaphor to connect.

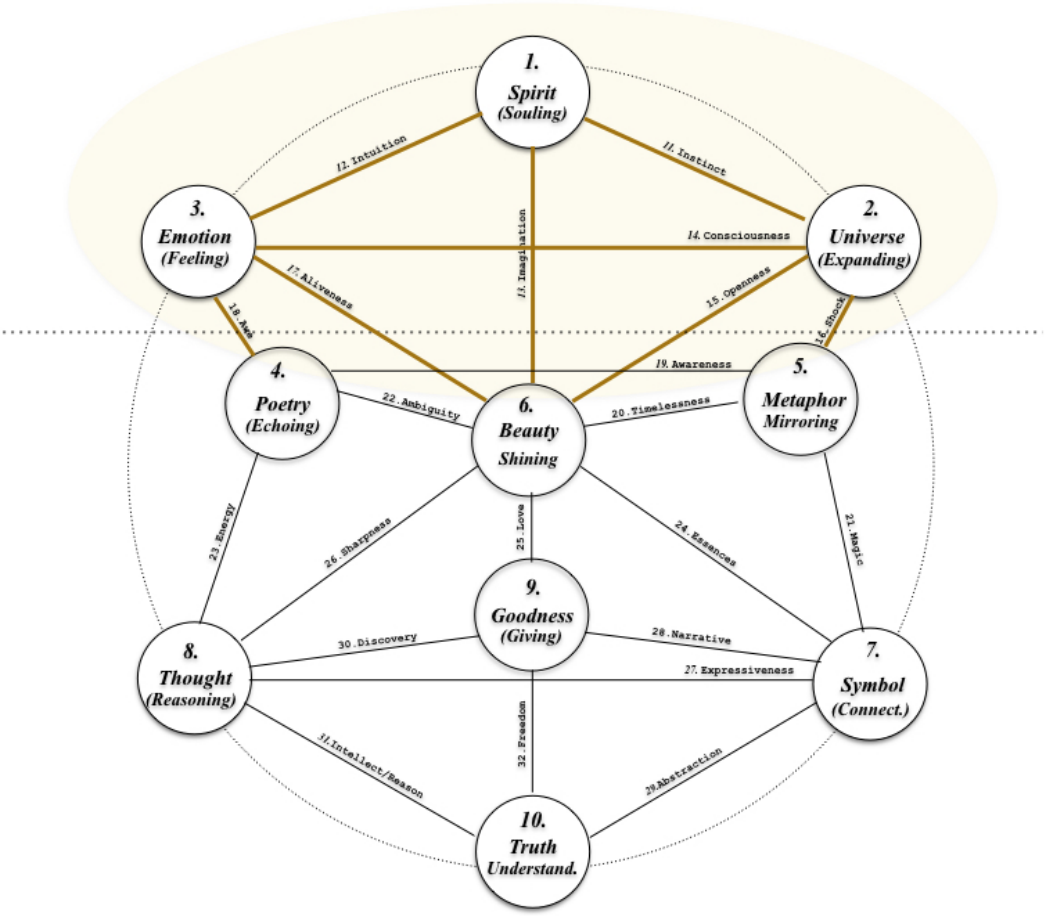


Figure 54: The diagram of creation of significance: the top level connectors.

Lastly, the top connectors are defined by:

18 – Awe: connects (4) poetry with (3) Emotion; which refers to the emotion of awe, as a link between poetical essence and emotional ones.

16 – Shock: in the opposing end, it is the emotion of shock that unites (5) metaphor with (2) Universe.

15 – Openness: connects the essence of (6) beauty with the (2) universe; it is the idea and search for openness and expansion, that establishes the link between beauty and the universe.

17 – Aliveness: connects the essence of (6) beauty with the (3) Emotion; meaning that beauty become 'alive' when connected to the emotion, and emotion needs 'aliveness' to be linked with the essence of beauty,

12 – Intuition: connects the (3) Emotion with the (1) Spirit; it is intuition that connects the spirit with emotion; intuition allows for the spirit to be converted into emotion, and emotion to be linked with the spirit. Intuition is a faculty of the spirit.

13 – Imagination: connects the essence of (6) beauty with the (1) Spirit; for without imagination, beauty can never belong to the realm of the spirit. It is imagination that allows the essence of beauty to be transformed into the essence of spirit. Imagination is a faculty of the spirit.

14 – Consciousness: connects the essence of the (2) Universe with (3) Emotion; which establishes the idea of consciousness as the union between emotional values and metaphysical ones: consciousness allows for emotions to be put into a metaphysical context and for metaphysical contexts to be understood as emotions.

And lastly,

11 – Instinct: connects the essence of the (2) Universe with the (1) Spirit; which relates to the fact that Spirit and Universe are united by the faculty of instinct (it is the spirit that instinctively knows it's own place within the universe). Instinct is a faculty of the spirit.

In total there are 22 connectors. These connections are not unilateral but bi-lateral, functioning from and to the same values. What all of them have in common, is the fact that they define the means by which one essence develops into the next essence: they are sort of invisible bridges between the essences.

(6) The Veil of Vision….

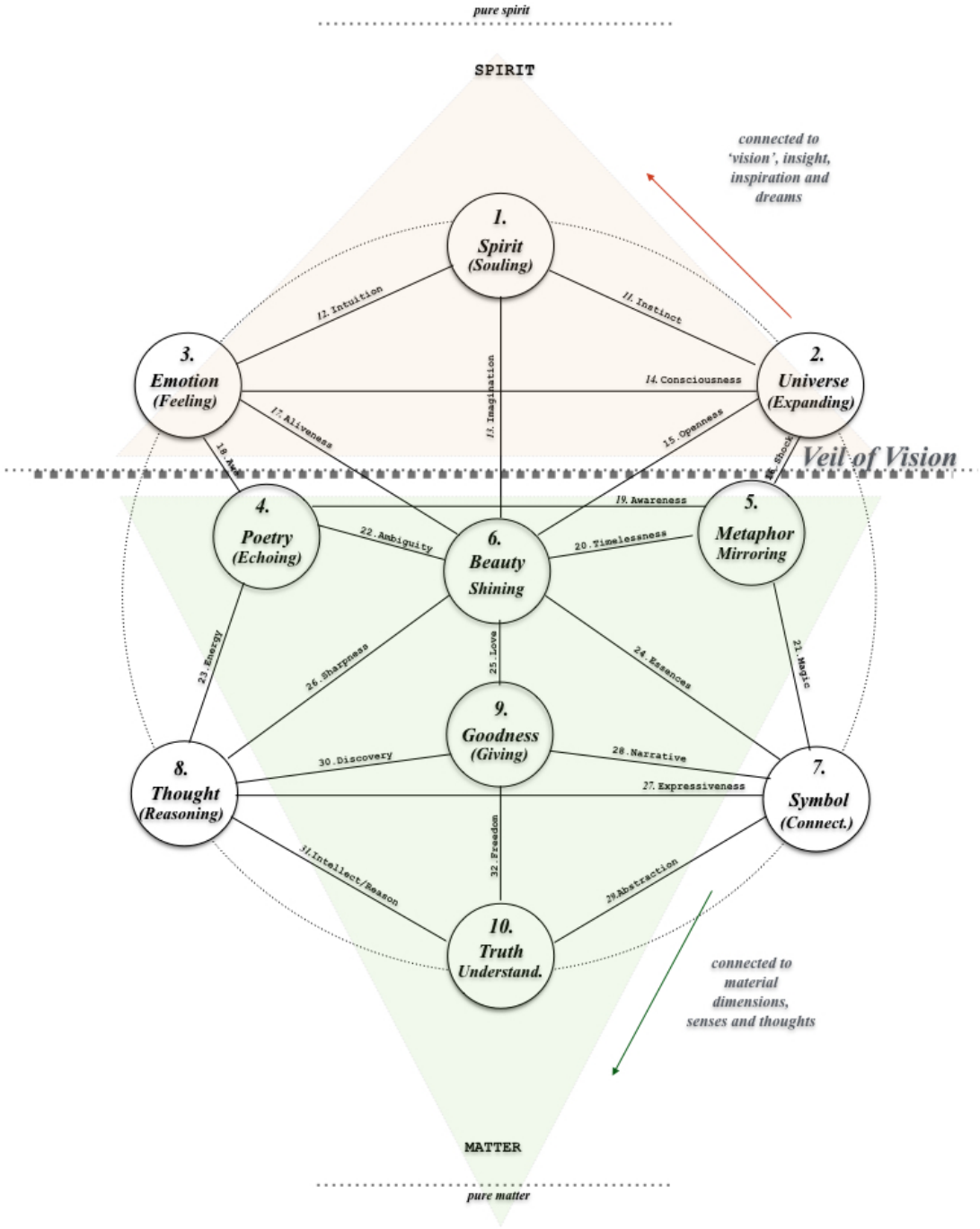


Figure 55: The diagram of creation of significance: the veil of vision

There is another idea that should be defined: the veil of vision. The veil of vision is an invisible threshold, that separates (1) Spirit, (2) Universe and (3) Emotion from the other essences and other connections: which means that from the veil upwards, those three essences rely on invisible 'criteria' or in 'vision' (which means insight) to be understood: relies on insight, imagination and dreams. Where as from the veil downwards, it relies on material dimensions, such as matter, senses and thoughts.

(7) Rules and Principles defined by the diagram….

(a) Harmony of essences and their functions…

One first principle that is clarified is the idea that all the essences and their functions need to exist in 'harmony' with each other. In other words, they balance each other out, and create a coherent whole, which exudes the property that we call harmony. Harmony is none other than those different essences co-acting together.

(b) Deriving from nature….

One has seen, that almost all of the case studies and the theorists sustained that the creation of art should be derived from nature: searching in nature for the forms, and ideals that sustain the natural creation (as a manifestation of God). Thus, a clarification of how this relates to the diagram of creation is in order. In order for creations to reflect the essences announced, they need to look at nature to understand them: in other words, it is understanding Nature (the whole of creation around us) that makes those essences come alive into existence. Therefore the diagram of creation is in direct correspondence with the ideas derived from the theorists and the case studies: what it does, is structure different ways to absorb and understand nature, as a fundamental part of our existence.

(c) Form and Colour are the tools…

The last principle that should be defined is the idea, form and colour are the two essences that define the whole diagram of creation. It is through these two essences, that all the other ones can be made manifest.

(9) Example of the applied diagram to two of the case studies

(9.1) Peter Zumthor

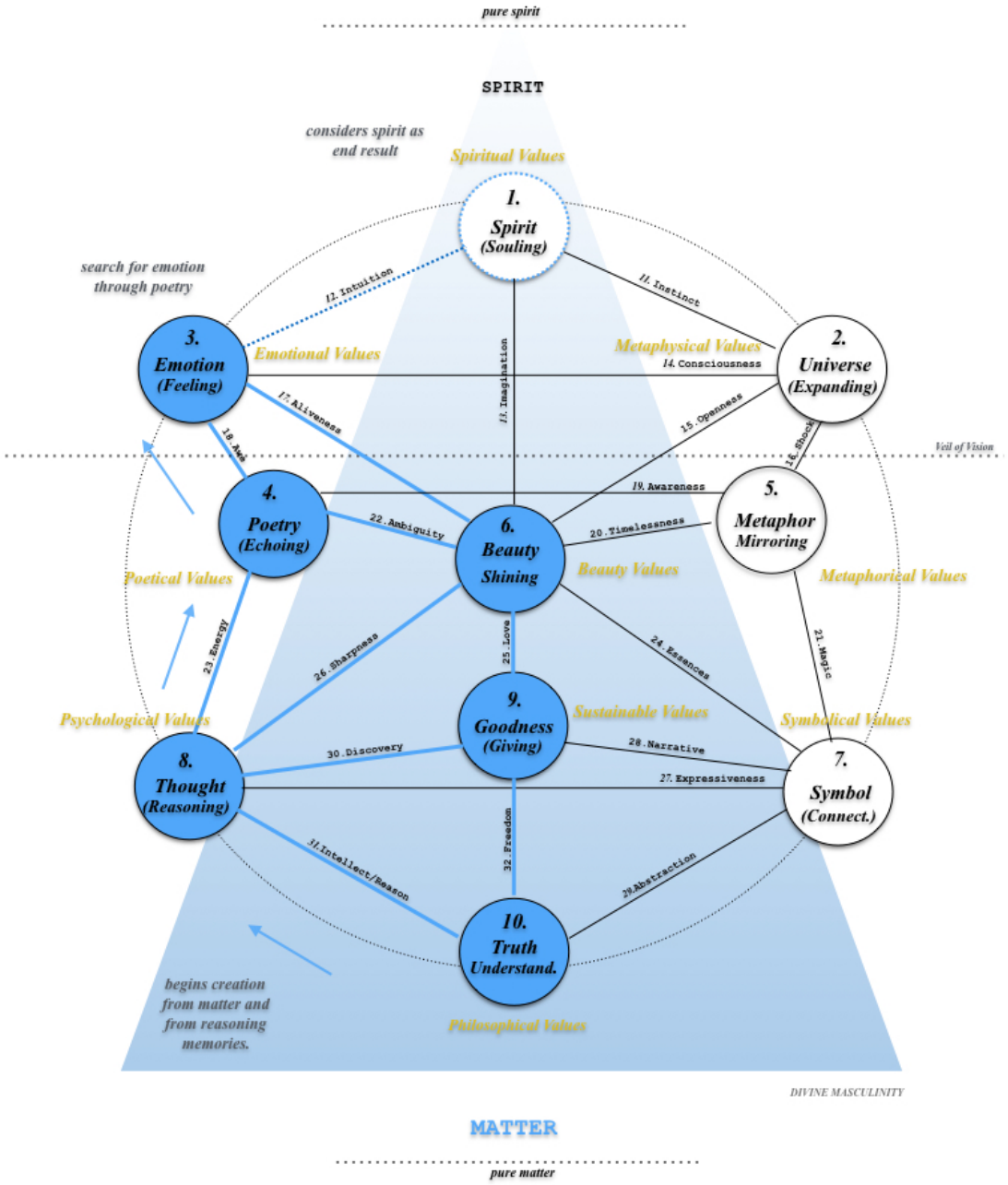


Figure 56: The diagram of creation of significance: applied to Peter Zumthor creation principles.

The above diagram is an example of the values and connecting principles used by Peter Zumthor, made clear through the diagram of creation. Zumthor's primary focus begins on matter and in an understanding of memories and impressions (uncovering of truth), thereby beginning his creative process with the values of Truth (10) and Thought (8), philosophical and psychological values accordingly. These founding values evolve into other values as the creation of significance evolves through the creative

process: the idea of goodness, or sustainability, focus on poetical ideas, poetical values, and on emotion, emotional values, which are accompanied by the overall beauty value, which for Zumthor, is described as the intangible idea of atmospheres. The value of Spirit (1) is an end result, and thus, is not exclusively a value per se, but a result of the combination of all the other values and principles.

(9.2) Anselm Kiefer

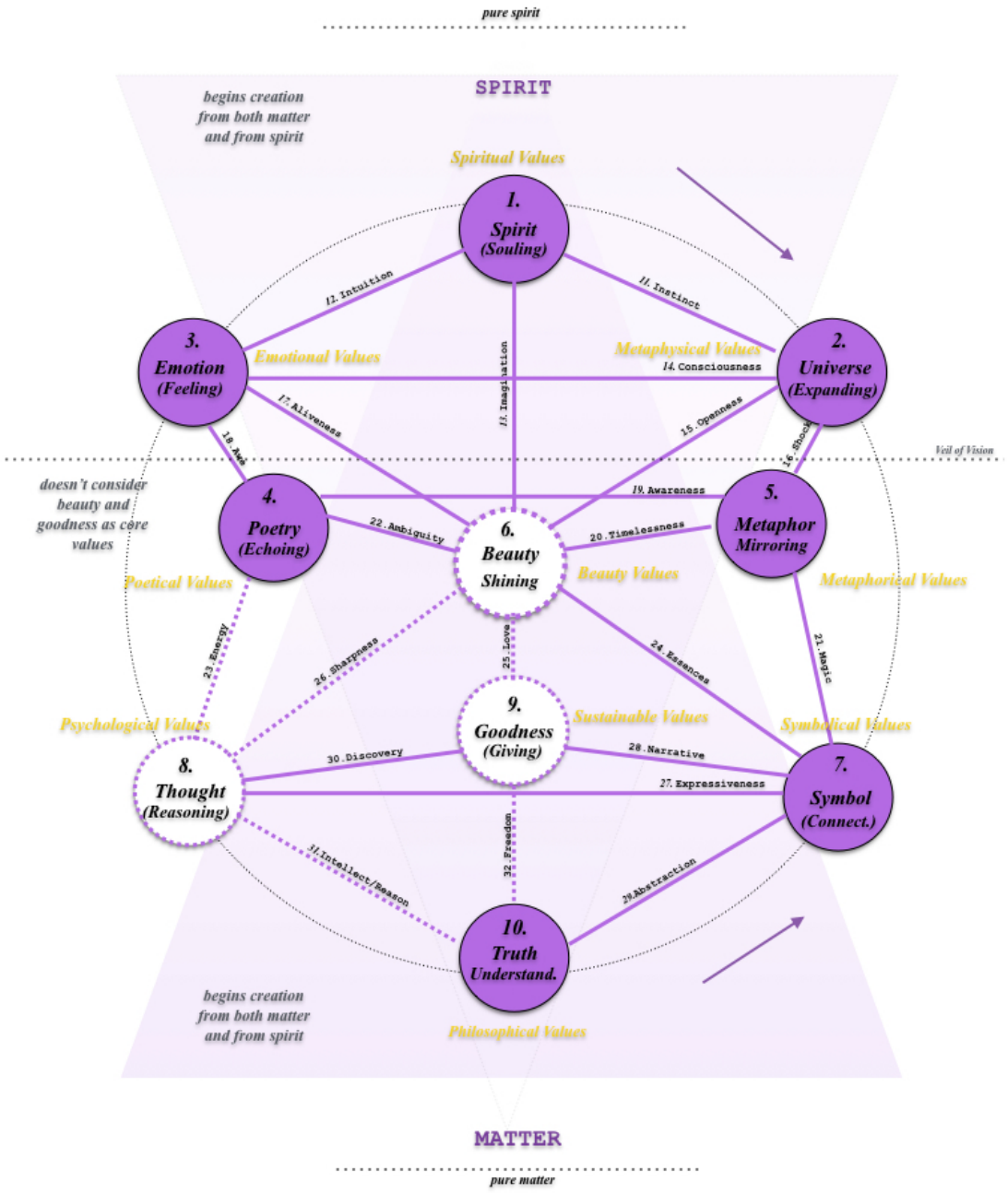


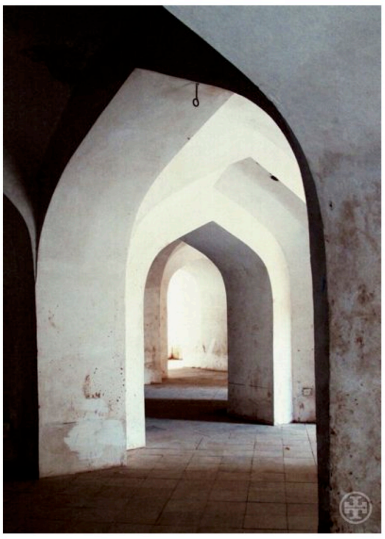
Figure 57: The diagram of creation of significance: applied to Anselm Kiefer's creation principles.

The above diagram is an example of the values and connecting principles used by Anselm Kiefer, made clear through the diagram of creation, which clearly show a completely different approach than

Zumthor's. For Kiefer the creation of significance is based on both feminine and masculine energies, both from top-down and from down-top: he both begins with a founding idea of Spirit (1), spiritual values and with a primary idea of Matter and a solid foundation on philosophical values. These two 'roots' evolve through principles into the other values in a sort of equidistant and proportional means, until they meet in the center with the value of beauty as an end result. For Kiefer, beauty shouldn't be used as an operative value but as an intangible essence. The founding value of Truth or philosophical values evolves into the value of Symbol (7), Symbolical values, and Metaphor, metaphorical values and the idea of universe, Metaphysical values (2), whereas the founding value of Spirit evolves into Emotional values (3) and the overall idea of poetry, poetical values (4), materialized mainly through their tree equivalents metaphor and symbol. It is an ever evolving circle, that repeats itself constantly, in search of both new spiritual ideas and materials ones, until the end result is reached, as fully embodied significance.







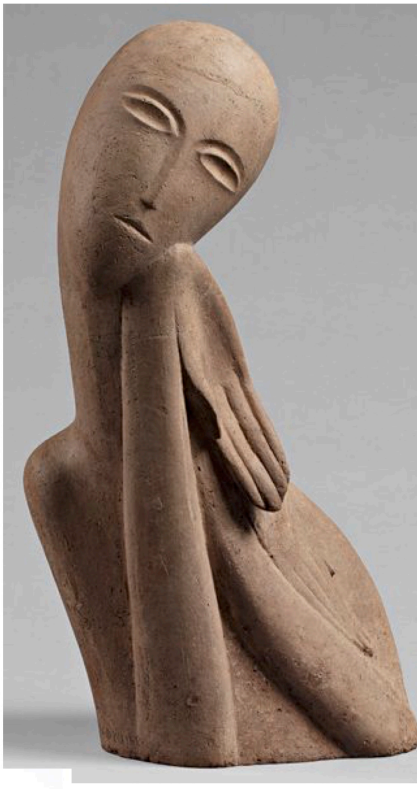




Photo 1: Anish Kapoor, Blind, 2013, Alabaster, 103 × 129 × 41 cm, Source:https://www.artsy.net/artwork/anish-kapoor-blind; Photo 2: Cy Twombly painting; Source: https://pt.pinterest.com/pin/316096467575584483/; Photo 3: Inside Amber Fortt; Source: https://pt.pinterest.com/pin/251075747955778205/ Photo 4: Ossip Zadkine, Buste de jeune fille - 1914 - Zadkine Research Center; Source: https://pt.pinterest.com/pin/251075747955682530/; Photo 5: Pottery ceramics; Source:https://pt.pinterest.com/pin/251075747954744961/;

PLATE 114: THE UNIVERSALITY OF SIGNIFICANCE

9.3. ENDING REMARKS: FINDINGS

Defining Significance…

As the thesis has shown, defining and understanding significance as what defines the artistic object is not simple: it is a quality that is somewhat elusive, intangible, evasive, and ever shifting, however as the research showed, this is the main driving quality that sustains and defines art. Overall, significance can be understood as the general essence of the artwork, the one aspect that defines it's spirit. It is simultaneously, the content, the means and the depth of the work that communicates to the hidden sides of humanity. In the arts, as the research has shown, significance begins at a first level, in the spirit of the creator (the painter, the architect or the sculptor); it is understood firstly as a visual component that takes on multiple levels of interpretations (engaging all the faculties of the viewer): containing meanings, expressing values, engaging emotions, psychological associations, poetical connections, metaphorical associations, symbolical reflections, metaphysical engagements and spiritual understandings. Significance is rich and complex, and is derived from these different values and essences understood by the creator and resonates with the viewer/user (also a creator) in an endless open cycle, with the different complex sides of our existence.

As it was seen, significance has dimensions to it that exist beyond the purely aesthetical ones: it is understood as something existential, as the pursuit of a philosophical insight that sustains and drives life, and draws into the nature of the poetical, the metaphorical, the symbolical and the spiritual; it exudes the intangible quality of the 'shining' that we call beauty; it engages the faculties of the spirit, which are intuition, instinct and imagination; it implies a selfless state of existence, that allows for a connection with the timeless, the metaphysical and the unchanging dimensions of the eternal.

It is significance that lets consciousness be developed and grown in the creator and in the observer. In doing so, it allows for an evolution of humanity in all it's multiple dimensions. The main aspect of significance and it's importance in the world, is the fact that it creates connections to the human spirit that otherwise could not be made visible: it makes the invisible layers of our spirits have a visible form, as art, and in that lies it's true value.

Embodiment: values and principles…

One last notion or conclusion needs to be defined, which is the idea of embodiment. Significance occurs through embodiment. Pallasmaa (1996) explained that embodiment in art is that which generates a lived experience, and is materialized in a multi-sensorial way. But throughout the thesis we understood that embodiment is so much more than that and that embodiment is a fundamental aspect of significance.

Significance cannot exist without this embodiment: it is this embodiment that defines the main core of creations that are significant for humanity. We also saw, throughout the thesis, that what creations embody can be defined as values. And that therefore, the main difference between values and principles, is that, values are embodied, where as principles are applied or followed. Multiple principles and ideas can be followed that are sustained by the broader idea of a value. (For example the works of Rothko as we

saw, followed the principles of abstraction as a means to create spiritual, poetical and emotional values; in architecture, we saw, Frank Lloyd Wright followed the principles of nature, in order to accommodate sustainable values (the desire for a harmonizing world).)

Thus, embodiment is the alive incorporation of the values that define the significance of the work throughout all stages of its conception. It is the means by which significance finds its existence in the work of art.

Other notes…

All in all, I consider that the overall goals and objectives that were outlined and set out in the beginning of this research were achieved because a much broader and more complete conception and idea of what significance means, how it can be designed and comprehended, what it is composed of and what it causes to occur in the man, were understood.

Simultaneously, the hypothesis outlined was proven: and the overall idea that consciousness emerges through different values in the encounter with artistic creations (painting, sculptures or architecture) was not only validated but also elevated to a higher regard: one that is deeply connected to spirituality and to the soul of man.

9.3.1. FURTHER OPPORTUNITIES FOR FUTURE STUDIES

A series of opportunities for future research can be announced:

- Deepen the conclusions into other analysis: such as classical examples Egyptian and Persian art and architecture.
- Extend the present research into other forms of artistic creations such as music.
- Write research papers about the core values that were defined in the present thesis, expanding each of them with other examples.
- Reiterate the importance of the emotional, spiritual and overall human values as multi-dimensional human being in architecture.
- Emphasize and clarify through future publications the idea sustained by the thesis on the union of the arts as a new artistic field.
- A study on the promotion of a more sustainable development and human interaction with the arts (and specially architecture).

BIBLIOGRAPHIC REFERENCES

A

Ackerman, J.S. (1966). *Palladio*. The architect and society. London: Penguin Books.

Abercrombie, S. (1984). *Architecture As Art: An Esthetic Analysis*. New York: Van Nostrand Reinhold.

Adorno, T.W. (1997). Aesthetic Theory. London: Continuum Books.

Aesthetics (2015). *Wikipedia, the free encyclopedi*a. Available at: http://en.wikipedia.org/w/index.php?title=Aesthetics&oldid=576795290 [Accessed 15 Oct. 2015].

Afonso, N. (2010). *Time does not exist: Manifesto.* Lisbon: Dinalivro.

Aguilar, G.M. (2005). *Poesia concreta brasileira: as vanguardas na encruzilhada modernista.* São Paulo: EdUSP.

Albers Foundation (2015). *Josef Albers* [online]. Available at: http://albersfoundation.org/artists/biographies/ [Accessed 12 Nov. 2015]

Albers, J., Weber, N.F. (2006). *Interaction of Color: Revised and Expanded Edition*. New Haven, Connecticut: Yale University Press.

Al′tshuller, G.S. (1984). *Creativity as an Exact Science: The Theory of the Solution of Inventive Problems*. London: Gordon and Breach Science Publishers.

Alba, J.W., Williams, E.F. (2013). Pleasure principles: A review of research on hedonic consumption, in: *Journal of Consumer Psychology,* 23, pp. 2–18. DOI:10.1016/j.jcps.2012.07.003

Alberti, L. B. (1991). *On Painting.* London: Penguin.

Alexander, C. (2002). *The nature of order : an essay on the art of building and the nature of the universe - Book two: The process of creating life*. Berkeley California: Center for Environmental Structure.

Almeida, P.V. (2008). Apontamentos para uma teoria da arquitectura. Lisboa: Livros Horizontes.

Almendra, R.A. (2010). *Making in the conceptual phase of design processes: a descriptive study contributing for the strategic adequacy an overall quality of design outcomes*. PhD Thesis. Faculty of Architecture of the Technical University of Lisbon. Lisbon, Portugal. Available at: http://www.repository.utl.pt/handle/10400.5/3320 [Accessed 19 Oct. 2013].

Alteveer, I. (2000). Anselm Kiefer (born 1945), in: *Heilbrunn Timeline of Art History*. New York: The Metropolitan Museum of Art. Available at: http://www.metmuseum.org/toah/hd/kief/hd_kief.htm [Accessed 26 Apr. 2015]

Ando, T. (1995). Acceptance Speech: Tadao Ando [online]. Available at: http://www.pritzkerprize.com/1995/ceremony_speech1 [Accessed 16 Jul. 2014].

Ando, T. (1989). *Tadao Ando: The Yale Studio & Current Works*. New York: Rizzoli Publishers.

Araujo, P.R.M. (2012). Edward Hopper and Heidegger: The Unveiling of Solitude, in: *KARPA, Journal of Theatricalities and Visual Culture,* 5.1-5.2, pp. 1–6. Available at: http://web.calstatela.edu/misc/karpa/Karpa5.1/Site%20Folder/Resources/araujo.pdf [Accessed 29 Jan. 2016]

Arisaka, Y. (1995). Heidegger's theory of space: A critique of Dreyfus, in: Inquiry, 38, pp. 455–467. DOI:10.1080/00201749508602400

Aristotle (1801). *Metaphysics*. London: Davis, Wilks and Taylor. Available at: http://warburg-archive.sas.ac.uk/pdf/akh237b32590817.pdf [Accessed 5 Aug. 2016].

Aristotle (1906). *De sensu and de memoria*. Cambridge: Cambridge University Press Wakehouse. Available at: https://archive.org/details/aristotledesensu00arisuoft [Accessed 5 Aug. 2016].

Aristotle (2002). *De anima: Books II and III*, 2nd edition. Oxford: Clarendon Press. Available at: http://people.exeter.ac.uk/sp344/0198240848%20-%20De%20Anima%20Books%20II%20and%20III%20(With%20Passages%20From%20Book%20I)%20-%20Aristotle,%20Christopher%20Shields,%20D.%20W.%20Hamlyn.pdf [Accessed 5 Aug. 2016].

Arnheim, R. (1966). *Toward a psychology of art: Collected essays*. California: University of California Press.

Arnheim, R. (1969). *Visual thinking*. California: University of California Press.

Arnheim, R. (1977). *The Dynamics of Architectural Form*. California: University of California Press.
Arnheim, R. (1964) *Art and Visual Perception: A Psychology of the Creative Eye*. 4th edition. California: University of California Press.

Aron, E. (2013). *A Talk on High Sensitivity*. United States of America. Available at: https://www.youtube.com/watch?v=FQLBnUBKggY [Accessed 30 Jul. 2016].

B

Bacigalupi, D. (2013). Donald Judd's Specific Objects and the Art of Installation, in: *The Huffington Post* [online]. Available at: http://www.huffingtonpost.com/don-bacigalupi/donald-judds-specific-obj_b_3451022.html [Accessed 24 Jun. 2015]

Bachelard, G. (2005). *A poética do espaç*o. 7th Edition. São Paulo: Martins Fontes.

Baljon, C.J. (2002). History of history and canons of design, in: *Design Studies* 23, pp. 333–343. DOI:10.1016/S0142-694X(01)00042-4

Ballantyne, A. (2002). *What is architecture?* Hove, United Kingdom: Psychology Press.

Ball, P. (2003). *Bright Earth: Art and the Invention of Color*. Chicago: University of Chicago Press.

Baeza, A.C. (2006). *A ideia Construida.* Lisboa: Caleidoscópio - Edição e Artes Gráficas S.A.

Banham, J. (1997). *Encyclopedia of Interior Design.* New York: Routledge Publishers.
Baker, E.E. (2004). Joseph Mallord William Turner (1775–1851), in: *Heilbrunn Timeline of Art History, The Metropolitan Museum of Art* [online]. Available at: http://www.metmuseum.org/toah/hd/roma/hd_roma.htm [Accessed 19 Nov. 2015]

Bamford, G. (2002). From analysis/synthesis to conjecture/analysis: a review of Karl Popper's influence on design methodology in architecture, in: *Design Studies* 23, pp. 245–261. DOI:10.1016/S0142-694X(01)00037-0

Barragan, L., Riggen, A. (2000). *Luis Barragán: Escritos y Conversacions.* Spain: El Croquis.
Barragán, L., Vedia, J.M., Schere, R. (2001). *Luis Barragán: paraísos*. Madrid: A. Asppan S.L.
Barrie, T. (1996). Spiritual Path, Sacred Place: Myth, Ritual, and Meaning in Architecture. India: Shambhala Publisher.

Basta, C., Moroni, S. (2013). *Ethics, Design and Planning of the Built Environment*. New York, USA: Springer Science & Business Media.

Batu, B. (2012). An Overview of the Field of Semiotics, in: *Procedia - Social and Behavioral Sciences,* 51, pp. 464 – 469. Available at: http://www.sciencedirect.com/science/article/pii/S1877042812033289 [Accessed 17 Nov. 2013]. DOI:10.1016/j.sbspro.2012.08.190

Battcock, G. (1995). *Minimal Art: A Critical Anthology*. California: University of California Press.

Benevolo, L. (1977). *History of Modern Architecture*. Cambridge, Massachusetts: MIT Press.
Benjamin, A.E. (1990). *Philosophy and architecture.* London: Academy Editions.

Berkus, B.A. (2000). *Architecture/Art/Parallels/Connections*. New York: Images Publishing.

Berger, J. (1972). *Ways of seeing*. London: Penguin Books.

Beuys, J., Harlan, V. (2004). *What is Art?: Conversation with Joseph Beuys*. London: Clairview books.

Bielefeld, B., el Khouli, S. (2007). *Basics Design Ideas*. Basel, Boston, London: Birkhäuser Architecture.

Birren, F. (1978). *Color Psychology and Color Therapy*. Secaucus, N.J: Citadel.

Birren, F. (1970). *The Elements of Color: A Treatise on the Color System of Johannes Itten Based on His Book the Art of Color.* New York: John Wiley & Sons, Inc.

Birren, F. (1986). *Color Perception in Ar*t. West Chester, Pa.: Schiffer Publishing,

Biography (2013). *Le Corbusier Biography* [online]. The Biography.com website. Available at: http://www.biography.com/people/le-corbusier-9376609 [Accessed 11 Dec. 2015].

Bloomer, C. (1990). *Principles of Visual Perception.* New York: Design Press.

Bockemuhl, M. (1994). *J.M.W. Turner, 1775-1851: The World of Light and Colour.* London and New York: Taschen.

Bonta, J.P. (1980). *Sistemas de significación en arquitectura: Un estudio de la arquitectura y su interpretación*. Madrid, Spain: Gustavo Gili.

Borden, I., Kerr, J., Rendell, J., Pivaro, A. (2002). *The Unknown City: Contesting Architecture and Social Space.* Cambridge, Massachusetts: MIT Press.

Borjesson, K.I.B. (2006). *The affective sustainability of objects : a search for causal connections : studies of theory, processes and practice related to timelessness as a phenomenon*. PhD Thesis. University of the Arts London. Available at: http://ualresearchonline.arts.ac.uk/5219/ [Accessed 20 Dec. 2013].

Brenner, A. (1971). Concerning Sculpture and Architecture, in: *Leonardo*, 4, pp. 99. DOI:10.2307/1572183

Breslin, J.E.B. (2012). *Mark Rothko: A Biography*. Chicago, United States of America: University of Chicago Press.

Broadbent, G., Ward, A. (1971). *Metodologia del diseño arquitectonico.* Barcelona, Spain: Editorial Gustavo Gili.

Bronowski, J. (1983). *Arte e Conhecimento: Ver, Imaginar, Criar*. Lisbon: Arte e Comunicação, Edições 70.

Brown, D.B. (2012). Draughtsman and Watercolourist, in: *Tate, United Kingdom* [online]. Available at: http://www.tate.org.uk/art/research-publications/jmw-turner/essays-g2010028 [Accessed 19 Nov. 2015]

Browne, C. (2008). Gaudí's organic geometry, in: Computers & Graphics, 32, pp. 105–115. DOI:10.1016/j.cag.2007.09.005

Bruno, G. (2002). *Atlas of Emotion: Journeys in Art, Architecture, and Film*. London: Verso Publishers.

Budd, M. (2014). Aesthetics. In: *Routledge Encyclopedia of Philosophy*. London: Routledge, Web. Available at: https://www.rep.routledge.com/articles/aesthetics/v-1 [Accessed 13 Sept. 2015]. DOI: 10.4324/9780415249126-M046-1

Butterfield, J. (1993). *The Art of Light + Space.* New York: Abbeville modern art movements.

Butts, C.T. (2008). Social network analysis: A methodological introduction. *Asian Journal of Social Psychology* 11, pp. 13 – 41. doi:10.1111/j.1467-839X.2007.00241.x. Available at: http://courses.washington.edu/ir2010/readings/butts.pdf [Accessed 20 Nov. 2015].

Byrne, M. (2001). Grounded theory as a qualitative research methodology. AORN Journal, 73, pp. 1155–1156. doi:10.1016/S0001-2092(06)61841-3. Available at: http://www.sciencedirect.com/science/article/pii/S0001209206618413 [Accessed 7 Jan. 2014].

C

Canella, G., Coppa, M., Gregotti, V., Rossi, A. (1971). *Teoria de la proyectación arquitectónica.* Barcelona, Spain: Editorial Gustavo Gili.

Canizaro, V.B. (2012). *Architectural Regionalism: Collected Writings on Place, Identity, Modernity, and Tradition*. San Francisco: Chronicle Books.

Casini, L. (2014). Renaissance Philosophy, in: Internet Encyclopedia of Philosophy [online]. Available at: http://www.iep.utm.edu/renaissa/ [Accessed 25 Jan. 2016].

Cary, J. (1984). A*rt and reality: ways of the creative process*. London: Ayer Company.

Chan, C.S. (2000). Can style be measured?, in: *Design Studies,* 21, pp. 277–291. DOI: 10.1016/S0142-694X(99)00011-3

Choay, F. (2015). Le Corbusier, Swiss architect, in: *Encyclopedia Britannica* [online]. Available at: http://www.britannica.com/biography/Le-Corbusier [Accessed 25 Oct. 2015].

Choy, H. (2009). The "Sas Cai" approach to Feng Shui analysis and design, in: *Proceedings of Hong Kong Conference,* Hong Kong, p. 10. Available at: http://www.fengshui-college.org/www/images/pages/19/HK%20Conference%202009%20Paper.pdf [Accessed 3 May 2014].

Choy, H. (2006). The 15 Core Principles Of Feng Shui, in: *European College of Feng Shui* [online]. Available at: http://www.fengshui-college.org/articles [Accessed 3 May 2014].

Christian, H. (2013). Designer Stephen Sills Revamps a Gleaming, Historic New York Apartment, in: *Architectural Digest* [online]. Available at: http://www.architecturaldigest.com/decor/2013-10/stephen-sills-fifth-avenue-manhattan-apartment-renovation-article [Accessed 13 Nov. 2013].

Choay, F. (2015). Le Corbusier, Swiss architect, in: Encyclopedia Britannica [online]. Available at: http://www.britannica.com/biography/Le-Corbusier [Accessed 25 Oct. 2014].

Cleary, R. (2000). Fallingwater Was Only the Beginning: TheVisionsof Frank Lloyd Wright and the Edgar J. Kaufmann Family for Bear Run, in: *Proceedings 85th Annual Meeting and Technology Conference*. Presented at the 85th Annual Meeting and Technology Conference, pp. 391 – 395.

Clément, E., Demonque, C., Hansen-Love, L., Kahn, P. (1994). *Dicionário Prático de Filosofia*. Lisbon: Terramar.

Clericuzio, P. (2011). *Edward Hopper's Architecture, Antimodernism, and Nostalgia* [online]. Available at: http://www.academia.edu/2601958/Edward_Hopper_s_Architecture_Antimodernism_and_Nostalgia [Accessed 13 Apr. 2015]

Colquhoun, A. (1985). *Essays in architectural criticism: modern architecture and historical change*. Cambridge, Massachussets: MIT Press.

Collingwood, R.G. (1938). *The Principles of Art.* Oxford: Clarendon Press.

Cohen, J.-L. (2004). *Le Corbusier, 1887-1965: The Lyricism of Architecture in the Machine Age.* London and New York: Taschen.

Consciousness (2014). *Wikipedia, the free encyclopedi*a. Available at: http://en.wikipedia.org/w/index.php?title=Consciousness&oldid=610534760 [Accessed 31 May 2014].

Constant, C. (1993). *The Palladio Guide.* New York: Princeton Architectural Press.

Corbusier, L. (2000). *The Modulor: A Harmonious Measure to the Human Scale, Universally Applicable to Architecture and Mechanic*s. New York: Springer Science & Business Media.

Corbusier, L. (1999). *Le Corbusier Talks with Students.* New York: Princeton Architectural Press.

Corbusier, L., Cohen, J.L. (2007). *Toward an Architecture.* Los Angeles: Getty Publications.

Corbusier, L., Žaknić, I. (1997). *The Final Testament of Perè Corbu: a Translation and Interpretation of Mise au point by Ivan Zaknic*. New Haven and London: Yale University Press.

Cronon, W. (1994). Inconstant Unity: The Passion of Frank Lloyd Wright, in: *Frank Lloyd Wright Architect*. New York: The museum of modern art. Available at: http://www.williamcronon.net/writing/cronon_inconstant_unity_passion_of_frank_lloyd_wright_1994.pdf [Accessed 1 Nov. 2015].

Cotter, H. (2012). "Josef Albers in America: Painting on Paper," at the Morgan, in: *The New York Times* [online]. Available at: http://www.nytimes.com/2012/07/27/arts/design/josef-albers-in-america-painting-on-paper-at-the-morgan.html [Accessed 26 Jul. 2013]

D

Da Vinci, L. (1955). *The Notebooks of Leonardo da Vinci.* New York: George Braziller.

Dabbour, L.M. (2012). Geometric proportions: The underlying structure of design process for Islamic geometric patterns, in: *Frontiers of Architectural Research*, 1, pp. 380–391. DOI:10.1016/j.foar.2012.08.005

Damásio, A. (2013). *O sentimento de si: Corpo, emoção e consciência*. Lisbon: Temas e Debates Circulo dos Leitores.

Danto, A.C. (1998). The End of Art: A philosophical defense. *History and Theory: Art History, Historiography and After the End of Art*, 37 (4), pp. 127 – 143. Available at: http://www.jstor.org/stable/2505400 [Accessed 12 Dec. 2015].

Danto, A.C. (1981). *The Transfiguration of the Commonplace: A Philosophy of Art*. New York: Harvard University Press.

Danto, A.C. (2014). *What Art Is*. New Haven and London: Yale University Press.

Davis, J. (2013). The White Border on Rothko's Untitled (Black on Gray), in: *Guggenheim Blogs* [online]. Available at: http://blogs.guggenheim.org/checklist/inside-the-collection-untitled-black-on-gray/ [Accessed 7 Oct. 2015]

Day, C., 2004. *Places of the Soul: Architecture and Environmental Design as a Healing Art*. London: Routledge.

De Botton, A. (2008). *The architecture of happiness*. London: Random House Digital, Inc.

De Botton, A. (2004). *The Art of Travel,* Reprint edition. New York: Vintage Publications.

De Botton, A., Armstrong, J. (2013). *Art as Therapy*. London: Phaidon Press.

de Sousa, R. (2014). Emotion, in: *The Stanford Encyclopedia of Philosophy*, Zalta, E.N. (Ed.). Available in: http://plato.stanford.edu/archives/spr2014/entries/emotion/ [Accessed 08 Apr. 2015].

Deleuze, G. (2001). *Pure Immanence: Essays on a Life.* New York: Zone Books.

De Risi, V. (2007). *Geometry and Monadology: Leibniz's analysis situs and Philosophy of Space*. New York: Springer.

Dias, S. F., Durão, M. J. (2014) '*A Arquitectura como arte no espaço espiritual de Tadao Ando',* Arquitecturas do Mar, da Terra e do Ar - Arquitectura e Urbanismo na Geografia e na Cultura Conference, Lisbon. Proceedings '*Arquitecturas do Mar, da Terra e do Ar - Arquitectura e Urbanismo na Geografia e na Cultura'*, Vol. III, 'Cidades Desejadas e Sonhadas, Ideias de Amanha', 1st Edition, Academia de Escolas de Arquitectura e Urbanismo de Lingua Portuguesa, pp 182 – 189. ISBN 978-150-2424-952

Dias, S. F., Durão, M. J. (2014) '*Significance and creation: Emotion and the primacy of colour in art (architecture and painting*)', Conference AIC 2014 Interim Meeting, 'Colour, Culture, Identity: past, present and future', Oaxaca, Mexico. Proceedings AIC 2014 Interim Meeting, 'Colour, Culture, Identity: past, present and future', p 121.

Dias, S. F., Durão, M. J. (2015) *'Atmospheres, Proportions and Harmonies: Form and Colour in the work of J.M.W. Turner'*, International Congress Proportion, (Dis) Harmonies, and Identity, Fundação Oriente, Lisbon.

Dias, S. F., Durão, M. J. (2015) '*Architecture and Art: La Ronchamp's symbiosis as a 'total work of art*', Le Corbusier, 50 years later International Congress, Universitat Politécnica de Valência, Valência, Spain.

Dias, S. F. (2016) '*Contemporary Utopias in Art and Architecture: Searching for Spiritual Significance in the work of John Pawson and Anselm Kiefer* ', PHI - International Congress – UTOPIA(S) WORLDS AND FRONTIERS OF THE IMAGINARY, Lisbon, Fundação Oriente, 20th-22nd October 2016, Lisbon, Portugal.

Diener, E. (1994). Assessing subjective well-being: Progress and opportunities, in: *Soc Indic Res,* 31, pp. 103–157. DOI: 10.1007/BF01207052

Didero, M.C. (2013). *John Pawson: Perspectives* [online]. Available at: http://www.domusweb.it/en/art/2013/05/29/john_pawson_perspectives.html [Accessed 27 Oct. 2015].

Drew, P. (1996). *Church on the Water, Church of the Light: Tadao Ando.* London and New York: Phaidon Publishers.

Dorment, R. (2008). Tate Modern's Rothko exhibition asks us to ditch the mumbo jumbo, in: *The Telegraph* [online]. Available at: http://www.telegraph.co.uk/culture/art/3561169/Tate-Moderns-Rothko-exhibition-asks-us-to-ditch-the-mumbo-jumbo.html [Accessed 19 Dec. 2015]

Duarte, R.B., Dias, S.F. (2016). *O Ser Criativo: Maneiras de olhar, ver, sentir, imaginar*. Lisbon; Caleidoscópio - Edição e Artes Gráficas S.A.

Durão, M.J. (2012). Colour as Pathway of Light: Searching the Shadow in Luis Barragán, in: J*AIC - Journal of the International Colour Association*, 5.

Durão, M.J. (2003). Funções perceptuais para o design de espaço, in: *Revista de Comunicação e Cultura,* 7.

Durão, M.J., (2006). O Diáfano e o μέλας. Ar - Cadernos da Faculdade de Arquitectura da Universidade Técnica de Lisboa, 6, pp. 144-147.

Durão, M.J. (2015). Contributions to the understanding of colour in nature and in art: Diogo de Carvalho e Sampayo Tratado das Cores, in: *Views on Eighteenth Century Culture: Design, Books and Ideas*. Cambridge: Cambridge Scholar Publishing.

Durão, M.J. (2002). Colour in the built environment, in: *FABRIKART-Arte*. Spain: Universidad del Pais Vasco-Euskal Herriko Unibersitatea.

Durão, M.J. (2011). *Cadernos Estudos de Cor, 2011*. Unpublished Colour Sketchbooks. Private collection.

Durão, M.J. (2008). Sketching the Ariadne's Thread for Alchemical Linkages in Painting, in: *FABRIKART-Arte, Tecnologia, Industria, Sociadad,* 8, pp. 106-123.

E

Eco, U. (1989). *The Open Work*. Cambridge, Mass.: Harvard University Press.

Eco, U. (1986). *Semiotics and the Philosophy of Language*. Bloomington: Indiana University Press.

Edwards, B. (1987). *Drawing on the Artist Within: An Inspirational and Practical Guide to Increasing Your Creative Powers*. New York: Touchstone.

Elkins, J. (2000). *What Painting Is*. New York: Routledge Publications.

Ehrenzweig, A. (1971). *The Hidden Order of Art: A Study in the Psychology of Artistic Imagination*. Revised edition. Berkeley, California: University of California Press.

Emotion (2015). In: *Merriam Webster* [online]. Springfield: Merriam-Webster, Inc. Available at: http://www.merriam-webster.com/dictionary/emotion [Accessed 4 Aug. 2015].

F

Ferrer-i-Carbonell, A., Gowdy, J.M. (2007). Environmental degradation and happiness, in: *Ecological Economics,* 60, pp. 509–516. DOI: 10.1016/j.ecolecon.2005.12.005

Fez-Barringten, B. (2002). *Aesthetics architecture: the making of metaphors*. Available at: http://www.academia.edu/1790215/Aesthetics_architecture_the_making_of_metaphors [Accessed 15 Apr. 2015].

Flam, J. (1995). *Matisse on Art.* California: University of California Press.

Franzini, E. (1999). *A estética do século XVIII*. Lisbon: Editorial Estampa.

Freeland, C. (2002). *But Is It Art?: An Introduction to Art Theory*. Oxford and New York: Oxford University Press.

Fry, R. (1961). An Essay in Aesthetics (1909), in: *Vision and Design*. Mineola, New York: Penguin Books, pp. 22 – 39. Available in: http://rci.rutgers.edu/~tripmcc/phil/poa/fry-essay_in_aesthetics.pdf [Accessed 09 Apr. 2014].

Frick, M. (2014). *Tadao Ando: From Emptiness to Infinity.* Documentary. Available at: http://www.rtp.pt/play/p2088/tadao-ando [Accessed 14 Nov. 2015].

Furnari, M. (1995). *Formal Design in Renaissance Architecture: from Brunelleschi to Palladio*. New York: Rizzoli Publishers.

Furuyama, M., 1996. Tadao Ando. Birkhäuser.

Furze, R.C. (2010). *Mysticism in the Experience of Architecture*. PhD Thesis. University of Exeter, United Kingdom. Available at: https://ore.exeter.ac.uk/repository/handle/10036/3141 [Accessed 14 Nov. 2015].

G

Gage, J. (1999a). *Color and Meaning: Art, Science, and Symbolism*. California: University of California Press.

Gage, J. (1999b). *Color and Culture: Practice and Meaning from Antiquity to Abstraction*. Berkeley: University of California Press.

Gage, M.F. (2011). *Aesthetic Theory: Essential Texts For Architecture and Design*. New York and London: WW Norton & Company.

Galitz, K.C. (2000). Romanticism: a Thematic Essay, in: *Heilbrunn Timeline of Art History, The Metropolitan Museum of Art* [online]. Available at: http://www.metmuseum.org/toah/hd/roma/hd_roma.htm [Accessed 19 Nov. 2015]

Gans, D. (1987). Chapelle Notre-Dame-du-Haut 1954, in: *The Le Corbusier Guide*. New York: Princeton Architectural Press.

Ganzfeld effect (2015). *Wikipedia, the free encyclopedia* [online]. Available at: https://en.wikipedia.org/w/index.php?title=Ganzfeld_effect&oldid=679686891 [Accessed 25 Oct. 2015]

García-Salgado, T. (2008). A Perspective Analysis of the Proportions of Palladio's Villa Rotonda: Making the Invisible Visible, in: *Nexus Network Journal,* 10, pp. 269 – 282. Available at: http://perspectivegeometry.com/sitebuildercontent/sitebuilderfiles/06nnjv10n2salgado269282pg.pdf [Accessed 25 Jan. 2016]. DOI:10.1007/ S00004-007-0069-3

Garland, P.S. (1983). Josef Albers: his paintings, their materials, technique and treatment, in: *Journal of American Institute for Conservation* 22, pp. 62 – 67. Available at: http://cool.conservation-us.org/coolaic/jaic/articles/jaic22-02-002.html [Accessed 25 May 2015]

Gargus, J. (1994). *Ideas of Order: A Formal Approach to Architecture.* Chicago: Kendall/Hunt Publishing Company.

Garratt, S., Pawson, J. (2010). John Pawson interview: Plain speaking, in: *The Telegraph* [online]. Available at: http://www.telegraph.co.uk/culture/art/architecture/7975043/John-Pawson-interview-Plain-speaking.html [Accessed 27 Oct. 2015].

Garrigan, K.O. (1973). *Ruskin on Architecture: His thought and influence*. Madison, Wisconsin, United States of America: The University of Wisconsin Press.

Ghyka, M.C. (1946). *The Geometry of Art and Life*. New York: Courier Dover Publications.

Giedion, S. (1967). *Space, Time and Architecture: The Growth of a New Tradition*. Cambridge, Massachussets: Harvard University Press.

Gil, J. (1993). *O espaço interior.* Editorial Presença, Lisboa.

Giovannelli, A. (2015). Goodman's Aesthetics, in: *The Stanford Encyclopedia of Philosophy*, Zalta, E.N. (Ed.). Available in: http://plato.stanford.edu/archives/fall2015/entries/goodman-aesthetics/ [Accessed 24 Sep. 2015].

Ginsborg, H. (2014). Kant's Aesthetics and Teleology, in: *The Stanford Encyclopedia of Philosophy*, Zalta, E.N. (Ed.)..Available in: http://plato.stanford.edu/archives/fall2014/entries/kant-aesthetics/ [Accessed 08 Sep. 2015].

Goleman, D. (1996). *Emotional Intelligence.* London: Bloomsbury.

Graham, G. (2012). *Scruton on Architecture*. New Jersey: Princeton Theological Seminary. Available at: http://www.academia.edu/2384787/Scruton_on_Architecture [Accessed 15 Apr. 2015].

Graham, G. (1997). *Filosofia Das Artes: Introdução à Estética*. Lisbon: Edições 70.

Grendler, P.F. (2016). Renaissance: Europe, 1450 to 1789, in: *Encyclopedia of the Early Modern World* [online]. Available at: http://www.encyclopedia.com/topic/Renaissance.aspx [Accessed 25 Nov. 2016].

Grey, A. (2013). *Cosmic creativity: how art evolves consciousness*. Video recording, TED talks. Maui, Hawai. Available at: http://www.youtube.com/watch?v=0_YJToyOp_4&feature=youtube_gdata_player [Accessed 06 Jun. 2014].

Goldstein, E. (2009). *Sensation and Perception*. New York: Cengage Learning.

Gorjão Jorge, J.D. (2006). *Ouvir o Silêncio.* Revista Ar: Cadernos da Faculdade de Arquitectura da Universidade de Lisboa, 6, pp. 82 - 85.

Goodman, N. (1976). *Languages of Art,* 2nd edition. Indianapolis, Cambridge: Hackett Publishing Company Inc.

Goodrich, L. (1964). *Edward Hopper.* New York: Whitney Museum of American Art.

H

Handa, R. (1999). Against arbitrariness: architectural signification in the age of globalization, in *Design Studies* 20, pp. 363–380. Available in: http://www.sciencedirect.com/science/article/pii/S0142694X98000416 [Accessed 16 Nov. 2013]. DOI:10.1016/S0142-694X(98)00041-6

Hanneman, R.A., Riddle, M. (2005). *Introduction to Social Network Methods*. Riverside, California: University of California. Available at: http://www.analytictech.com/networks.pdf [Accessed 20 Nov. 2015].

Heath, T. (1984). *Method in Architecture*. New Jersey, United States: John Wiley & Sons.

Heidegger, M. (1989). *A origem da obra de arte*. Lisbon: Edições 70.

Hemenway, P. (2005). *O Código Secreto: A fórmula misteriosa que governa a art, a natureza e a ciência.* China*:* Evergreen, GmbH, Koln.

Hofstadter, A., Kuhns, R. (1976). *Philosophies of Art and Beauty: Selected Readings in Aesthetics from Plato to Heidegger*. Chicago: University of Chicago Press.

Holl, S., Pallasmaa, J., Gómez, A.P. (1994). *Questions of perception: phenomenology of architecture*. 2nd edition. New York: a + u Publishing Company and William Stout Publishers.

Holl, S., Frampton, K. (1991). Anchoring: selected projects, 1975-1991. Cambridge, Massachussets: Princeton Architectural Press.

Houlgate, S. (2014). *Hegel's Aesthetics*. The Stanford Encyclopedia of Philosophy, Zalta, E.N. (Ed.). Available at: http://plato.stanford.edu/archives/spr2014/entries/hegel-aesthetics/ [Accessed 08 Sep. 2015].

Hsieh, N. (2016). Incommensurable Values, in: *The Stanford Encyclopedia of Philosophy*, Zalta, E.N. (Ed.). Available in: http://plato.stanford.edu/archives/spr2016/entries/value-incommensurable/ [Accessed 18 Aug. 2016].

Hursthouse, R. (2013). Virtue Ethics, in: *The Stanford Encyclopedia of Philosophy*, Zalta, E.N. (Ed.). Available in: http://plato.stanford.edu/archives/fall2013/entries/ethics-virtue/ [Accessed 25 Jan. 2016].

Hylton, W.S. (2013). How James Turrell Knocked the Art World Off Its Feet, in: *The New York Times* [online]. Available at: http://www.nytimes.com/2013/06/16/magazine/how-james-turrell-knocked-the-art-world-off-its-feet.html [Accessed 11 May 2014]

I

Iyer, P. (2011). Museum peace: Japan's Naoshima island, in: *The Guardian* [online]. Available at: http://www.theguardian.com/travel/2011/jul/10/japan-travel-art-island-naoshima [Accessed 15 Jul. 2014].

Imagine Anselm Kiefer Remembering the Future (2014), [documentary]. Available at: https://www.youtube.com/watch?v=CK9N2NbSehE&feature=youtube_gdata_player [Accessed 16 Apr. 2015]

Imms, M. (2013). Colour Studies, in: *Tate* [online]. Available at: http://www.tate.org.uk/art/research-publications/jmw-turner/colour-studies-relating-to-picturesque-views-in-england-and-wales-r1144233#synopsis [Accessed 19 Oct. 2015]

Instinct (2006). In: *Merriam Webster* [online]. Springfield: Merriam-Webster, Inc. Available at: http://www.merriam-webster.com/dictionary/instinct [Accessed 17 Mar. 2016

J

J. M. W. Turner (2014). *Wikipedia, the free encyclopedia* [online]. Available at: http://en.wikipedia.org/w/index.php?title=J._M._W._Turner&oldid=607239468 [Accessed 11 May 2014]

Jackson, M.-R., Herranz, J. (2003). *Art and Culture in Communities: a framework for measurement.* Washington DC: The urban Institute.

Jencks, C., Baird, G. (1975). *El Significado en Arquitectura.* Madrid: Hermann Blume Ediciones.

Jodidio, P. (2005). *Architecture: Art.* Munich, Germany: Prestel Verlag GmbH & Company KG.

Johnson, G.A., Smith, M.B. (1993). *The Merleau-Ponty Aesthetics Reader: Philosophy and Painting*. Evanston, Illinois: Northwestern University Press.

Johnson, P.A. (1994). *The theory of architecture: Concepts, themes & practices*. New York: Van Nostrand Reinhold.

Jones, J. (1999). Immortal longings, in: *The Guardian* [online]. Available at: http://www.theguardian.com/culture/1999/jul/08/artsfeatures2 [Accessed 11 May 2015]

Jowett, M.A.B., 1892. The dialogues of Plato: Volume 3, third edition. ed. Oxford University Press, Oxfordshire.

Judd, D. (1994). *Some Aspects of Color in General and Red and Black in Particular*. Available at: http://newcomplexity.com/post/3035630628/donald-judd [Accessed 25 May 2015]

Judd, D. (1965). *Specific Objects*. Originally published in *Arts Yearbook*, 8. Available at: http://atc.berkeley.edu/201/readings/judd-so.pdf [Accessed 3 Jun. 2015]

Jukubik, A. (2013). Koshino House by Tadao Ando, in: *Trend Land* [online]. Available at: http://trendland.com/koshino-house-by-tadao-ando/ [Accessed 13 Nov. 2013]

Jung, C.G., Jaffé, A. (1977). *O homem e os seus simbolos, Concepção e organização de Carl G. Jung*, Edição especial Brasileira. ed, 20ª impressão. Rio de Janeiro: Editora Nova Fronteira,

K

Kai, G. (2006). *Concrete Resistance: Ando in the context of critical regionalism*. Available at: http://www.andrew.cmu.edu/user/gutschow/theory_course/Xiang%20Hua%20Ando%20Paper.pdf [Accessed 15 Jul. 2014].

Kandinsky, W. (1977). *Concerning the spiritual in art.* 2nd edition. New York: Courier Dover Publications Inc.

Kay, A., 2000. Art and community development: the role the arts have in regenerating communities. Community Dev J 35, 414–424. doi:10.1093/cdj/35.4.414

Kemp, G. (2012). Collingwood's Aesthetics. The Stanford Encyclopedia of Philosophy, Zalta, E.N. (Ed.). Available at: http://plato.stanford.edu/archives/fall2012/entries/collingwood-aesthetics/ [Accessed 08 Sep. 2015].

King, P. (2004). *Private Dwelling: Contemplating on the Use of Housing*. Oxfordshire: Psychology Press.

Kinsella, E.A. (2006). Hermeneutics and Critical Hermeneutics: Exploring Possibilities within the Art of Interpretation, in: Forum Qualitative Sozialforschung, Qualitative Social Research, 7 (3). Available at: http://www.qualitative-research.net/index.php/fqs/article/view/145/ [Accessed 22 Nov. 2013].

Kisby, S. (2000). *Bruno Taut: Architecture and Colour,* Kisbee website [online]. http://www.kisbee.co.uk/sarc/taut/taut.htm [Accessed 25 Nov. 2014].

Klee, P. (1961). *Paul Klee: The Thinking Eye.* London and New York: G. Wittenborn and Lund Humphries.

Klinkhammer, B. (2011). After Purism: Le Corbusier and Colour, in: *Preservation Education & Research,* 4, pp. 115 – 130. Available at: http://www.ncpe.us/wp-content/uploads/2013/01/Klinkhamer_OffprintPERvol4.pdf [Accessed 15 Apr. 2015].

Kohn, A. (2007). Judd on Phenomena, in: *Rutgers Art Review, The journal of Graduate Research in Art History,* 25 (1). Available at: https://www.google.pt/url?sa=t&rct=j&q=&esrc=s&source=web&cd=11&cad=rja&uact=8&ved=0CB4QFjAAOAo&url=http%3A%2F%2Fwww.massart.edu%2Fdocuments%2Fwww.massart.edu%2Ffaculty_bios%2Fjuddonphenomena.pdf&ei=QnKKVfr3CabmywPbl57gBQ&usg=AFQjCNGf5zuo82ZDGhcQCfEfhzSUNlQc4Q&sig2=3IX45_JAOlVhs-ElWIzXVQ&bvm=bv.96339352,d.bGg [Accessed 24 Jun. 2015]

Krauss, R.E. (1981). *Passages in Modern Sculpture.* Cambridge, Massachussets: MIT Press.

Kroes, P. (2002). Design methodology and the nature of technical artefacts, in: *Design Studies,* 23, pp. 287–302. DOI:10.1016/S0142-694X(01)00039-4

Kueber, P. (2013). *Josef Albers Homage to the Square studies - at The Morgan through Oct. 14. Retro Renovation*. Available at: http://retrorenovation.com/2012/09/19/josef-albers-homage-to-the-square-studies-at-the-morgan-through-oct-14/ [Accessed 20 Jan. 2016]

L

Lamb, T., Bourriau, J. (1995). *Colour: Art and Science*. Cambridge: Cambridge University Press.

LACMA (2014). *James Turrell's Roden Crater* [documentary]. Texas, United States of America. Available at: https://vimeo.com/67926427 [Accessed 24 Jun. 2015]

Lawson, B. (2006). *How Designers Think: The Design Process Demystified.* New York: Routledge.

Lehrer, K. (2012). *Art, Self, and Knowledge*. Oxford, England: Oxford University Press.

Levin, G. (1998). *Edward Hopper: An Intimate Biography*. California: University of California Press.

Leonardo, da V., Rigaud, J.F. (1835). *A treatise on painting.* London : J.B. Nichols and Son.

Lipovetsky, G. (1989). *A era do vazio*. Lisbon, Portugal: Relógio de Água.

Lipovetsky, G., Serroy, J. (2014). *O Capitalismo Estético na Era da Globalização*. Lisbon, Portugal: Edições 70.

Loius, S. (2011). *The window and the void' in the work of Edward Hopper.* Dissertation submitted for the Degree of B.A. Honours in History of Art. University of Bristol, Department of Historical Studies, Bristol.

Loos, A. (2004). *Ornamento e Crime.* Lisboa: Cotovia Editora,

Love, T. (2002). Constructing a coherent cross-disciplinary body of theory about designing and designs: some philosophical issues, in: *Design Studie*s, 23 (2), pp. 345–361. DOI: 10.1016/S0142-694X(01)00043-6

Love, T., 2000. Philosophy of design: a meta-theoretical structure for design theory, in: *Design Studies ,* 21, pp. 293–313. Available at: http://www.sciencedirect.com/science/article/pii/S0142694X99000125 [Accessed 21 Dec. 2013]. DOI:10.1016/S0142-694X(99)00012-5

Luis Barragán House and Studio (2004). *UNESCO World Heritage Centre* [online]. Available at: http://whc.unesco.org/en/list/1136 (accessed 11.13.14). [Accessed 11 Oct. 2014].

M

MacKerron, G., Mourato, S. (2006). Happiness is greater in natural environments, in: *Global Environmental Change*. Available at: http://www.sciencedirect.com/science/article/pii/S0959378013000575 [Accessed 24 Oct. 2013] DOI:10.1016/j.gloenvcha.2013.03.010

Mark Rothko Biography (2015). *Mark Rothko - paintings, prints, biography and quotes of Mark Rothko* [website] Available at: http://www.markrothko.org/biography/ [Accessed 21 Jan. 2016]

Marchán Fiz, S. (1986). *Del Arte objectual al arte de concepto*, 2nd edition. Madrid: AKAL Arte y Estética, Ediciones AKAL S.A

Marchán Fiz, S. (1986). *Contaminaciones Figurativas.* Madrid: Alianza Editorial.

Marlow, T. (2014). *Anselm Kiefer in Conversation with Tim Marlow* [interview]. Available at: https://www.youtube.com/watch?v=vlm5tgistqA [Accessed 16 Apr. 2015]

Marlow, T. (2014). *Kiefer and Chipperfield talk space and creativity* [online video recording]. Royal Academy of Arts, London. Available at: http://www.royalacademy.org.uk/article/kiefer-and-chipperfield-talk-space [Accessed 18 Aug. 2016].

May, M.E., Kawasaki, G. (2010). *In Pursuit of Elegance: Why the Best Ideas Have Something Missing*, Reissue editions. New York: Crown Business.

Meaning (2013). In: *Merriam Webster* [online]. Springfield: Merriam-Webster, Inc. Available at: http://www.merriam-webster.com/dictionary/meaning [Accessed 27 Dec. 2013].

Meadowcroft, J. (2016). Sustainability, in: *Britannica Encyclopedia* [online]. Available at: https://www.britannica.com/topic/sustainability [Accessed 16 Aug. 2016].

Medway, P., Clark, B. (2003). Imagining the building: architectural design as semiotic construction, in: *Design Studies,* 24, pp. 255–273. Available at: http://www.sciencedirect.com/science/article/pii/S0142694X02000558 [Accessed 16 Oct. 2014]. DOI: 10.1016/S0142-694X(02)00055-8

Merleau-Ponty (2009). *O olho e o espírito*. 7th ed. Lisbon: Editora Vega.

Merleau-Ponty, M. (1991). *Signos.* Lisbon: Martins Fontes.

Messina, J. (2008). Principle and Practice: The Ethic and Efficacy of Donald Judd's Interventions at La Mansana de Chinati, in: *Association of Collegiate Schools of Architecture Conference Proceedings. Presented at the Association of Collegiate Schools of Architecture Conference,* pp. 533 – 539.

Middleton, R. (1982). *The Beaux-Arts and Nineteenth-Century French Architecture*. Cambridge, Mass.: The MIT Press.

Mitrache, G. (2012). Architecture, Art, Public Space. *Procedia: Social and Behavioral Sciences*, 51 (2), pp. 562–566. Available at: http://www.sciencedirect.com/science/article/pii/S1877042812033447 [Accessed 29 Oct. 2013].DOI:10.1016/j.sbspro.2012.08.206

Mora, J.F. (1991). *Dicionário de Filosofia*. Lisbon: Publicações Don Quixote.

Morris, R. (2005). Notes on Sculpture, in: *Art in Theory 1900-2000 by Charles Harrison & Paul Wood*. Malden: Blackwell Publishing, pp. 825–35.

Moreira da Silva, F. (1999). *Colour / Space: Its quality management in architecture: the colour/space unity as an unity of visual communication*. PhD Thesis. University of Salford, Salford, UK. Available at: http://usir.salford.ac.uk/14758/1/299124.pdf [Accessed 9 Nov. 2014].

More, T. (1515). *Utopia*. London: feed books publishers.

Moore, R. (2010). John Pawson: Plain Space, in: *The Guardian* [online]. Available at: http://www.theguardian.com/artanddesign/2010/sep/19/john-pawson-plain-space [Accessed 27 Oct. 2015].

Muller, L. (2004). *The symbiosis between art and architecture as evidenced in Le Corbusier's Ronchamp.* PhD thesis. University of British Columbia, Vancouver, Canada. Available at: https://circle.ubc.ca/bitstream/2429/15781/1/ubc_2004-0570.pdf [Accessed 18 May 2015].

N

Naar, H. (2014). Art and Emotion, in: *Internet Encyclopedia of Philosophy*. Available at: http://www.iep.utm.edu/art-emot/ [Accessed 8 Apr. 2015].

Netto, J.T.C. (1999). *A construção do sentido na arquitectura*, 4th Edition. São Paulo: Editora Perspectiva.

Nóbrega, T. P. (2008) Corpo, percepção e conhecimento em Merleau-Ponty. *Estudos de Psicologia*. 13 (2), 141 – 148.

Norberg-Schulz, C. (1985). *The concept of dwelling: on the way to figurative architecture*. New York: Electa Rizolli International Publications.

Noy, P., Noy-Sharav, D. (2013). Art and Emotions, in: *International Journal of Applied Psychoanalytic Studies,* 10, pp. 100 – 107. Available at: http://www.pinchasnoy.com/files/Art-and-Emotion-published-aps1352.pdf [Accessed 8 Apr. 2015]. DOI: 10.1002/aps.1352

Noy, P. (1972). About Art and Artistic Talent, in: *International Journal of Psycho-Analysis,* 53, pp. 243 – 249. Available at: http://www.pinchasnoy.com/index.php?file=kop6.php [Accessed 09 Apr. 2015]

Noy, P. (1968). A Theory of Art and Aesthetic Experience, in: *The Psychoanalytic Review,* 55, pp. 623 – 645. Available at: http://www.pinchasnoy.com/index.php?file=kop6.php [Accessed 09 Apr. 2015]

O

Ockman, J., Williamson, R. (2012). A*rchitecture School: Three Centuries of Educating Architects in North America.* Cambridge, Massachusetts: MIT Press.

Olsen, D.J. (1986). The City as a Work of Art: London, Paris, Vienna. Cambridge, Massachusetts: Yale University Press.

Onwuegbuzie, A.J., Leech, N.L. (2006). Linking Research Questions to Mixed Methods Data Analysis Procedures. *The Qualitative Report*, 11 (3), pp. 474 - 498. Available at: http://www.nova.edu/ssss/QR/QR11-3/onwuegbuzie.pdf [Accessed 15 Jan. 2014].

Oxman, R., 2002. The thinking eye: visual re-cognition in design emergence, in: *Design Studies*, 23, pp. 135–164. Available at: http://www.sciencedirect.com/science/article/pii/S0142694X01000266 [Accessed 26 Dec. 2014] DOI:10.1016/S0142-694X(01)00026-6

P

Padovan, R. (2002). *Towards Universality: Le Corbusier, Mies, and De Stijl*. Hove, United Kingdom: Psychology Press.

Palladio, A. (1965). *The Four Books of Architecture.* New York: Dover Publications.

Palladio, A. (1987). *Los Cuatro Libros de Arquitectura*. Barcelona: Editorial Alta Fulla.

Pallasmaa, J. (2011). *The embodied image: imagination and imagery in architecture*. Chichester: John Wiley & Sons.

Pallasmaa, J. (1996). *The Eyes of the Skin: The Architecture and the Senses.* London: Academy Editions.

Pallasmaa, J. (2009). *The thinking hand: existential and embodied wisdom in arthitecture*. Chichester, U.K.: Wiley Publishers.

Pallister, J. (2013). *Interview with Royal Gold Medallist Peter Zumthor* [online]. Available at: http://www.architectsjournal.co.uk/news/interview-with-royal-gold-medallist-peter-zumthor/8642305.article [Accessed 14 Oct. 2015].

Parkes, G. (2011). Japanese Aesthetics, in: *The Stanford Encyclopedia of Philosophy* [online], Zalta, E.N. (Ed.). Available in: http://plato.stanford.edu/archives/win2011/entries/japanese-aesthetics/ [Accessed 15 Jul. 2015].

Paul, S. (2004). Abstract Expressionism, in: *The Met's Heilbrunn Timeline of Art History, The Metropolitan Museum of Art* [online]. Available at: http://sdwstoah00/toahadmin/essays/abstract-expressionism/ [Accessed 21 Jan. 2016]

Pauly, D. (1997). *Le Corbusier: La Chapelle de Ronchamp, The Chapel at Ronchamp*. New York: Springer Science & Business Media.

Pauly, D., 2002. Barragán: space and shadow, walls and colour. Birkhäuser.

Pawson, J. (2015). *John Pawson* [online]. Available at: http://www.johnpawson.com/office/john-pawson/ [Accessed 15 Jul. 2015].

Pawson, J. (1998). *Minimum*. London: Phaidon Press.

Perception (2014). *Wikipedia, the free encyclopedi*a. Available at: http://en.wikipedia.org/w/index.php?title=Perception&oldid=607946640 [Accessed 12 Apr. 2014].

Pérez-Gómez, A. (2008). *Built upon Love.* Cambridge, Massachusetts: MIT Press.

Perez, A. (2010). AD Classics: Fallingwater House, Frank Lloyd Wright, in: *ArchDaily* [online]. Avaialable at: http://www.archdaily.com/60022/ad-classics-fallingwater-frank-lloyd-wright/ [Accessed 11 Dec. 2015].

Pfeiffer, B.B. (2007). *Frank Lloyd Wright.* London and New York: Taschen, Hohenzollernring and Koln.

Phillips, G., Ashton, D., Crow, T. (2005). *Seeing Rothko.* New York: Getty Publications.

Pimlott, M. (2009). *Natural Antagonism: Notes on Colour or Architecture*. Presented at the Painting with Architecture in Mind. Tu Delf, Netherlands: Tu Delf Architecture University. Accessed at: http://www.tudelft-architecture.nl/uploaded/files/Interiors/Mark%20Pimlott/pimlott_v2.pdf [Accessed12 Sept. 2015]

Pinto, J.C. (2001). *A caixa, o espaço-limite, e a ideia de caixa nos momentos da arquitectura portuguesa*, Revista Ar: Cadernos da faculdade de arquitectura da universidade de lisboa, 1, Lisboa, pp. 28 - 30

Pinto, J.C. (2006). *Entre a Arquitectura e a Pintura*, Revista Ar: Cadernos da Faculdade de Arquitectura da Universidade de Lisboa, 6, pp. 120 - 125

Pinto, J.C. (2009). *Entre a pintura e a Arquitectura: Para-Arquitecturas*, Revista Arquitectura e Vida, 6, pp. 84 - 85

Pinto, J.C. (2007). *Ver, Desenhar, Imaginar, Projectar*, Colecção didáctica, temas e ideias em arquitectura, urbanismo e design, Centro Editorial da Faculdade de Arquitectura da Universidade Técnica de Lisboa, Lisboa

Pinto, J.C. (2007). *O espaço limite*, Volume 2, Colecção Arquitectura e Urbanismo, Edição ACD Editores, Lisboa.

Pinto, J.C. (2007). *A caixa, metáfora e arquitectura*, Volume 1, Colecção Arquitectura e Urbanismo, Edição ACD Editores, Lisboa.

Plato (1937). *The Republic*, 2nd edition. Cambridge, Massachusetts and London: Harvard University Press and William Heinemann Ltd. Available at: https://ryanfb.github.io/loebolus-data/L237.pdf [Accessed 5 Aug. 2016].

Plato (1888). *The Timaeus*. London and New York: Macmillan and Co. Available at: http://www.math.upatras.gr/~streklas/public_html/timaeusofplato00platiala.pdf [Accessed 5 Aug. 2016].

Preziosi, D. (1979). *Architecture, language and meaning: the origins of the built world and its semiotic organization.* The Hague, The Netherlands: Mouton Publishers.

Pritchard, C. (2014). Anselm Kiefer, Royal Academy, preview: Is he our greatest living artist?, in: *The Independent* [online]. Available at: http://www.independent.co.uk/arts-entertainment/art/reviews/anselm-kiefer-royal-academy-preview-is-he-our-greatest-living-artist-9729789.html [Accessed 18 Apr. 2015]

Poetry (2015). In: *Merriam Webster* [online]. Springfield: Merriam-Webster, Inc. Available at: http://www.merriam-webster.com/dictionary/poetry [Accessed 3 Oct. 2016].

Polyzoides, S. (2012). Introduction to "The Mexican Patio House.", in: Moule and Polyzoides Architects and Urbanists [online]. Avaialable at: http://www.mparchitects.com/site/thoughts/introduction-mexican-patio-house [Accessed 26 Jan. 2016].

Politsky, R.H. (1995). Penetrating our personal symbols: Discovering our guiding myths, in: *The Arts in Psychotherapy,* 22, pp. 9–20. DOI: 10.1016/0197-4556(94)00070-8

Postiglione, G. (2004). *100: One Hundred Houses for One Hundred European Architects of the Twentieth Century.* London and New York: Taschen.

Prodger, M. (2014). Inside Anselm Kiefer's astonishing 200-acre art studio, in: *the Guardian* [online]. Available at: http://www.theguardian.com/artanddesign/2014/sep/12/anselm-kiefer-royal-academy-retrospective-german-painter-sculptor [Accessed 18 Apr. 2015]

Pust, J. (2016). *Intuition*. The Stanford Encyclopedia of Philosophy, Zalta, E.N. (Ed.)..Available in: http://plato.stanford.edu/archives/spr2016/entries/intuition/ [Accessed 14 May 2016].

Q

Qualitative research (2013). *Wikipedia, the free encyclopedi*a. Available at: http://en.wikipedia.org/w/index.php?title=Qualitative_research&oldid=585593100 [Accessed 15 May 2014].

Quantitative research, 2013. *Wikipedia, the free encyclopedi*a. Available at: http://en.wikipedia.org/w/index.php?title=Quantitative_research&oldid=586706846 [Accessed 15 May 2014].

R

Ramberg, B., Gjesdal, K. (2013). Hermeneutics, in: *The Stanford Encyclopedia of Philosophy*. Available at: http://plato.stanford.edu/archives/sum2013/entries/hermeneutics/ [Accessed 1 Dec. 2015].

Rampley, M. (2000). Anselm Kiefer and the Ambivalence of Modernism, in: *Oxford Art Journal,* 23, pp. 79–96.

Rasmussen, S.E. (1982). *London: The Unique City*, Revised edition. Cambridge, Massachussets: The MIT Press.

Rasmussen, S.E. (1964). *Experiencing Architecture*. Cambridge, Massachussets: MIT Press.

Rendell, J. (2006). *Art and Architecture: A Place Between*. London: I.B.Tauris.

Rendell, J. (2002). *The Pursuit of Pleasure: Gender, Space & Architecture in Regency London*. London: Continuum.

Ricoeur, P. (2003). *The Rule of Metaphor: The Creation of Meaning in Language*. London and New York: Routledge Publishers.

Riba Architecture (2013). *RIBA Royal Gold Medal Winner Peter Zumthor in conversation with the RIBA's Tony Chapman*. Chapman, T. (Prod.). Available at: https://www.youtube.com/watch?v=UuhB6OGXNcY [Accessed 15 Jan. 2016].

Richardson, M.A. (2014). Andrea Palladio: Italian architect, in: *Encyclopedia Britannica* [online]. Available at: http://www.britannica.com/biography/Andrea-Palladio [Accessed 25 Jan. 2016].

Riley, C.A. (1995). *Color Codes: Modern Theories of Color in Philosophy, Painting and Architecture, Literature, Music, and Psychology.* London: UPNE.

Rhisiart, M., 2013. Exploring the future for arts and culture organisations through scenarios and vignettes, in: *Futures* 50, pp. 15–24. DOI :10.1016/j.futures.2013.03.008

Roden Crater Webpage (2010). *Roden Crater description* [online]. Available at: http://rodencrater.com/about [Accessed 11 May 2014]

Rodrigues, M.J.M. (2002). *Arquitectura*, Lisbon: Quimera Editores.

Rosenfield, K. (2013). James Turrell Transforms the Guggenheim, in: *ArchDaily* [online]. Available at: http://www.archdaily.com/394484/james-turrell-transforms-the-guggenheim/ [Accessed 11 May 2014]

Rothko, M., López-Remiro, M. (2006). *Writings on Art*. United States of America: Yale University Press.

Rothko, M., Waldman, D.S. (1978). *Mark Rothko, 1903-1970 : A Retrospective.* New York: H. N. Abrams.

Ruskin, J. (1903). *The Seven Lamps of Architecture*, in: *The Works of John Ruskin*. London and New York: Longman, Greene and Co.

Ruskin, J. (1903). The Stones of Venice, in: *The Works of John Ruskin*. Volume IX. London: Longman, Greene and Co. Available at: http://www.lancaster.ac.uk/depts/ruskinlib/Stones%20of%20Venice [Accessed 5 Oct. 2015].

Ruskin, J. (1903). Modern Painters: Of General Principles and of Truth, Volume I (Part 1 and 2), in: *The Works of John Ruskin*. London and New York: Longman, Greene and Co. Available in: http://www.lancaster.ac.uk/depts/ruskinlib/Modern%20Painters [Accessed 5 Oct. 2016].

S

Saarinen, E. (1948). *The search for form in art and architecture*. New York: Courier Dover Publications.

Sassen, S. (2001). *The Global City: New York, London, Tokyo.* New York: Princeton University Press.

Scavuzzo, G. (2010). *Compositions For Chromatic Keyboards: Colour and composition in Le Corbusier's works*. Presented at the Colour and Light in Architecture - First International Conference 2010. Available in: https://www.academia.edu/3383554/Compositions_For_Chromatic_Keyboards_Colour_and_composition_in_Le_Corbusiers_works [Accessed 9 Dec. 2014].

Schielke, T. (2013). Light Matters: Seeing the Light with James Turrell, in: *ArchDaily* [online]. Available at: http://www.archdaily.com/380911/light-matters-seeing-the-light-with-james-turrell/ [Accessed 11 May. 2015]

Scruton, R. (2009). *Beauty*. Oxford, England.: Oxford University Press.

Scruton, R. (1979). *The Aesthetics of Architecture*. Princeton, New Jersey: Princeton University Press.

Seago, A., Dunne, A., 1999. New Methodologies in Art and Design Research: The Object as Discourse, in: *Design Issues*, 15, pp. 11. DOI:10.2307/1511838

Sennott, S. (2004). *Encyclopedia of Twentieth Century Architecture.* London: Taylor & Francis.

Scheerbart, P., Taut, B. (1972). *Glass Architecture.* Westport, Connecticut: Praeger.

Signification (2013). In: *Merriam Webster* [online]. Springfield: Merriam-Webster, Inc. Available at: http://www.merriam-webster.com/dictionary/signification?ref=office [Accessed 27 Dec. 2013].

Silvestrini, N. (2011). *Colorsystem* [online]. Available at: http://www.colorsystem.com/?page_id=1853&lang=en [Accessed 12 Nov. 2015].

Simmons, O.E. (2011). *The Grounded Theory Methodology of Barney G. Glaser* [online]. Grounded Theory Institute. Available at: http://www.groundedtheory.com/what-is-gt.aspx [Accessed 1 July 2014].

Simões, Z., Durão, M.J. (2008a). New Materialities of light and colour in spatial allegories, in: *Proceedings AIC 2008*. Presented at the Interim Meeting of the Internatonla Colour Association, Sweedish Colour Center Foundation, Stockholm, pp. 1–4.

Simões, Z., Durão, M.J. (2008b). Contemporary Architecture: Real and Virtual Narratives, in: *Proceedings of ICDHS 08*. Presented at the 6th Conference of Design History and Design Studies, Japan Society for the Promotion of Science & Osaka University Communication Design Center, Osaka, pp. 430–433.

Shanes, E. (2004). *Turner.* London: Parkstone Press.

Shaw, N. (2013). We Don't Just Build Buildings: The Importance of Public Art in London, in: *The Huffington Post* [online]. Available at: http://www.huffingtonpost.co.uk/nicola-shaw/london-public-art_b_3549677.html [Accessed 29 Apr. 2015].

Shields, J.A.E. (2014). Luis Barragán, in: *Collage and Architecture*, pp. 218 – 229. New York: Routledge Publications.

Shelley, J. (2013). The Concept of the Aesthetic, in: *The Stanford Encyclopedia of Philosophy*. Available at: http://plato.stanford.edu/archives/fall2013/entries/aesthetic-concept/ [Accessed 8 Sep. 2015].

Scheerbart, P., Taut, B., 1972. *Glass Architecture.* Switzerland: Praeger.

Shirazi, M.R. (2011). On Phenomenological Discourse in Architecture. Available at: http://www.arch.ksu.edu/seamon/Shirazi_phenomenological_discourse.htm [Accessed 21 Oct. 2013].

Slater, T. (2002). Fear of the city 1882–1967: Edward Hopper and the discourse of anti-urbanism, in: *Social & Cultural Geography*. United Kingdom: Routledge, Taylor & Francis Group, pp. 135–154. DOI:10.1080/14649360220133916

Singh, I. (2012). *Color, Facture, Art and Design: Artistic Technique and the Precisions of Human Perception.* London: John Hunt Publishing.

Siza, A., Fernandez, A.T., Barragan, L., Júlbez, J.M.B. (1995). *Barragán: Obra Completa*. Madrid: Tanais Ediciones.

Smienk, G., Niemeijer, J. (2011). *Palladio, The Villa and the Landscape.* Basel: Birkhauser.

Smith, P.F. (2003). *The dynamics of delight: Architecture and aesthetics*. New York: Spon Press, Routledge and the Taylor

Smith, D.W. (2013). Phenomenology, in: *The Stanford Encyclopedia of Philosophy.* Available at: http://plato.stanford.edu/archives/win2013/entries/phenomenology/ [Accessed 15 Nov. 2015].

Snodgrass, A., Coyne, R. (1997). Is Designing Hermeneutical?, in: *Architectural Theory Review, Journal of the Department of Architecture, The University of Sydney*, 1, pp. 65 – 97. Available at: http://echo.iat.sfu.ca/library/snodgrass_design_hermeneutical.pdf [Accessed 22 Nov. 2013].

Souter, G. (2012). *Edward Hopper.* New York: Parkstone International.

Steiner, R. (1992). *Color*. Great Barrington: Steiner Books.

Stiles, K., Selz, P.H. (1996). *Theories and Documents of Contemporary Art: A Sourcebook of Artists' Writings.* California: University of California Press.

Sussman, H. (2005). *The Task of the Critic: Poetics, Philosophy, and Religion*. New York: Fordham University Press.

Sveiven, M. (2010). AD Classics: Church on the Water by Tadao Ando, in: *ArchDaily* [online]. Available at: http://www.archdaily.com/97455/ad-classics-church-on-the-water-tadao-ando/ [Accessed 14 May 2016]

Sveiven, M., Zumthor, P. (2011). Bruder Klaus Field Chapel by Peter Zumthor, in: *ArchDaily* [online]. Available at: http://www.archdaily.com/106352/bruder-klaus-field-chapel-peter-zumthor/ [Accessed 14 Oct. 2015]

Svilar, D. (2012). Church of the Light by Tadao Ando Architect & Associates, in: *mooponto* [online]. Available at: http://www.mooponto.com/2012/09/19/church-of-the-light-tadao-ando-architect-associates/ [Accessed 15 Jul. 2014]

T

Tanizaki, J. (1999). *O Elogio da Sombra.* Lisbon: Relógio de Água.

Titus, J.E., Sinacore, A.L. (2013). Art-making and well-being in healthy young adult women, in: *The Arts in Psychotherapy,* 40, pp. 29–36. DOI:10.1016/j.aip.2012.09.006

Trott, E. (2002). Permanence, change and standards of excellence in design. In: *Design Studies,* 23 (3), pp. 321–331. Available at: http://www.sciencedirect.com/science/article/pii/S0142694X01000412 [Accessed 22 Dec. 2014]. DOI:10.1016/S0142-694X(01)00041-2

Tolstoy, L. (2013). O Que é a Arte?. Lisbon: Gradiva.

Toussaint Alves Pereira, M. (2009). *Da arquitectura à teoria e o universo da teoria da Arquitectura em Portugal na primeira metade do Seculo XX*. PhD Thesis. Faculdade de Arquitectura da Universidade Técnica de Lisboa. Lisbon, Portugal.

Turner, C. (2005). *Cured by colour* [online]. Tate. Available at: http://www.tate.org.uk/context-comment/articles/cured-colour [Accessed 12 Oct. 2014].

Turrell, J. (2014). *James Turrell* [online]. Available at: http://jamesturrell.com/about/introduction/ [Accessed 25 Oct. 2015]

Tzonis, A. (2014). Creativity real and imagined in architectural education, in: *Frontiers of Architectural Research* 3, pp. 331–333. DOI: 10.1016/j.foar.2014.08.001

Tzonis, A. (1977). *Hacia un entorno no opresivo*, 2nd edition. Madrid: Hermann Blume Ediciones.

U

Ursprung, P. (2009). *Earthworks: The Architecture of Peter Zumthor*. Essay for the Pritzker Prize. Available at: http://www.pritzkerprize.com/sites/default/files/file_fields/field_files_inline/2009_essay_0.pdf [Accessed 14 Nov. 2015]

V

Van Toorn, J., 2010. A Passion for the Real. in: *Design Issues,* 26, pp. 45–56. Available at: http://dx.doi.org/10.1162/DESI_a_00043 [Accessed 20 Nov. 2013] DOI:10.1162/DESI_a_00043

Varichon, A. (2007). *Colors: What They Mean and How to Make Them*. New York: Harry N. Abrams.

Veleiro, T.T. (1991). *El color en arquitectura*. Sada, Spain: Edicios do Castro.

Venturi, L. (1980). *Historia de la crítica de Arte*. Coleccion Punto y Linea. Barcelona: Editorial Gustavo Gili.

Verganti, R., Öberg, Å. (2013). Interpreting and envisioning — A hermeneutic framework to look at radical innovation of meanings, in: Industrial Marketing Management, 42, pp. 86–95. DOI: 10.1016/j.indmarman.2012.11.012

Verme, P. (2009). Happiness, freedom and control, in: Journal of Economic Behavior & Organization, 71, pp. 146–161. DOI: 10.1016/j.jebo.2009.04.008

Vitruvius (1914). *The Ten Books of Architecture*. Cambridge, England: Oxford University Press.

Volker, L., Lauche, K., Heintz, J.L., de Jonge, H. (2008). Deciding about design quality: design perception during a European tendering procedure, in: *Design Studies* 29, pp. 387–409. DOI: 10.1016/j.destud.2008.03.004

Von Goethe, J.W. (1840). *Theory of colours.* Cambridge, Massachusetts: The MIT Press.

W

Walker Art Center (2010). Utopia Is No Place: The Art and Politics of Impossible Futures [documentary]. United States of America. Available at: https://www.youtube.com/watch?v=H8BhXKGOeeY [Accessed 5 Jan. 2016]

Weston, R. (2004). *Plans, Sections and Elevations: Key Buildings of the Twentieth Century.* New York: Laurence King Publishing.

Welby, L.V. (1903). *What is Meaning?: Studies in the Development of Significance*. London: John Benjamins Publishing.

Williams, K., Giaconi, G., Palladio, A. (2003). *The Villas of Palladio.* New York: Princeton Architectural Press.

Willis, D. (1999). *The Emerald City: And Other Essays on the Architectural Imagination*. New York: Princeton Architural Press.

Wittkower, R. (1971). *Architectural Principles in the Age of Humanism,* 3rd edition. London: Academy Editions.

Wright, F.L. (1970). *The Natural House.* United States of America: Plume Books.

Wong, J.F. (2010). The text of free-form architecture: qualitative study of the discourse of four architects. *Design Studies,* 31 (3), pp. 237–267. doi:10.1016/j.destud.2009.11.002. Available at: http://www.sciencedirect.com/science/article/pii/S0142694X09000945 [Accessed 23 Dec. 2013].

Wolf, J. (2015). Color Field Painting Movement, Artists and Major Works, in: *The Art Story* [online]. Available at: http://www.theartstory.org/movement-color-field-painting.htm [Accessed 21 Jan. 2016]

Wood, G., 2004. Edward Hopper's wife and muse, in: *the Guardian* [online]. Available at: http://www.theguardian.com/artanddesign/2004/apr/25/art1 [Accessed 11 Apr. 2015]

Wullschlager, J. (2014). Interview with Anselm Kiefer, ahead of his Royal Academy show, in: *The Financial Times* [online]. Available at: http://www.theartstory.org/movement-color-field-painting.htm [Accessed 26 Apr. 2015]

Y

Yin, R.K. (2013). *Case Study Research: Design and Methods*. Los Angeles: SAGE Publications.

Young, J. (1994). *Nietzsche's Philosophy of Art.* Cambridge, Massachusetts: Cambridge University Press.

Yoon, J., 2008. Searching for an image conveying connotative meanings: An exploratory cross-cultural study. in: *Library & Information Science Research,* 30, pp. 312–318. Available at: http://www.sciencedirect.com/science/article/pii/S0740818808000789 [Accessed 14 Nov. 2013] DOI:10.1016/j.lisr.2008.04.004

Z

Zarzar, K.M. (2007). Identity in the Work of Tadao Ando: An exploratory essay on the problems of how to model identity. Presented at the 10 th Generative Art Conference. Available at: http://www.karinazarzar.com/6.pdf [Accessed 15 Jul. 2014]

Zevi, B. (1977). *Saber ver a arquitectura*. Colecção Artes e Letras. Lisbon: Editora Arcádia.

Zumthor, P. (2006). *Thinking architecture.* Basel, Swizterland: Birkhäuser.

Zumthor, P. (2006b). *Atmospheres: Architectural Environments - Surrounding Objects*. Basel and Boston: Birkhäuser,

Zumthor, P., Merin, G. (2013). Peter Zumthor: Seven Personal Observations on Presence In Architecture, in: *ArchDaily* [online]. Available at: http://www.archdaily.com/452513/peter-zumthor-seven-personal-observations-on-presence-in-architecture/ [Accessed 14 Nov. 2015]

Zybaczynski, V.M. (2013). The Colour of Architecture: Past and Presen, in*: Urbanism, Arhitectură, Construcţii*, 4 (3). Available at: http://uac.incd.ro/Art/v4n4a08.pdf [Accessed 24 Nov. 2014]

APPENDIXES

APPENDIX A

GLOSSARY OF TERMS

A

ABSTRACTION: *overall, abstraction refers to the act of obtaining or removing something (abstracting) from a source (the act of abstracting something); abstraction is a mental process that maintains the general characteristics of objects or things, creating a synthesis, which can be understood as a generalization. It entails a liberation from the particulars, the specifics, and the individual, in search of what it has that is universal, essential and general. It generates general ideas and abstract ideas.*

ABSTRACT ART: *Abstract art emerged as a movement in the end of the XIX century, when artists felt the need to create a new type of art that reflected the transformations that were occurring in society (technological, scientific and philosophical); as an art movement, it refers to the paintings and sculptures that tried to break away from traditional representation of physical objects and the academic rules of the 'fine arts' schools, searching in 'abstraction' for their visual significance, by exploring the relationships of forms and colours. Overall, in art, abstraction refers to art that is unconcerned with the literal depiction of things from the visible world.*

ART NOVEAU: ***i****s an international artistic and architectural movement (or style) that also had it's grounds in philosophy; the movement was used especially by the decorative arts and was at its most popular between the 1890 and the 1910, in Paris. Overall the movement, as it's name suggests (Art Nouveau is French for New Art), was deeply inspired by the natural forms of the landscape (such as flowers and leafs) appealing for a more organic, curvy and natural type of design. Because it was embraced by the multiple fields (architecture, design, graphic art, interior design, and the decorative arts such as jewellery, furniture and textiles) it is considered a total art style. It was then replaced by the Modernist ideas and principles.*

ART POVERA*: is a modern artistic movement that originated in Italy in the late 1960s and the beginning of the 1970's; it combined aspects of conceptual, minimalist, and performance art, and made use of worthless or common materials such as earth or newspaper; the movement had the underlying aim of subverting the commercialization of art, and artists emerged against the values of established institutions of government, industry, and culture. The term was coined by Italian art critic Germano Celant. Some of the main ideas that the movement sustained were: a return to simple objects and messages emphasizing that the everyday can also be meaningful, the embodiment of energy and dynamic ideas, the exploration of space and language. Some of the leading artists are: Michelangelo Pistoletto, Piero Gilardi, Jannis Kounellis and Mario Merz.*

ABSTRACT EXPRESSIONISM: *Abstract Expressionism is an artistic movement which emerged in the United States (...) in which the artist expresses himself purely through the use of form and colour, using non-representational, or non-objective means of expression (no actual objects represented). The term was initially coined to describe the work of Willem de Kooning, Jackson Pollock and Arshile Gorky; however as a movement it expanded and was divided into two groups: the Action Painting group, which included artists such as Pollock, de Kooning and Franz Kline, where all of them emphasizes the physical action and movement involved in painting; secondly, the Colour Field Painting, led by Mark Rothko and Kenneth Noland, who were primarily concerned with exploring the effects of pure colour on a canvas.*

B

BAUHAUS: *The Bauhaus was an art school in Germany that combined crafts and the various fine arts (architecture, painting and sculpture); It operated from 1919 to 1933. It was firstly founded by the architect Walter Gropius in Weimar, with the idea of creating a total work of art in which all arts, including architecture, would be brought together in a collaborative manner. The school existed in three German cities: Weimar from 1919 to 1925, Dessau from 1925 to 1932 and Berlin from 1932 to 1933, under three different architect-directors: Walter Gropius from 1919 to 1928, Hannes Meyer from 1928 to 1930 and Ludwig Mies van der Rohe from 1930 until 1933. Overall, the school was marked by a design which believed in the absence of ornamentation, in a harmony between the function of an object or a building and its design, in simplified forms, and in the idea that mass-production was reconcilable with the individual artistic spirit*

BARROQUE: *Baroque Art developed in Europe around 1600, as a reaction against Mannerism. Baroque art is less complex, more realistic and more emotionally charged than Mannerist art. Encouraged by the Catholic Church, Baroque Art was developed by Caravaggio, Gianlorenzo Bernini and Annibale Carracci; deeply influenced and led by other artists of the time such as Rubens, Rembrandt, Vermeer and Velázquez. Some of the qualities associated with the Baroque are grandeur, richness, drama, vitality, movement, tension, emotional exuberance, and a general tendency to blur distinctions between the various arts.*

C

CUBISM: *created by Pablo Picasso (1881–1973) and Georges Braque (French, 1882–1963) in Paris between 1907 and 1914, Cubism is considered to be one of the most influential visual art styles of the early twentieth century. It was deeply influenced by the works of Cézanne, by African art, Primitivism and other non-Western sources. Overall, It was a rejection of rejected of the idea that art should copy nature, or use the traditional techniques of perspective and foreshortening emphasizing instead the two-dimensionality of the canvas by the reduction and factorization of objects into geometric forms.*

COLOUR FIELD PAINTING: *was one of the paths defined by Abstract Expressionism, and is considered one of its mature styles. It explored the expressive potential of colour, by abandoning all forms of figuration and developing it in large fields. It found expression through the work of Rothko, Newman, and Still, that seemed to all create art that was simplified in content, grounded in large formats and was dominated by colour creating a sort of field. They had profound motivations to their 'colour fields' usually grounded in the 'sublime'. Author Paul (2004) explains: '' Rothko and Newman, among others, spoke of a goal to achieve the "sublime" rather than the "beautiful," harkening back to Edmund Burke in a drive for the grand, heroic vision in opposition to a calming or comforting effect.'' (Paul, 2004). The authors used scale as one of the tools for provoking a strong impact. All of the colour field painters, as author Justin Wolf (2015) explains: '' (...) were all independently searching for a style of abstraction that might provide a modern, mythic art and express a yearning for transcendence and the infinite.'' (Wolf, 2015). He further explains that it was the first style to avoid the suggestion of a form or mass standing out against a background, instead, the figure and the ground are both composed and apprehended as one.*

CONCEPTUAL ART: *also called Conceptualism, is an art movement that explores concepts or ideas above formal or aesthetic values of art; it occurred from the beginning of the mid 60's, with various artists, that aimed to create art that simply reflected ideas; the works, thus, can usually be constructed by anyone, and define a type of installation, meant to be understood intellectually rather than aesthetically. One of the most notorious works that summarizes the movement is the work by Joseph Kosuth, One and Three Chairs (1965),*

D

DEUTSCHER WERKBUND: *(German Association of Craftsmen) is a German association of artists, architects, designers, and industrialists (established in 1907) which was deeply important in the development of modern architecture, industrial design, and the creation of the Bauhaus school of design.*

DE STIJL: *De Stijl (Dutch for 'The Style'), which is also known as neoplasticism, was a Dutch artistic movement founded in 1917 in Amsterdam, by the painter, designer, writer, and critic Theo van Doesburg (1883 – 1931). It's initial definition was accompanied by a magazine, where the overall ideals of the movement were clarified which was greatly defined in collaboration with the artist Piet Mondrian. The movement which consisted of both artists and architects, aimed to define a new visual language for society: it advocated pure abstraction, universality, a reduction of form (a simplification of compositions to vertical and horizontal directions) and use of primary colours, black and white. The group's principal members, besides Theo Van Doesburg are the painters Piet Mondrian (1872–1944) and Vilmos Huszár (1884–1960) and the architect Gerrit Rietveld (1888–1964).*

DIVINE ORDER: *Refers to the idea that sustained the Renaissance, at all spheres of existence, that accompanying eternal life is a 'divine order' organized and comprehended only by God. Man, thus, needs to understand the divine order, in order to become in tune with the universe, and align his creations with God. Some of the principles that reflect that divine order are the principles of symmetry, order, truth, beauty and proportions, which are generally drawn from nature.*

E

EMOTION*: generally understood as a feeling that derives from circumstances; it is distinguished from reasoning or knowledge, as something intuitive and instinctive. The term 'emotion' has it's origins in the French word 'émouvoir', which translates to 'to stir up', and it's use is commonly traced to 1579; it's deeper origins finds roots in the Latin word 'emovēre' that means to remove or to displace; from the word 'movēre' that means 'to move'. The meaning of the word in everyday language, usually refers to intense feelings, however this differs from academic and scholarly discourse, where the word is used in a deeper and more complex context. Physiologically, emotions are closely linked to behavioural tendencies, to the arousal of the nervous system. Psychologically, emotions are closely connected, associated to the driving force that sustains different types of motivations. In a scientific view, they are connected to cognition to temperament and personality.*

ENGLISH EMPIRICISM*: British Empiricism is a practical philosophical movement which started largely in Britain, during the Age of Reason and Age of Enlightenment of the 17th and 18th Century. The major figures in the movement were John Locke, George Berkeley and David Hume. Overall, Empiricism is the idea that the origin of all knowledge is sense experience, and is contrasted with rationalism (which sustains that the mind may apprehend some truths directly, without requiring the medium of the senses).*

ENSTEINIAN UNIVERSE: *Albert Einstein proposed a temporally infinite but spatially finite model in 1917, in his paper Cosmological Considerations in the General Theory of Relativity that opposed the traditional concept of a Static Universe (universe is both spatially infinite and temporally infinite, and space is neither expanding nor contracting) and proposed a spatially finite universe that would either collapse or expand forever.*

EXPRESSIONISM: *Expressionism is an artistic style that sustains the 'expression' as the real value of art, leading away from 'realistic' representations; thus, the intention is not to reproduce a subject accurately, but instead to portray it in such a way as to express the inner state of the artist, his emotions and other intuitive manners. Expressionism emerged simultaneously in various cities across Germany, and was inspired most heavily by the Symbolist currents in late nineteenth-century art. Leading Expressionists include Wassily Kandinsky, Franz Marc, George Grosz and Amadeo*

Modigliani. Expressionism led to Abstract Expressionism, which sustains the same principles and ideals, however sustained no subject at all, only pure abstract form.

F

FORMALIST THEORIES: *refers to aesthetic theories that sustain that art's value is in it's form.*

FAUVE MOVEMENT: *Fauvism grew out of Pointillism and Post-Impressionism, but is characterized by a more primitive and less naturalistic form of expression. Fauvism was a short-lived movement, but had a substantial influence on some of the Expressionists. The artists associated with Fauvism are Albert Marquet, Andre Derain, Maurice de Vlaminck and Henri Matisse.*

FUTURIST MOVEMENT: *Futurism was founded in 1909 by Filippo Tommaso Marinetti, along with painters Umberto Boccioni, Giacomo Balla, Carlo Carrà, and Gino Severini, in Italy, it's birth country. It was an artistic modernist movement that celebrated the technological era (inspired by the Cubism), and emphasized machines and motion as their main themes and concepts.*

G

GESTALT PRINCIPLES: *Gestalt principles, or gestalt laws, are rules of the organization of perceptual scenes. Gestalt is a psychology term which means "unified whole" and refers to theories of visual perception developed by German psychologists in the 1920s which attempted to describe how visual elements are perceived and understood; The principles created are: Similarity (occurs when objects look similar to one another), Continuation (when the eye moves through one object and continue to another object), Closure (when an object is incomplete or a space is not completely enclosed), proximity, figure and ground relationships. The Gestalt principles were introduced in a seminal paper by Wertheimer (1923/1938), and were further developed by Köhler (1929), Koffka (1935), and Metzger (1936/2006).*

GOLDEN ETERNITY (Kerouac): *The Scripture of the Golden Eternity is a book of 66 prose poems written by American novelist and poet Jack Kerouac, first published in 1960 by Corinth Books, New York. Associated to the book is the idea of a 'golden eternity', a condition that is pure, a sort of lost paradise, where the human race is untainted and pure. It can be associated to the idea of a lost paradise and a kind of utopian wonderland; it can also be associated to the Nirvana principle of Buddhism.*

H

I

IMPRESSIONISM*: Impressionism began in France as a reaction against the restrictions and conventions of the dominant Academic art; it sustained a light and intuitive approach to painting. Its subject matter was most commonly landscapes: defined by the attempt to capture the impression of light in a natural setting. The movement's name was derived from Monet's early work, Impression: Sunrise. Some of it's most notorious artists include: Claude Monet, Pierre-Auguste Renoir, Camille Pissarro, Edgar Degas, Gustave Caillebotte, Edouard Manet, and the American Mary Cassatt. As an intellectual school it faded towards the end of the 19th century, however as an artistic movement it deeply influenced all the artistic movements that followed.*

INTUITION*: Intuition is generally understood as the innate ability to acquire knowledge without the use of reason; it is generally understood as the ability 'to know' without any evidence or reasoning,*

providing us with beliefs that we cannot necessarily justify. It is also associated to the ability 'to look inside' or 'to contemplate'.

J

K

L

LAND ART*: is an art movement in which landscape and the work of art are inextricably linked; the art form is created in nature (using natural materials such as soil, rock, organic media, water or other mineral pigments) and emerges from the landscape. The movement emerged in the 1960s (coinciding with a growing ecology movement in the United States), and brought new dimensions to art: taking art out of the gallery or museum and into the natural landscape, making it ephemeral and unable to be bought or sold. The art forms are usually large in scale, they engage with the elements of the environment and the landscape of which they belong, they are placed away from civilization and they are allowed to change and evolve with the landscape itself as part of nature. Overall, Land art was inspired by minimal art and Conceptual art but also by the work of Constantin Brâncuși and Joseph Beuys.*

LIGHT AND SPACE MOVEMENT: *Light and Space movement began in Southern California in the mid-1960s and was related to op art, minimalism and geometric abstraction. The Light and Space movement, is characterized by a focus on light and other perceptual phenomena, such as volume, scale and geometry; the group also used non traditional material such as glass, neon, fluorescent lights or resin and includes the artists such as Robert Irwin, Mary Corse and Doug Wheeler, that were at the time, also coming into prominence. In 1967, Irwin and Turrell (both considered to be leading artists for the movement), investigated the phenomenon of sensory deprivation in an art-and-technology program by the Los Angeles County Museum of Art.*

M

MODERNISM: *Overall, modernism is a philosophical movement that, emerged from transformations in Western society in the late 19th and early 20th centuries. Modernism evolved from the development of modern industrial societies, the rapid growth of cities, followed World War I, and quickly spread out to various fields: expanding to architecture and to the arts. As a movement, it rejected Enlightenment thinking, religious beliefs, traditional artistic and architectural views, and aimed to create a new language and new idea of life that could respond psychologically, emotionally and spiritually to the new economic, social, and political environment of the industrialized world. As a whole, modernism can be understood as a new way of thinking and understanding the world, that searched for new ideals and new values to characterize and define a new era.*

MORALISTS: *refers to the people, philosophies and ideals that sustained a life guided by morals and morality above anything else.*

N

O

OP ART: *Optical Art is a movement that belongs to Abstract art; it uses repetition of simple forms and colours to create visual effects (vibrating effects, patterns, foreground-background confusion, an exaggerated sense of depth). In the mid-20th century, artists such as Victor Vasarely, Josef Albers and M.C. Escher experimented with Optical Art, using the visual phenomena as the subject of art itself; however it is in the 1960's, that the term 'Op Art' was coined to describe the work of a growing group of abstract painters, led by Vasarely and Bridget Riley.*

P

PHENOMENOLOGY: *phenomenology is generally understood as the philosophical study of experience and consciousness: it is the study of structures of consciousness. The word ''Phenomenology" comes from the Greek words phainómenon, meaning 'that which appears', and lógos, meaning 'study'. Founded in the early years of the 20th century by Edmund Husserl, and was expanded by various authors such as Heidegger, Sartre, Merleau-Ponty and others. It is both considered as a disciplinary field in philosophy and as a movement in the history of philosophy. In Husserl's conception, phenomenology is concerned with the making of structures of consciousness, and the understanding of the phenomena which appear in acts of consciousness.*

POP ART: *Pop art is an art movement that emerged in the mid-1950s in Britain and the late 1950s in the United States; it is most associated with the work of New York artists of the early 1960s such as Andy Warhol, Roy Lichtenstein, James Rosenquist, and Claes Oldenburg. As a reaction to abstract expressionism pop art emerged using visual figures drawn from mass media and popular culture; it celebrated commonplace objects and people of everyday life, trying to elevate popular culture to the level of fine art. The most notorious artworks that are considered to represent the movement are: Andy Warhol's Campbell's Soup Cans (1962), Richard Hamilton's Just What Is It That Makes Today's Homes So Different, So Appealing? (1956) and Bunnies (1966) by Sigmar Polke.*

Q

R

ROMANTICISM: *Romanticism emerged as an anticlassicism movement (a reaction against Neoclassicism and it's overall principles); it begun gathering momentum in the end of the 18th century. As a movement it sustained a more emotional approach to life in a more individualistic and personal way. Some of the general characteristics include: the celebration of the simple life and a focus on the landscape and the natural setting, using an emotional framework. Some of the main painters closely associated with Romanticism include Caspar David Friedrich, John Constable, J.M.W. Turner and William Blake.*

S

SPIRIT: *the inner quality or nature of a person; the force within a person that is believed to give the body life, energy, and power; considered to be the essence of a person, his immaterial intelligent or sentient part of his existence; can also refer to a special attribute or quality.*

SOUL: *The soul in many religions, philosophical and mythological traditions, is understood as the incorporeal and immortal essence of a living being; overall it can be understood as the spiritual or immaterial part of a person that gives life to the body; it is associated to immortality and to that which lives beyond the body; it also refers to a person's deeply felt moral and emotional nature.*

SURREALISM: *The surrealist movement uses the fantastical visual imagery from the subconscious mind, aiming to bring the unconscious world alive through the artistic process. It was founded by Andre Breton in 1924, deeply influenced by the psychoanalytic work of Freud and Jung. Some of the most prominent surrealistic artists include Max Ernst, Giorgio de Chirico, Jean Arp, Man Ray, Joan Miro, Rene Magritte and Salvador Dali (whom broke away from the movement due to political discrepancies).*

T

THEORISTS: *Refers to all the authors used in the chapters leading up to the case studies; authors that composed theories or published books used in the thesis.*

TEMPIETTO: *the Tempietto is a small commemorative martyrium (tomb) built by Donato Bramante, built in the courtyard of San Pietro in Montorio, a church in Rome, Italy, in 1502, on the supposed site of the martyrdom of St. Peter. It was commissioned by Ferdinand and Isabella of Spain, and is considered Bramante's masterpiece. It drew it's inspiration, from the small classical temple, more specifically from the temple of Vesta at Tivoli which was built on a circular plan and was surrounded by columns. It is composed of a small circular plan, two floors, a dome, and a series of columns that define the whole façade of the imaginary cylinder that circumscribes the small chapel. It sits at the centre of the squared courtyard, and metaphorically represents the union of the circle with the square, heaven and earth. It is considered a masterpiece of Renaissance architecture, and had a profound influence on Palladio and other Renaissance architects that followed.*

U

V

VALUE: *a desire, an embodiment, a guiding aspect, a category, a connection with specific ideals; something that is embodied, expressed and communicated in art, and is that which grants it it's significance; in embodying values art establishes it's significance allowing humanity to evolve into greater realms of consciousness, by connecting to those sides of himself; that which defines man's existence, that which drives the creation process, that which is embodied in the creation; that which defines and composes significance together with principles; can also be understood as a desire for something, and the creation of connections towards something. Of reference is Scruton's (1979) idea: '' A value is characterized not by its strength but by its depth, by the extent to which it brings order to experience.'' (Scruton, 1979, p.32).*

Y

X Y Z

APPENDIX B

GLOSSARY OF AUTHORS, ARTISTS AND ARCHITECTS

A

AALTO, Alvaro (1898 – 1976): *was a Finnish architect and designer, sculptor and painter, and his works include works of architecture, furniture, textiles designs, and glassware. His overall designs can be characterized as ranging from a Nordic Classicism (early work), which evolved into a more rational International Style Modernism during the 1930s and combined with an organic modernist style from the 1940s onwards. These three spheres defines a notorious and singular style. He was awarded the RIBA Gold Medal and the AIA Gold Medal. Some of his most known works include: Villa Mairea (1937–1939), Noormarkku, Finland and Helsinki University of Technology (1949–1966), Espoo, Finland.*

ALBERTI, Leon Battista (1404 – 1472): *was an Italian humanist author, artist, architect, poet, priest, linguist, philosopher and cryptographer; he was considered the stereotype of the Renaissance Man; he is most known for his treatise of architecture entitled De Re Aedificatoria (1452) more commonly referred to as On the Art of Building, and his architectural works such as the facade of Sant' Andrea,*

Mantua, (1471) and the polychrome facade of Santa Maria Novella (1448–70). His contributions to painting were also of great relevance at the time and in the years that followed.

AFONSO, Nadir (1920 – 2013): *was a portuguese architect and artist; he is known for his art which can be categorized as geometric abstractionist (use of geometry, abstraction and expression). He practiced architecture early in his career with Le Corbusier and Oscar Niemeyer, and later studied painting in Paris; he is considered on the pioneers of Kinetic art, and published several books on his own geometry-based aesthetics. He was awarded the Order of St. James of the Sword by the Portuguese Academy of Fine Arts.*

AQUINAS, Saint Thomas (1225 – 1274): *Tommaso d'Aquino, from the latin Thomas de Aquino, also known as Saint Thomas Aquinas, was an Italian Dominican friar and Roman Catholic priest, philosopher and theologian. He embraced several ideas defined by Aristotle and aimed to reunite Aristotelian philosophy with the principles of Christianity.*

ARISTOTLE (384–322 BC): *was a Greek philosopher and scientist, who joined Plato's Academy in Athens and remained there until the age of thirty-seven (c. 347 BC); he wrote and studied many different subjects including physics, biology, zoology, metaphysics, logic, ethics, aesthetics, poetry, theatre, music, rhetoric, linguistics, politics and government. He is considered to be the first scientist in history, and had a profound influence on westerns philosophy.*

ARNHEIM, Rudolf (1904 – 2007): *was a German-born author, art and film theorist, and also a perceptual psychologist. Overall, Arnheim tries to use science to better understand art, explaining visual perception, how visual thinking occurs and why and the overall psychology that sustains art. His most notorious works and considered to be: Art and Visual Perception: A Psychology of the Creative Eye (1954), Visual Thinking (1969), and The Power of the Center: A Study of Composition in the Visual Arts (1982).*

AUGUSTINE, Saint (354 – 430): *named Augustine of Hippo from the Latin Aurelius Augustinus Hipponens is considered to be one of the most important philosophers and theologians in the history of Christianity. He was an early Christian theologian and philosopher whose writings deeply influenced Western Christianity and Western philosophy. He was deeply influenced by Plotinus. Among his most important works are The City of God (5th century AD) and Confessions (written between 397 and 400 AD).*

B

BAUMGARTEN, Alexander Gottlieb (1714 – 1762): *was a German philosopher considered to belong to the Enlightenment school of philosophy; whose studies were centred on the field of aesthetics; he is considered to have defined the word aesthetics as a relation to beauty and taste, which defined the contemporary understanding of the word (invented it's modern use), and is considered a key figure in the development of aesthetic philosophy. His most notorious work is Aesthetica (1750), developing the concept and study of aesthetics.*

BACHELARD, Gaston (1884 – 1962): *was a French philosopher whose studies were centred on the fields of poetics and the philosophy of science. He influenced many subsequent French philosophers, such as Michel Foucault and Jacques Derrida.*

BALL, Philippe (1962 -): *is a British science writer, He has contributed to publications ranging from New Scientist to the New York Times, The Guardian, the Financial Times and New Statesman. His most popular book is Critical Mass: How One Thing Leads to Another (2004), winner of the 2005 Aventis Prize for Science Books. Other publications include: Made to Measure: New Materials for the*

21st Century (1997), Bright Earth: The Invention of Colour (2001), and Elegant Solutions: Ten Beautiful Experiments in Chemistry (2005).

BARTHES, Roland (1915 – 1980): *was a French literary theorist, philosopher, linguist, critic, and semiotician (the formal study of symbols and signs pioneered by Ferdinand de Saussure) who helped establish structuralism and the New Criticism as leading intellectual movements. His main fields of study include semiotics, literary theory and linguistics. Some of the most notorious works include: Critical Essays (1972), Empire of Signs (1983) and The Semiotic Challenge (1994). His first book, Le Degré zéro de l'écriture (1953; Writing Degree Zero), was a literary manifesto that examined the arbitrariness of the constructs of language.*

BELL, Clive (1881 – 1964): *Arthur Clive Heward Bell, commonly known as Clive Bell, was an English art critic, associated with formalism. Some of his most notorious works include: Art (1914), Since Cézanne (1922) and An Account of French Painting (1931).*

BERNINI, Gian Lorenzo (1598 – 1680)*: was an Italian sculptor and architect, considered the leading sculptor of his age, whom is credited with creating the Baroque style of sculpture. As an architect he designed secular buildings, churches and chapels where he combined both architecture and sculpture. His work is generally characterized by the depiction of dramatic narratives with characters embodying intense psychological states. Some of his most notorious sculptures include: Apollo and Daphne (1622–25), Bust of Cardinal Armand de Richelieu (1640-1641) and Ecstasy of Saint Teresa (1651).*

BRETON, André (1896 – 1966): *was a French writer, poet, anarchist and anti-fascist, that developed surrealism as a movement (of which he is considered to be the founder of). His most notorious and influential work is the first Surrealist Manifesto (Manifeste du surréalisme) published in 1924.*

BRÂNCUSI, Constantin (1876 – 1957): *was a Romanian and French sculptor, painter and photographer, who is generally considered one of the most influential sculptors of the 20th-century; his sculptures is abstract in its essence, and emphasize geometrical lines and forms, using different materials and shapes to create visual allusions. Some of his most notorious works include: Portrait of Mademoiselle Pogany (1912) and The Kiss (1907-8).*

BRUNOLLESCHI, Filippo (1377 – 1446): *was an Italian designer and architect, considered to be the first modern engineer and planner and one of the founders of the Renaissance. He is generally well known for developing a technique for linear perspective in art and for building the dome of the Florence Cathedral (the largest brick dome in the world, considered a masterpiece of European architecture), (1419–1436). Other notorious works include: Basilica di San Lorenzo di Firenze, (1419–1480s), Santo Spirito di Firenze, (1441–1481) and Pazzi Chapel, (1441–1460s).*

C

CALDER, Alexander (1898 – 1976)*: was an American sculptor; he is best known as the originator of a sort of mobile sculptures (composed of delicately balanced suspended shapes that move and react in according to touch, air or other external factors). His art can generally be characterized as a sort of Kinetic art, Surrealist in character and with a focus on Abstraction. Besides the 'mobile' sculptures, Calder also developed rigid monumental forms (sculptures), often painted in red, that were placed in public realms.*

CALVINO, Italo (1923 – 1985): *was an Italian journalist and writer of short stories and novels; His best known works include the Our Ancestors trilogy (1952–1959), the Cosmicomics collection of short stories (1965), and the novels Invisible Cities (1972) and If on a winter's night a traveler (1979).*

CARAVAGGIO (1571-1610): *Michelangelo Merisi da Caravaggio, more commonly known as just Caravaggio, was an Italian painter based in Rome, Naples, Malta, and Sicily, between 1592 and 1610. His paintings had a profound influence on Baroque painting, and combine a realistic interpretation of human nature, both physical and emotional. Known for his biblical scenes and exquisite use of darkness and light, some of his most notorious paintings are: Amor Vincit Omnia (1601–1602), St. Jerome (1605–1606) and David with the Head of Goliath (1609–1610).*

CAREY, Joyce (1888 –1957): *was an Irish novelist, whom also examined historical and social change in England during his own lifetime and wrote about art. His most notorious works include: To Be a Pilgrim (1942), The Moonlight (1946) and Art and Reality (1958).*

CEZANNE, Paul (1839 – 1906): *was a French artist and Post-Impressionist painter; his work is considered to have laid the foundations for the transition between the 19th-century conception of art (impressionism) to the 20th century new conception of art (such as cubism). Cézanne's work is generally characterized by it's use of exploratory small brushstrokes, broad planes of colour that compose complex fields and an overall search for an expressive language derived from the subject (both landscapes and people). Some of his most notorious works include: Bather (1885–1887), Madame Cézanne in the Greenhouse (1890–1892) and The House with the Cracked Walls (1892–1894).*

CROCE, Benedetto (1866 –1952): *was an Italian idealist philosopher, historian and politician. His writings expand on numerous topics, including philosophy, history, historiography and aesthetics. He generally sustained that Art expresses emotions, not ideas, and developed an Idealistic and Liberalistic theory. His most notorious works include: What is Living and What is Dead in the Philosophy of Hegel (1907).*

COLLINGWOOD, Robin George (1889 – 1943): *was an English philosopher, historian, archaeologist and writer, that developed his philosophical ideas on metaphysics, history and aesthetics. He is best known for his posthumous book The Idea of History (1946).*

CHRISTO, V. (1935 -): *Christo Vladimirov Javacheff and Jeanne-Claude, were a married couple who created environmental works of art. Some of their notorious works include: Valley Curtain 1972 (USA) and Umbrellas 1991(Japan).*

D

DA VINCI, Leonardo (1452 – 1519): *was an Italian Renaissance architect, artist (painter and sculpture) and scientist; his interests further included invention, science, music, mathematics, engineering, literature, anatomy, geology, astronomy, botany, writing, history, and cartography. He is widely considered one of the greatest painters of all time, and one of the greatest inventors in history. Overall he epitomized the Renaissance humanist ideal. Some of his most notorious painting include: The Adoration of the Magi (1481), John the Baptist (c. 1513–16), Annunciation (1475–1480), The Last Supper (1498) and the Mona Lisa or La Gioconda (1503–05/07).*

DALI, Salvador (1904 – 1989): *Salvador Domingo Felipe Jacinto Dalí i Domènech, Marqués de Dalí de Pubol, more commonly known simply as Salvador Dali, was a Spanish surrealist painter. Dalí also created in various other medias such as film, sculpture, and photography, as well as carried out numerous collaborations with various artists. His artworks are characterized by the use of 'unconscious' vocabulary, connected to dreams, which consisted of a realistic representation of objects, animals and landscapes that merged together without coherence or logic (as they emerged from his subconscious world). Figures were represented in distorted and changed ways, which carried a metaphoric idea. His best-known work is considered to be The Persistence of Memory (1931).*

DANTO, Arthur C. (1924 – 2013): *was an American art critic and philosopher, best known for his work in philosophical aesthetics and philosophy of history. His interests included thought, feeling, philosophy of art, theories of representation, philosophical psychology, Hegel's aesthetics, and the philosophers Friedrich Nietzsche and Arthur Schopenhauer. His most notorious works include: What Philosophy Is (1968), The Transfiguration of the Commonplace (1981), Embodied Meanings: Critical Essays and Aesthetic Meditations (1994) and After the End of Art (1997).*

DE BOTTON, Alain (1969 -): *is a Swiss-born, British-based philosopher and author known for emphasizing philosophy's relevance to everyday life. In 2015 he was awarded "The Fellowship of Schopenhauer",* in *2011 was elected as a Fellow of the Royal Society of Literature (FRSL). His most notorious books include How Proust Can Change Your Life (2007) and Essays in Love which was entitled On Love in the U.S., (1993)*

DESCARTES, René (1596 – 1650): *was a French philosopher, mathematician, and scientist, whom is considered to be the father of modern western philosophy (due to the break with the traditional Scholastic-Aristotelian philosophy prevalent at his time). Known for the introduction of the method of doubt, and the idea of 'I exist' which is impossible to doubt, and therefore, as an absolutely certainty would prove the existence of God. His studies range from Metaphysics, epistemology, mathematics, physics and cosmology.*

DEWEY, John (1859 – 1952): *was an American philosopher, psychologist, and educational reformer; he developed a philosophy of pragmatism and is considered one of the founders of functional psychology; although Dewey is known best for his publications about education, he also wrote about many other topics, including epistemology, metaphysics, aesthetics, art, logic, social theory, and ethics. His most notorious work in regards to aesthetics is Art as Experience (1934).*

DOESBURG, Theo Van (1883 – 1931): *was a Dutch artist, painter, writer, poet and architect, who.is best known as the founder and leader of De Stijl Movement, which sustained a complete abstraction of reality in all artistic forms, and desired to create a cohesive visual language throughout all the artistic forms of creation. Overall, he wanted to establish a visual vocabulary comprised of elementary geometrical forms and pure primary colours, that could be universally understood and applied. Some of his most notorious works include the painting Composition in Gray (1919) and Counter composition XIII (1929).*

DUCHAMP, Marcel (1887 – 1968) : *Henri-Robert-Marcel Duchamp, simply known as Duchamp, was a French, naturalized American painter, sculptor and writer whose works are associated with conceptual art and the Dada movement, of which he is considered to be a founder of. Duchamp is considered to be an artist that helped define the revolutionary developments in the plastic arts in the beginning of the twentieth century.*

DURÃO, Maria João: *Maria João Durão graduated in Fine Arts from the Faculty of Fine Arts of the University of Lisbon and obtained her Ph.D. from The University of Salford, Manchester (2000) with the thesis "Colour and space: an analysis of the relationships between colour meaning expression and the perception of space,". Her research on the phenomena of colour and light ranges from pictorial to architectural space- terrestrial to outer space, having conducted a post-doctoral project funded by FCT. Author of scientific publications she has participated in seminars, congresses, workshops and art exhibitions in Portugal, the United Kingdom, Italy, Germany, Spain, Sweden, Germany, Italy, China, Japan, South Korea, Mexico, Brazil, Australia and the United States.*

E

EDWARDS, Betti (1926 -): *is an American art teacher and author, best known for her 1979 book, Drawing on the Right Side of the Brain. She was a teacher and did research at the California State University, Long Beach.*

ECO, Umberto (1932 – 2016): *was an Italian novelist, literary critic, philosopher and semiotician. His fields of study include semiotics, semiology, art, linguistics, anthropology and human nature; he publishes both fiction and non fiction books. He is best known for his 1980 historical mystery novel Il nome della rosa (The Name of the Rose). Some of his most notable publications include: In Foucault's Pendulum (1988), The Island of the Day Before (1994), The Mysterious Flame of Queen Loana (2005), Experiences in Translation, University of Toronto Press (2000) and Opera aperta (1962, rev. 1976 – English translation: The Open Work (1989).*

ELKINS, James (1955 -): *is an American art historian and art critic; currently he is E.C. Chadbourne Chair of art history, theory, and criticism at the School of the Art Institute of Chicago. Some of his most notorious publications include: 'What painting is' (1999), 'Why art cannot be taught' (2001) and 'Stories of Art' (2009).*

F

FICINO, Marsilio (1433 – 1499): *was an Italian scholar, philosopher and Catholic priest who is considered to be one of the most influential humanist philosophers of the early Italian Renaissance. He revived Neo-Platonism, was the first translator of Plato's complete works into Latin, and thus had a profound impact in the Renaissance's philosophical background.*

FICHTE, Johann Gottlieb (1762 – 1814)*: was a German philosopher, considered a founding figure of the philosophical movement known as German idealism; deeply influenced by Immanuel Kant. Studied the nature of self-consciousness or self-awareness.*

FREELAND, Cynthia (1958 -): *Is a philosophy professor and author focusing on contemporary aesthetics. Concluded her Ph. D. in Philosophy from the University of Pittsburgh with the Dissertation Title Aristotle's Theory of Actuality and Potentiality (1979); is a Professor and Chair of the Department of Philosophy (with tenure) at the University of Houston. Some of her most notorious works include But is it Art? (2001) and Portraits & Persons (2010).*

FREUD, Sigmund (1856 – 1939): *was an Austrian neurologist and the father of psychoanalysis; he developed and expanded on the fields of Neurology, psychology, psychotherapy and psychoanalysis. He had a profound impact on the understanding of the subconscious, the unconscious and dreams.*

FRIEDRICH, Casper David (1774 – 1840): *was a 19th-century German Romantic landscape painter; he is generally considered the most important German artist of his generation; he is known for his interest in the landscape which featured contemplative figures as silhouettes that contrasted against morning mists, open mountains or Gothic ruins. Some of his most notorious works include: Chalk Cliffs on Rügen (1818), Moonrise Over the Sea (1822) and Seashore by Moonlight (1835–36).*

FRY, Roger (1866 – 1934): *was an English painter and critic, and a member of the Bloomsbury Group. As an art critic, he was an advocate of the developments in French painting, to which he gave the name Post-Impressionism, and raised public awareness of modern art in Britain, emphasizing formal aspects of the arts. He wrote on Cezanne, Matisse and other French artists.*

G

GABO, Naum (1890 – 1977): *was a Russian sculptor in the Constructivism movement and is considered a pioneer of Kinetic Art. His art sustained an exploration of space without the depiction of mass, and the belief that art needed to use four dimensionality (which included time). Gabo wrote and published jointly with Pevsner in 1920 a 'Realistic Manifesto' proclaiming the tenets of pure Constructivism. He was a Professor at the Graduate School of Architecture at Harvard University 1953-4.*

GAGE, Mark Foster: *is an American is a practicing and licensed architect, professor, and writer practicing as head of his firm, Mark Foster Gage Architects, in New York City. Currently, since 2001, he is the Assistant Dean, Chair of Admissions and tenured Associate Professor at the Yale University School of Architecture. He has numerous international publications which include: 'The Zero Degree of Ideology.' in Log 17 Fall 2009: 7-8, 'Automotive and Architectural Design' in A+U Architecture and Urbanism Aug. 2009: 84-87 and 'Deus Ex Machina: From Semiology to the Elegance of Aesthetics.' In AD Architectural Design 77.1, Ali Rahim Ed, London (2007): 82-85.*

GHYKA, Matila (1881 – 1965): *was a Romanian novelist, mathematician, historian, philosopher and diplomat, best known in the architectural realm for his geometry studies of proportions and number in nature. His most notorious work being The Geometry of Art and Life (1946).*

GOETHE, Von (1749 – 1832)*: Johann Wolfgang Goethe more commonly known as Von Goethe was a German writer, poet and scientist. His body of work includes epic and lyric poetry, prose and verse dramas, novels, memoirs, aesthetic criticism and research on colour.*

GORMLEY, Anthony (1950 -): *Sir Antony Mark David Gormley (Order of British Empire), is a British sculptor, known for his installation art, sculptures and public artworks. His best known works include the Angel of the North, a public sculpture in Gateshead in the North of England (1998), and Event Horizon, a multi-part site installation which premiered in London in 2007. Almost all his work takes the human body as its subject (based on moulds taken from his own body), however some of his more contemporary work is based on the repetition of geometric elements, forms, volumes and cubes.*

GOODMAN, Nelson (1908 – 1998): *was an American philosopher, known for his work on the problem of induction, logic and aesthetics. His aesthetics is centred around the idea of signs and symbols. He is generally considered one of the most influential philosophers of the post-war era of American philosophy, for his overall work on induction and logic. Other important contributions include his description of the technique 'reflective equilibrium' and his development of mereology.*

H

HADID, Zaha (1950 – 2016): *Hadid was an Iraqi architect, who received the Pritzker Architecture Prize in 2004, and received the Stirling Prize in 2010 and 2011, became a Dame Commander of the Order of the British Empire in 2012 and became the first woman to be awarded the RIBA Gold Medal in 2015 . She is known for liberating architectural geometry, promoting an architecture that was liquid in form and expressive in character, that allowed for multiple perspective points; the underlying idea was that a fragmented geometry evoked the chaos and flux of modern life. Some of her most notorious works include: the London Aquatics Centre (2011), Jockey Club Innovation Tower (2013) in Hong Kong and the Bridge Pavilion (2008), Zaragoza, Spain.*

HEGEL (1770 – 1831): *Georg Wilhelm Friedrich Hegel more commonly known as Hegel, was a German philosopher of the late Enlightenment. Known for developing German idealism, Absolute idealism, and being the Founder of Hegelianism, in which the dualisms of, for instance, mind and nature and subject and object are overcome. Developed a philosophy of spirit that integrates psychology, history, art, religion, and philosophy.*

HEIDEGGER, Martin (1889 – 1976): *was a German philosopher who developed the Continental tradition and philosophical hermeneutics. He is best known for his contributions to Phenomenology and Existentialism. His most notorious work is Being and Time (1927).*

HOLL, Steven (1947 -): *is a New York-based American architect and water-colourist; he has been awarded the Alvar Aalto Medal (1998), the BBVA Foundation Frontiers of Knowledge Award (2008), the AIA Gold Medal (2012) and the Praemium Imperiale (2014). Some of his most notorious designs include: the Simmons Hall at MIT in Cambridge (2013), Massachusetts, the Bloch Building (2007) addition to the Nelson-Atkins Museum of Art in Kansas City Missouri, and the Linked Hybrid (2009) mixed-use complex in Beijing, China. His architecture is known for being closely related to phenomenology: focusing on the experience of space derived from spatial properties such as colour, textures, sound and light.*

HOLT, Nancy (1938 – 2014): *was an American artist most known for her public sculpture, installation art and land art (associated to the landscape); Holt also worked in other media (film and photography) and wrote books and articles about art. Holt's art deal addresses issues of how people perceive time and space, related to human scale; they are created to be harmonious with the land, reflecting the natural landscape, while not disturbing it. Some of her most notorious works include: Sun Tunnels (1973–76), Great Basin Desert in Utah, Sole Source (1983), Dublin, Ireland and Up and Under (1998), Town of Nokia in Finland.*

HUSSERL, Edmund (1959 – 1938): *was a German Professor of philosophy and philosopher most known for establishing and defining the school of phenomenology. His overall ideas defined that transcendental consciousness sets the limits of all possible knowledge, thus, re-defining phenomenology as a transcendental-idealist philosophy. His main field of interests include: Epistemology, ontology and philosophy of mathematics. Some of his most notable ideas include: Phenomenology, epoché (transcendental reduction), the idea of noema, phenomenological reduction and pre-reflective self-consciousness. Some of his publications include: On the Phenomenology of the Consciousness of Internal Time (1893–1917), Formal and Transcendental Logic (1969), and Experience and Judgement (1973).*

I

J

JOYCE, James (1882 – 1941): *was an Irish novelist and poet; regarded as one of the most influential and important authors of the twentieth century. Best known for Ulysses (1922). Other well-known works include 'Dubliners' (1914), and the novels 'A Portrait of the Artist as a Young Man' (1916) and 'Finnegans Wak'e (1939).*

JUDD, Donald (1928 – 1994): *was an American artist (sculptor) and author associated with minimalism. He is generally considered the leading international exponent of minimalism, and its most important theoretician through his most notorious and well known influential work 'Specific Objects' (1964). See case study for further detail.*

JUNG, Carl (1875 –1961): *Carl Gustav Jung, often referred to as C. G. Jung, was a Swiss psychiatrist and psychotherapist and was the founder of analytical psychology. The central concept of analytical psychology is individuation, around which Jung's theories develop. He was a prolific writer, and had a profound influence not only in psychology but also in philosophy, anthropology and literature.*

K

KHAN, Louis (1901-1974): *was an American architect, based in Philadelphia, design critic and professor of architecture (at Yale School of Architecture from 1947 to 1957 and from 1957 until his death, at the School of Design at the University of Pennsylvania), who is generally regarded as one of the most influential architects of the twentieth century; his architecture is generally characterized as monumental, monolithic, that used mostly concrete, pure forms, large volumes and a large scale. He won both the AIA Gold Medal and the RIBA Gold Medal, and his most notorious works are considered to be the Salk Institute (1959), Phillips Exeter Academy Library (1965) and Jatiyo Sangsad Bhaban or National Parliament House of Bangladesh.*

KANT, Immanuel (1724 – 1804): *was a German philosopher, whose major and most influential work is the Critique of Pure Reason (Kritik der reinen Vernunft, 1781. He is generally considered to be the central figure of modern philosophy. Other important works, on ethics, religion, law, aesthetics, astronomy, and history include the Critique of Practical Reason (Kritik der praktischen Vernunft, 1788) and the Metaphysics of Morals (Die Metaphysik der Sitten, 1797).*

KANDINSKY, Wassily (1866 – 1944): *Wassily Wassilyevich Kandinsky was a Russian painter and art theorist. He is known for beginning to paint works that are purely abstract in their character, and developing an according theory. Some of his most notorious paintings include Squares with Concentric Circles (1913), On White II (1923) and Several Circles (1926).*

KIERKEGAARD, Soren (1813 – 1855): *was a Danish existential philosopher, poet, critic and religious author; he is commonly considered to be the first existentialist philosopher, and developed writings on morality, ethics, psychology, and the philosophy of religion. Also developed theories on Aesthetics.*

KUSAMA, Yayoi (1929 -): *is a contemporary Japanese artist and writer, who is known for her Painting, drawing, sculpture, installation art, performance art, film, fiction, fashion and writing. She is considered to belong to the art movements of pop art, minimalism, feminist art and environmental art. Across all mediums, her work focuses on psychedelic colours, repetition, geometry, symbol and pattern. She is most known for her polka dots that have become a trademark of her work, used across all media. In 1977, Kusama published a book of poems and paintings entitled 7, which became one of her most notorious publications.*

L

LANGER, Susanne (1895 – 1985): *was an American philosopher, writer, and educator; she is best known for her theories on the influences of art on the mind and on the human being, the connection of consciousness and aesthetics. She was the first woman to be popularly recognized as an American philosopher. Some of her most notorious publications and books include: An Introduction to Symbolic Logic (1937), Reflections on Art (1961) and Feeling and Form: A Theory of Art (1953).*

LIPOLD, Richard (1915 – 2002): *was an American sculptor, known for his geometric constructions that used only wire as a medium; Lippold, in his early career stages, worked as an industrial designer from 1937 to 1941; after he became a sculptor, Lippold taught at several universities, including Hunter College at the City University of New York, from 1952 to 1967. Some of his most notorious work include: 'Radiant I' (1957) at the Inland Steel Building in Chicago and 'Sun' at the Metropolitan Museum of Art in New York City, which includes more than two miles of gold wire.*

LIBESKIND, Daniel (1946 -): *is a Polish-American architect, artist and Professor. Libeskind founded Studio Daniel Libeskind in 1989 with his wife, Nina, of which he is the principal design architect. His work is generally characterized by his use of sharp angles, intense geometries, and rough materials. His most notorious works include: the Jewish Museum Berlin (1999), the Imperial War Museum North (2001), the Contemporary Jewish Museum (2008) and the Run Run Shaw Creative Media Centre (2011).*

LIPOVETSKY, Gilles (1944 -): *is a French philosopher, writer and sociologist, professor at the University of Grenoble. Lipovetsky's work focuses on the modern world from the latter 20th century to the present. He analyses and criticizes the contemporary world of consumerism, and hyper modernity.*

LOCKE, John (1632- 1704): *was an English philosopher and physician, whom is generally regarded as one of the most influential of Enlightenment thinkers; he is considered one of the first of the British empiricists, following the tradition of Sir Francis Bacon. His studies and interest range from metaphysics, epistemology, political philosophy, philosophy of mind, education and economics. His most notorious works include: Of the Conduct of the Understanding (1706) and An Essay Concerning Human Understanding (1690).*

M

MALEVICH, Kasimir (1878 – 1935): *was a Russian painter and art theoretician, whom is considered the pioneer of geometric abstract art and the originator of the avant-garde Suprematist movement, which was defined by his manifesto, From Cubism to Suprematism (1915), which advocated purity of forms, a new sense of abstraction, simplicity, geometry and a restricted or absent use of colour. Some of his notable paintings are Black Square (1915) and White On White (1918).*

MATISSE, Henry (1869 - 1954): *was a French artist (painter, sculptor, printmaker and writer), known for his expressive use of colour and form and his varied means of creation: creating painting, etchings, linocuts, lithographs, aquatints, paper cut-outs, and book illustration; considered to be one of the artists who helped to define the evolution of the plastic arts throughout the beginning of the twentieth century and one of the most influential artists of the twentieth century (often considered a rival to Pablo Picasso in the importance of his innovations). Matisse emerged as a post-impressionist, and was initially labelled a Fauvist artist; he rejected cubism, and searched in colour and form for a more expressive and intuitive means of creation, that allowed his work to be considered a leading precursor of the modern movements that followed. His varied subjects comprised landscape, still life, portraiture, domestic and studio interiors, and particularly focused on the female figure. Some of his most notable works include: Woman with a Hat (1905), Nu bleu (1907) and La Danse (1909).*

MENDELSSOHN, Moses (1729 – 1786): *was a creative thinker and philosopher, whose writings on metaphysics, aesthetics and theology, had a profound impact on German Enlightenment. Deeply influenced by the metaphysics derived from writings of Leibniz, Wolff, and Baumgarten,*

MERLEAU-PONTY, Maurice (1908 – 1961): *was a French phenomenological philosopher, deeply influenced and connected to Edmund Husserl and Martin Heidegger. He wrote extensively on perception, meaning, art, consciousness and politics and developed his phenomenological views, on existential and embodied phenomenology, metaphysics and epistemology. Some of his most notorious works include : Phenomenology of Perception (first published in French in 1945), Sense and Non-Sense (1964) and Eye and Mind (1964).*

MICHEANGELO (1475-1564): *Michelangelo di Lodovico Buonarroti Simon, more commonly known as Michelangelo, was an Italian sculptor, painter, architect, poet, and engineer of the High*

Renaissance. Considered to be the greatest living artist during his lifetime, he has since also been described as one of the greatest artists of all time. He was considered a true Renaissance man, as he embodied and represented all of the Renaissances ideals and principled. His students included Giorgio Vasari. Some of his most notorious works include: the Pietà, St Peter's Basilica (1498–99) and David, completed in 1504, which is considered one of the most renowned works of the Renaissance.

MONET, Claude (1840 – 1926): *was a French Impressionist Painter, and is generally considered the founding father of impressionism. The term 'Impressionism' is derived from the title of his painting Impression, soleil levant (Impression, Sunrise), exhibited in 1874. Overall hiss painting is characterized by a broad and loose use of colour, that captured the open air landscapes in an atmospheric way; overall, he aimed to capture the changing of light and the passing of the seasons. Some of his most notorious works include: Impression, Sunrise (Impression, soleil levant), 1872, Study of a Figure Outdoors: Woman with a Parasol, facing left, 1886, and the Water Lilies series, c. 1915.*

MONDRIAN, Piet (1872 –1944): *Pieter Cornelis Mondriaan, more commonly known as just Mondrian, is considered one of the masters of modern art; he was deeply Influenced by Pablo Picasso, Theo van Doesburg and Georges Braque and helped define the De Stijl art movement and group, which was founded by Theo van Doesburg. Mondrian attempted to reconcile his painting with his spiritual pursuits. Some of his most notorious paintings include: Gray Tree (1911) an early experimentation with Cubism and Composition II in Red, Blue, and Yellow (1930), which is an example of his mature style.*

MORITZ, Karl Philipp (1756 – 1793): *was a German author, editor, essayist, teacher, journalist, literary critic, professor of art and linguistics of the late enlightenment, and had a profound influence on early German Romanticism.*

MORRIS, Robert (1931 -): *is an American sculptor, conceptual artist and writer, who currently lives and works in New York; he is regarded as one of the most prominent theorists of Minimalism (along with Donald Judd); however his art expands the fields of minimalism itself and as such, he also made contributions to the development of performance art and land art. He has a background in engineering from the University of Kansas and begun his work as a painter, influenced by Abstract Expressionism and particularly Jackson Pollock, but rapidly evolved into three dimensionality focusing on the object and space, their interaction and the communication with the viewer.*

N

NEUTRA, Richard (1854 – 1900): *was an Austrian-American architect, based in Southern California, that helped shape modern architecture. His residential architecture is known for blending art, landscape, and practical comfort, and defining a new idea of modern life portrayed in an architecture that is simple, minimalistic yet filled with depth. Some of his most notorious works include the Kaufmann House (1946) Palm Springs, California and the Freedman House (1949) also in California.*

NIEMEYER, Oscar (1907-2012): *Oscar Ribeiro de Almeida Niemeyer Soares, known more simply as Oscar Niemeyer, was a Brazilian Modernist architect; he won the Pritzker Prize for Architecture (1988), Order of Cultural Merit (Brazil, 2007), Doctor Honoris Causa from the Federal University of Minas Gerais (1995) and many other awards. He is known for both his large scale urbanistic projects such as the city of Brasilia and for his residential architecture such as the 'Casa das Canoas'; overall, he believed in an architecture that used curves as oppose to rigid straight lines, that used natural materials, and that found a specific way to blend and communicate with the landscape. Other notorious works include Oscar Niemeyer Museum, Curitiba (2001-02) and Niterói Contemporary Art Museum (1991-96).*

NIETZSCHE, Friedrich (1844 – 1900): *Friedrich Wilhelm Nietzsche was a German philosopher, professor, critic, poet, and Latin and Greek scholar, drawing widely on the themes of art, philology,*

history, religion, and science. He had a profound influence on Western philosophy and modern intellectual history. Some of his most influential works include: The Birth of Tragedy (1872), Beyond Good and Evil (1886) and The Antichrist (1888).

NOY, Pinchas (1930 – 2014): *Pinchas Noy was a psychiatrist, psychoanalyst and psychotherapist. Member of the Israeli Psychoanalytic Society and the International psychoanalytic society. Professor Emeritus of the Hebrew University of Jerusalem. Has published over 60 papers in international and local journals and books. His main areas of research: Study of primary thought processes and their expression in dreams, art and creativity.*

O

P

PALLASMAA, Juhanni (1936 -): *is a Finnish architect, former professor of architecture and dean at the Helsinki University of Technology and author. He was also the Director of the Museum of Finnish Architecture 1978-1983, and head of the Institute of Industrial Arts in Helsinki. Pallasmaa is also a member of the Finnish Association of Architects, and an honorary Fellow of the American Institute of Architects. Some of his most notorious books include: Encounters – Architectural Essays (2005) and The Thinking Hand (2009).*

PESSOA, Fernando (1888 – 1935): *was a Portuguese poet, writer, literary critic, publisher and philosopher whom is considered to be one of the most significant literary figures of the 20th century and the greatest poet in the Portuguese language. He is known for the creation of heteronyms (imagined characters that possessed independent personalities and extreme views) from which he composed his poetry. His most notorious works include: The Book of Disquiet and Message.*

PÉREZ-GOMEZ, Alberto (1949 -): *is an architectural historian, theorist and writer, known as a promoter of a phenomenological approach to architecture. He is an engineer and architect (graduated from the National Polytechnic Institute of Mexico) and further continued his studies in history and theory of architecture at the University of Essex where he received his Master of Arts in 1975 and Ph.D. in 1979. Currently, he directs the History and Theory of Architecture Program at McGill University, where he is Professor of the History of Architecture. He has numerous publications, the most notorious include: Architecture and the Crisis of Modern Science (1983), Anamorphosis (1997) and Built upon Love: Architectural Longing after Ethics and Aesthetics (2006).*

PICASSO, Pablo (1881 – 1973): *was a Spanish painter, sculptor, printmaker, ceramicist, stage designer and poet, generally considered as one of the greatest and most influential artists of the 20th century; he was the co-founder of the cubist movement, and the inventor of new techniques such as collage and constructed sculpture (sculpture made out of different objects and forms); generally, he is considered both a cubist and a surrealist, however his art escapes categorization; his artistic style is characterized by his search for a new formal vocabulary: expressive nature, new visual vocabularies through distorted, exploded or stylized forms, intense and vibrant colours and large scaled paintings. Some of his most notorious works include: Les Demoiselles d'Avignon (1907), the Guernica (1937) and The Weeping Woman (1937).*

PLATO (424/423 – 348/347 BC): *philosopher in Classical Greece and the founder of the Academy in Athens; was a pupil of Socrates, and teacher of Aristotle; Plato is generally considered to have laid the very foundations of Western philosophy, science and mathematics and is considered to be one of the founders of Western religion and spirituality. He was deeply influenced by Socrates, Heraclitus, Parmenides, and the Pythagoreans.*

PLOTINUS (204/5 – 270): *Plotinus is considered to be a major philosopher of the ancient world, who followed the Platonic tradition, developing a Neoplatonic philosophy. Plotinus is also known for his metaphysical and mystical writings. He is also known for his theory of forms, form of the good and his theories of the micro and macrocosm.*

POLLOCK, Jackson (1912 – 1956): *was an American painter that had a major influence in defining the abstract expressionist movement; known for his unique style of drip painting, he developed paintings that were organic, spontaneous and abstract in their character. He is considered to have revolutionized the world of modern art with his unique abstract painting techniques.*

Q

R

RAPHAEL (1483 – 1520) : *Raffaello Sanzio da Urbino more commonly known as Rafael, was an Italian painter and architect of the High Renaissance. He is admired for his visual achievement of the Neoplatonic ideal of human grandeur, in all his forms of creation. His most notorious works include: the painting The Coronation of the Virgin (1502–3) and The Madonna of the Pinks (c. 1506–7).*

REMBRADNT (1606 – 1669): *Rembrandt Harmenszoon van Rijn was a Dutch Baroque Era Painter and Engraver (Etcher), that is generally considered one of the greatest painters and printmakers in European art and the most important in Dutch history. He emerged in what is considered to be the Dutch Golden Age (Dutch Golden Age painting), which was in many ways antithetical to the Baroque style that dominated Europe. Rembrandt, that achieved youthful success as a portrait painter, he became known for his portraits of his contemporaries, self-portraits and illustrations of scenes from the Bible and his paintings and etchings gave rise to important new genres in painting: focus on darkness and light, dramatic and enigmatic scenes. Some of his most notorious works can be announced to be: The three trees (1643) etching and The evangelist Matthew and the angel (1661).*

RENDELL, Jane: *is a writer, art critic and architectural historian/theorist/designer, whose work explores interdisciplinary intersections between architecture and art. She is Professor of Architecture and Art, and Vice Dean of Research at the Bartlett, UCL, UK. Her published books include Site-Writing (2010), Art and Architecture (2006), and The Pursuit of Pleasure (2002); she is co-editor of Pattern (2007), Critical Architecture (2007), Spatial Imagination (2005), The Unknown City (2001), Intersections (2000), among others. In 2006 she was a research fellow at CRASSH (Centre for Research in Arts, Social Sciences and Humanities) at the University of Cambridge and received an honorary degree from the University College of the Creative Arts.*

RICHTER, Gerard (1932 -)*: is a German visual artist, whom produces abstract as well as photorealistic paintings, photographs and glass pieces; Richter is know for both his abstract works, and his realistic works (originally trained in a realist style and later developed an appreciation for the more progressive work of his American and European contemporaries). Common themes in his work include the play between realism and abstraction and the distortion of images such as 'blurring' a technique for which he is most known for. Some of his most notorious works include Clouds (1982) and Atlas (an on-going visual encyclopaedia of photographs organized by themes).*

RICOUER, Paul (1913 – 2005): *was a French philosopher known for combining phenomenological philosophies with hermeneutics; he developed his ideas following the traditions of other hermeneutic phenomenologists such as Martin Heidegger and Hans-Georg Gadamer. His most notorious work is considered to be The Rule of Metaphor.*

ROHE, Ludwig Mies Van der (1886 – 1969*: Ludwig Mies van der Rohe was a German-American architect, who is generally regarded as one of the pioneers of modern architecture. His architectural style, is defined by an intense clarity and simplicity of forms, use of modern materials such as industrial steel and glass, and generally sustained a structural order combined with an inherent*

interior freedom (free-flowing open space). His most notorious ideas are summarized by his well-known aphorisms: 'less is more' and 'God is in the details'. His most known works include the Farnsworth House (1951), Vacation Home, Plano, Illinois and the Seagram Building Office Tower (1958), New York City, New York.

RUSKIN, John (1810 – 1900): *was an English art critic of the Victorian era, an artist, an art patron, draughtsman, water-colourist and philanthropist. His writings ranged from multiple themes such as: architecture, art, myth, literature, education, botany and political economy, and also ranged in style, writing essays, treatises, poetry, lectures, travel guides and manuals. His most notorious works include: Modern Painters 5 vols. (1843–60), The Seven Lamps of Architecture (1849), The Stones of Venice 3 vols. (1851–53) and Unto This Last (1860, 1862).*

S

SAARINEN, Eliel (1873 – 1950): *Gottlieb Eliel Saarinen was a Finnish architect known for his work with art nouveau buildings in the early years of the 20th century and is the father of the architect Eero Saarinen. He also wrote his theories and ideals and published books on his unique ideas of art and architecture.*

SCARPA, Carlo (1906 –1978*: was an Italian architect, whom also designed glass and furniture; he was deeply influenced by the materials, the landscape, and the history of Venetian culture (spent most of his early childhood in Vicenza); he is best known for his instinctive approach to materials, combining crafts with modern manufacturing processes, his attention to detail and use of geometry. An example of his architecture is found in Museo Castelvecchio which was completed in 1964 carefully balanced new and old.*

SCHILLER, Friedrich (1759 – 1805): *Johann Christoph Friedrich von Schiller more commonly known as Friedrich Schiller, was a German poet, philosopher, physician, historian, and playwright. Known for his friendship with Johann Wolfgang von Goethe. Schiller wrote many philosophical papers on ethics and aesthetics. Overall, he synthesized the thought of Immanuel Kant with the thought of the German Idealist philosopher, Karl Leonhard Reinhold.*

SCHELLING, Friedrich (1775 – 1854): *Friedrich Wilhelm Joseph Schelling, known as von Schelling, was a German Idealist philosopher. Mentored by Johann Gottlieb Fichte in his early years, and influenced by Georg Wilhelm Friedrich Hegel (his former university roommate, early friend, and later rival). Know for his development of German idealism, Post-Kantian transcendental idealism and his general Romanticism in science.*

SCHOPENHAUER, Arthur (1788 – 1860): *was a German philosopher that proceeded from the transcendental idealism of Immanuel Kant and developed his own type of transcendental idealism. He also developed what has become known as a philosophical pessimism. He is best known for his work The World as Will and Representation (1818).*

SCRUTTON, Roger (1944 -)*: is an English contemporary philosopher specialised in aesthetics. Scruton was a lecturer and professor of aesthetics at Birkbeck College, London, from 1971 to 1992. He has published numerous books, all related to aesthetics; some of which include: Art and Imagination (1974), The Meaning of Conservatism (1980), The Aesthetics of Music (1997), Beauty (2009), and Our Church (2012).*

SERRA, Richard (1938 -): *is an American minimalist sculptor known for working with large-scale assemblies of sheet metal, that are placed on specific sites and establish a connection with urban spaces, interior spaces or with open landscapes and sites. His sculptures, thus, are connected to environmental art, site-specific art and neo-minimalism. Some of his most notorious works include: Hours of the Day (1990), Bonnefanten Museum, Maastricht, among many others.*

SHAFTSBURY (1671 – 1713): *Anthony Ashley Cooper, 3rd Earl of Shaftesbury, more commonly known as Shaftesbury, was an English politician, philosopher and writer, whom wrote on various themes and subjects such as aesthetics. He exerted an enormous influence throughout the eighteenth and nineteenth centuries on British and European discussions of morality, aesthetics, and religion.*

STILL, Clyfford (1904 – 1980): *was an American painter considered one of the leading figures of Abstract Expressionism; because his shift from figuration to abstraction occurred prior to Rothko's or Pollock's, he is considered one of the founding fathers of the movement; he developed a new approach to painting, completely abstract, using only pure colours (such as black red or yellow), and morphed like forms.*

STEINER, Rudolf (1861 – 1925): *was an Austrian philosopher, author, architect and esotericist; he is considered to be the founder of the scientific spiritual movement anthroposophy, that has it's roots in German idealist philosophy and theosophy, religion and spirituality (specifically in Goethe). The movement aimed to find a synthesis and union between science and the spiritual dimensions, and worked with multiple fields and in a variety of artistic expressions, including architecture and painting. He developed metaphysical ideas and expanded on Christianity's ideals. Some of his most notorious works include: Truth and Knowledge, his doctoral thesis, (1892), Christianity as Mystical Fact (1902) and How to Know Higher Worlds: A Modern Path of Initiation (1904–5).*

STENDHAL (1783 –1842): *Marie-Henri Beyle better known by his pen name Stendhal, was a 19th-century French writer, who is considered to be one of the earliest and foremost practitioners of realism. He is best known for the novels Le Rouge et le Noir (1830) and La Chartreuse de Parme (1839).*

SPINOZA, Baruch (1632 – 1677): *also known as Benedict de Spinoza, was a Dutch philosopher of Portuguese origin, who is considered to have layed the groundwork for the 18th-century Enlightenment. He is known for the being the founder of the modern conceptions of the self and the universe, and is generally considered one of the great rationalists of 17th-century philosophy. His most notorious works include: 'Tractatus de Intellectus Emendatione' (1662), (On the Improvement of the Understanding) and Ethica Ordine Geometrico Demonstrata (1677).*

SOCRATES (470/469 – 399 BC): *was a classical Greek (Athenian) philosopher considered as one of the founders of Western philosophy. Known today through the writings of his students Plato and Xenophon,*

SULZER, Johann Georg (1720 – 1779): *was a Swiss professor of Mathematics, also connected to the field of electricity, philosopher and director of the philosophical section of the Berlin Academy of Sciences, and translator of David Hume's An Enquiry Concerning the Principles of Morals into German in 1755*

T

TINTORETTO (1518 – 1594) : *born Jacopo Comin, more commonly known as Tintoretto, was an Italian painter and is considered a leading exponent of the Renaissance school. His paintings are generally characterized by their capturing of energy, the use of muscular figures with dramatic gestures, the bold use of perspective in the Mannerist style, and the traditional use of colour and light typical of the Venetian School. Some of his most notorious works include: Finding of the body of St Mark (1548) and St Mark's Body Brought to Venice (1548).*

TROTT, Elizabeth: *is a Canadian philosopher and researcher and is a Professor of Philosophy at the Ryerson University in Toronto; her main fields of research include Social and political philosophy, human rights, race, multiculturalism, Aesthetics, Kant, Hegel, and Metaphysics. Some of her publications include: 'What is Canadian Philosophy?' (2014), Trent University Philosophy Department Colloquium Speaker Series, January 29, 'The Self, The Individual and The Person' (2013), presented at a conference entitled British Idealism and Concepts of the Self, Mansfield College, Oxford*

University, August 27-30, and 'Kant's Legacy: Murder as Art' (2013) Journal of Ultimate Reality and Meaning (2009) Vol. 32 no. 2-3-4, 108-118.

TOLSTOY, Leo (1828 – 1910) : *Count Lev Nikolayevich Tolstoy, usually referred to in English as Leo Tolstoy, was a Russian writer generally regarded as one of the greatest authors of all time. Best known for the novels War and Peace (1869) and Anna Karenina (1877). Also wrote plays, short stories and numerous philosophical essays.*

U

V

VERMEER, Johannes (1632 – 1675): *was a Dutch painter known for portraying domestic interior scenes of middle-class life, with an exquisite use of light and colour. He painted in a very slow manner, and used refined and expensive materials, which explains the small number of works he left behind. Some of his most notorious works include: The Milkmaid (c. 1658), The Astronomer (c. 1668) and Girl with a Pearl Earring (1665), considered a Vermeer masterpiece.*

VITRUVIUS (c. 80-70 – c. 15 BC): *Marcus Vitruvius Pollio, more commonly known as Vitruvius, was a Roman architect (also civil engineer and military engineer) and author during the 1st century BC. He is known for his multi-volume work entitled De architectura, known today as The Ten Books on Architecture; the treatise was written in Latin, dedicated to the emperor Augustus, and aimed to define the laws and principles of architecture.*

VIEIRA, Siza (1933 -): *is a Portuguese architect; he won the Pritzker Prize (1992), Royal Gold Medal (2009), UIA Gold Medal (2011) and the Golden Lion for lifetime achievement (2012); his architecture can be loosely characterized by a minimal approach, attention to detail, simple forms and volumes, and a pristine language that uses light, proportions and scale as their main tools. Some of his most notorious works include: Serralves Museum of Contemporary Art, Porto, Portugal (1998), the* Serpentine Gallery Pavilion (2005) and Iberê Camargo Foundation, Porto Alegre, Brazil (2008).

VIOLLET-LE-DUC, Eugene-Emmanuel (1814 – 1879): *was a French architect and theorist who mainly sustained renovations and restorations of medieval architecture; he won the Royal Gold Medal in 1864 and he is generally considered the first architectural theorist of the modern movement; some of his many restorations include the Notre-Dame in Paris and Basilica of St. Denis near Paris.*

W

WARHOL, Andy (1928 – 1987): *was an American artist, considered a leading figure in the visual art movement known as pop art. Flourishing in the 1960's, his works explore the relationship between artistic expression and celebrity culture. He was considered a renowned and controversial artist, aiming to expand the realms of art itself, using multiple types of media and artistic expression (drawing, painting, printmaking, photography, silk screening, sculpture, film, and music).*

WILDE, Oscar (1854 – 1900): *Oscar Fingal O'Flahertie Wills Wilde, more commonly known as Oscar Wilde, was an Irish playwright, novelist, essayist, and poet. Was one of London's most popular playwrights in the early 1890s, and his most notorious work is considered to be The Picture of Dorian Gray (1890). A short stories (dialogue) that addresses the issues of aesthetics is The Decay of Lying (1889) and The Critic as Artist (1891).*

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Z

APPENDIX C

WILLIAM TURNER PUBLICATION: ATMOSPHERES, PROPORTIONS AND HARMONIES

International Congress – Proportion, (Dis)Harmonies, and Identity Lisbon, Fundação Oriente, 19th-21st March 2015

Atmospheres, Proportions and Harmonies: Form and Colour in the work of J.M.W. Turner

Sarah Frances DIAS*, Maria João DURÃO†

CIAUD - Centro de Investigação em Arquitectura Urbanismo e Design, Faculdade de Arquitectura, Universidade de Lisboa, LabCor-Laboratório da Cor da FAUL, Lisboa, Portugal.

*Sarah.frances.dias@gmail.com; † mjdurão@fa.ulisboa.pt;

Abstract

The focus of the present research is a search for the underlying form and colour principles that define a harmonious atmosphere. As underlying driving questions it is possible to outline: how does geometry and colour define and sustain the values of the harmonious atmosphere?' The underlying search of the work, thus is a desire to understand the conscious and unconscious forms and colour harmonies that define, sustain and compose the atmospheric work of art and their connections to universal principles. For this, the research turns to William Turner's creations and artistic compositions; firstly understanding conceptually and secondly by analyzing fifteen of his paintings individually, so as to draw specific principles and criteria relating them to universal ideals. Turner's work was chosen for his use of the landscape in the communication of values and timeless principles; an example of the invisible hidden geometric orders and colour properties that define the artistic imagery and language. In other words, 'How does Turner use 'harmony' to define 'timelessness' and universal principles?' Be it as an overall image (the general) or in the detail, every work embodies an ''aura'' and that aura is studied and understood through the principles inherent to it, that define its 'formal' and 'intangible' essence. So too, with Turner, this research aims at uncovering. His work, relying in an inherent harmony and balance, through the use of composition, forms and colour, will be the focus of the present research, with the aim of uncovering the inherent properties and universal principles that underlie his complex atmospheric and harmonious creation.

Keywords: Art, Form, Harmonies, Colour, Atmosphere

1. Joseph Mallord William Turner: The quest for harmony, light and timelessness

Joseph Mallord William Turner (1775 - 1851), or simply referred to as J.M.W. Turner, was baptized on 14 May 1775 (birth date unknown) and died on 19 December 1851. He was a British 'Romantic' Landscape Painter, commonly referred to as "the painter of light", his work is regarded as a 'romantic' preface to Impressionism and also an example of the first type of 'Abstract Art'. He was a controversial figure in his days, but today his vision and artistic quest is unquestionable. Turner, although well known for his oil paintings, is also considered one of the greatest masters of British 'watercolour landscape painting'. His work is characterised by broadly applied 'atmospheric' washes of paint, by his unique use of colour, and by his portrayal of the 'natural' world. Turner portrayed the natural world untainted by man, free, full of energy and vitality; this, an 'evidence of the power of God', was an ideal that fuelled all his creations; his fascination by light, is a 'reflexion' that signifies the 'emanation of God's spirit'; this is the reason why his later works led towards abstraction, concentrating exclusively on the 'light' and the 'radiance' of the skies. Turner's landscapes strived for an expression of this 'spirituality' in the world, but his works were highly criticized by his fellow contemporary peers, leading to John Ruskin becoming the first defender of his paintings; Ruskin defended his 'innocence of the eye' and his 'childlike'[1] manner of understanding the world, that preceded an understanding of reason and that lie in an intuitive and harmonious contemplation.

> As Ruskin claims, cited by Bockemuhl (1994): " '' The whole effect of painting from the technical viewpoint is based on our ability to acquire once again that state which one could call the innocence of the eye, in other words a way of looking at things in a childlike manner, through which one perceives spots of colour as such without knowledge of their meaning – as a blind man would see them if his sight were restored all of a sudden''." (1994, 6)

In the same way, on the importance of Turner's work, Birren (1986) claims: "To me there is little doubt that Joseph Mallory Turner (1775 -1851) was one of the greatest colourists of all time " (1986, 8). Also on this regard Bockemuhl (1994) claims: "Yet it is this power to change our vision that renders Turner's paintings a puzzle even today." (1994, 6).

1.1. Turner's atmospheric and harmonious landscapes

Turner's landscapes are endowed with a series of properties that prevail throughout all of his creations. Firstly, his works portray landscapes (portrayal of nature): the ocean, the mountains, boats at sea, sunsets, skies, horizons and seascapes in general define the themes of his work. Secondly, although rooted in reality (with those specific themes), he leads towards abstraction, trying to define an intangible atmosphere, or an atmospheric impression that defines the essence of the 'subject' he portrays. This balance

between the physical aspects of the represented reality and the apprehended perceived abstraction (emotional and psychological) characterize all of his works. To achieve or create that harmonious and ''intangible'' spirit of the moment, or that 'aura', Turner relies on the use of colour and the use of forms (composition).

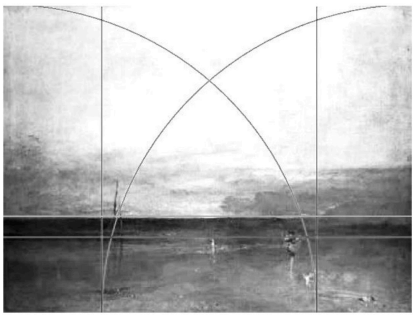


Fig. 1: Geometrical study of the abstracted landscape by J.M.W. Turner

2. Universal laws of harmony and the quest for universal principles

The principles of Geometrical Harmonies and Proportions have fascinated artists, scientists and philosophers throughout the course of history. Priya Hemenway (2005) in her book 'Divine Proportion: Phi in Art, Nature and Science', explains that this fascination can be partly explained by the fact that through the 'Divine Harmonies man understands that he too is part of the Divine Creation; it is by this observation that we find our own place in the universe, understanding that " (…) we are the whole, we are the largest and the smallest of the parts - always in a perfectly balanced ratio of the whole to the largest and from largest to smallest." (Hemenway, 2005, p.8) . Underlying these 'ideal' principles and harmonious proportions that define the universe is the number Phi and the mathematical and geometrical ratios of 1:1.618, derived from the Fibonacci Series (0,1,1,2,3,5,8,…). This ratio, known as the Phi Proportion, also defines the Golden Rectangle, with its unique defining property: if one removes the square (dimension of the shortest side), this will define another Golden Rectangle; a process that repeated infinitely, defines Fractal Forms and also defines the Golden Spiral and other geometrical forms such as the Golden Pentagram. These principle of geometry underlie all of nature and the universe, both in macro and micro scale: in the Nautilus Shell, for example, the increments of growth possess the constant and common ratio of expansion of the Phi Proportion. Besides being found 'everywhere' in nature, the Phi Proportion has also been used by numerous architects and in distinct architectural elements throughout history: from the Egyptian Pyramids, the Gothic Cathedral or the Parthénon in Athens to the more contemporary examples such as the works of Le Corbusier; and also in various works of art, such as the works of Mondrian. What is found, Hemenway (2005) clarifies is "(…) a relation of equilibrium, harmony and symmetry that is very strange; and is so mysterious in its functioning as the code we seek to unravel." (2005, 3). She further accentuates: "The universal laws are recognized in our intimacy as eternally true." (2005, 9). These, intuitively felt, define a harmonious balance and a timeless order to the creations, mirroring and echoing the ultimate works of art, those of nature, the human body and the universe. Although the principles of colour cannot so easily be observed in mathematical terms such as the number Phi and all its derivates, these too are coordinated and defined by universal laws that sustain and underlie both nature creations and human creations, trying to elevate art into the harmonious, universal and timeless sphere of existence. In this regard it is of reference the studies conducted by Faber Birren (1970) that establish a series of 'principles of harmony and contrast of colours' that clarify the universal laws related to colour in the natural and artistic world. However, as an overall principle of colour harmony, Birren (1970) understands it as: "(…) the craft of developing themes from systematic colour relationships capable of serving as a basis for composition." (1970, 72).

3. Harmony in art: conscious and unconscious processes

The geometrical symbol or structure and the colour harmony principles are used as a way of mirroring an intrinsic natural order, balance, harmony and essence of the universe in all fields of art. The 'geometry and colour of life', nature and the universe, define the 'geometry and colour of art', thus granting it with the universal order, harmony and beauty of nature. In geometrical terms, this is explained and studied by Matilda Ghyka (1946) in his book 'The Geometry of Art and Life'. Contextualizing the use of 'geometry' in history he clarifies that from Pythagoras and Plato, principles of proportion were established, leading to the Vitruvian ideal of 'symmetry' and 'eurhythmic', where number defines the code of composition; by this way the order of the Cosmos was maintained, and every creation would mirror the universal ideas of harmony, thus assuring an order between the cosmos (macro cosmos) and man (micro cosmos). Ghyka (1946) further claims that the use of geometrical proportions in both architecture and decorative art throughout history, was and is 'without any doubt, conscious'. (1946, 174); that although inspiration is a key component, the knowledge of the 'theory of proportions' far from being limitative allow for infinite possibilities; he further explains that this is what leads to a 'co-ordinating' artistic principle . In modern art, the use of the golden section, for example, is still found as a compositional structure. However, the author emphasizes that in regards to many contemporary works of both architecture and art, it is unknown if it was used consciously or unconsciously; as examples of this doubt is Seurat's painting Le Pont de Courbevoie and Guardi's painting Lagoon of Venice.

Continuing this debate, and in regards to Turner's work, it is unknown if there existed any prior knowledge and study of

geometry in his works. It is still unknown whether the 'artist' uses geometry in a conscious or in an unconscious way; unlike with colour theory, known to be a subject of study of his. However, it seems clear, that Turner used geometric and colour harmonies in both an intuitive and rational way. Thus, just like nature, the artworks too, grow intuitively and naturally: for, no study of only geometry can claim to understand harmony and balance or an 'aura' of any artwork; no rational understanding of geometry and colour rules alone will produce art. Form and colour grow naturally with the aid of intrinsic and intuitive understanding and conscious processes (an analytical understanding). Just as the life of the painting exists because it is a duality of both abstraction and reality, so too, harmony prevails in a natural order, because it is a balance of intuitive forces and conscious processes.





Fig. 2 and 3: Conscious or unconscious applications of geometry principles in modern art: Seurat's painting Le Pont de Courbevoie and Guardi's painting Lagoon of Venice

4. Colour and form harmony: leading to abstracted spiritual atmospheres

Saarinen (1948) in his book 'The Search for Form in Art and Architecture' explains that there exists a number of 'forms' that are soulless, 'destitute of meaning' and 'superficial', characterised by a 'complacent' acceptance of form instead of a formulation of 'real' form. Neither of the problematics of 'imitation' and copying, identified and defined as: " (…) ''superficially decorative'', ''realistically imitative'' or ''druly practical''." (1948, 11), make art or produce 'form' as soul or meaning. On the other extreme, true 'form' is a materialization of 'true' art; form in its true sense, is 'meaning' and 'soul' that is innate in life, humans and art. Saarinen (1948) further explains that in the quest for the 'meaning of form' it is vital to understand that form expresses the 'mentality' that originates it, thus, emphasizing the relation and connection to the spiritual qualities that are either lacking (in the three types presented previously) or present. As such: "Form conveys its inner meaning with finer vibration and deeper expressiveness than can the spoken tongue." (1948,17). Form, when it express its inner meanings, is felt in the intimacy of life and reflects an inherent meaning. Also in this regard, is Kandinsky's (1977) studies. Painting has 'two weapons' Colour and Form, clarifies Kandinsky (1977) in Concerning the spiritual in art. Whereas form can represent an object alone, colour cannot. The colour, Kandinsky (1977) explains "(…) exercises at once a definite and an indefinite impression on the soul, and produces spiritual harmony." (Kandinsky, 1977, p.28) But for this, the colour in a painting, must possess: a 'definite shade' (a specific shade within the many) which is the subjective component and a 'limited surface' (divided off from the other colours) which is an objective realm (of limits between colours). This defines a connection between colour and form, and the influence of form on colour. Quality and value, then, continues Kandinsky (1977) emerge from the different connections between colour and form; each geometrical form possesses its own spiritual values, despite being abstract they provoke an 'inner suggestion'; the connections between different forms and each colour, provoke associations of elements of spiritual values. Furthermore, for Kandinsky (1977) every form has a meaning and says something both inwardly and outwardly; form, as the 'separating line between surfaces of colour', portrays its 'outer meaning'; but "(…) form is the outward expression of this inner meaning." (1977, 29). Each aspect of form, then, has its specific aim: the 'outline' the external form, is well applied when and only when it expresses its own specific inner meaning. Thus, if form remains abstract, it describes only 'non-material spiritual entities'. It this this internal inner meaning that propels the form definition, and as a composition, form and colour define a harmony that echoes "(…) on a corresponding vibration of the human soul; and this is a second guiding principle of the inner need." (1977, 29).

Kandinsky's understanding of the correlations between form and colour in an abstract way that searches for a harmonious balance between both as a reflexion of inner ideals, sheds light on Turner's quest for the spiritual atmospheres as well as his tendency for a more abstracted creation that accompanied his work's journey.

Also of reference, is the studies conducted by Goethe (1840) on colour and its correlation with the atmosphere, that Turner is known to have understood in great detail even naming one of his paintings as 'Light and Colour: Goethe's Theory' (1843). Goethe (1840) claims that "A single colour excites, by a specific sensation, the tendency to universality." (1840, 174). Goethe (1840) also emphasized the importance of the atmosphere and its influence on colour; space, for him, is perceived as an empty space, filled with a kind of transparent medium that exists in it (either air, gas, water, or another element); these elements, being pure, light transmitting, and semi-transparent transform and empower different ways of perception; the sun for example, says Goethe, varies in colour according to the atmosphere it finds itself in, according the atmospheric vapors that fill it. Turner's atmospheres reflect this condition greatly, and his 'free' use of colour derives partly or greatly, by this understanding; also, his free formed forms reflect the perceptual condition of a hazy atmosphere, that diffuses edges and blends the atmosphere with the elements there represented.

It is not only the importance of colour and form as an expression of an 'inner meaning' as well as an aspiration towards the timeless condition of man, but also, and as such, both are employed in accordance with the natural laws and harmonious properties of the universe: observed and understood, both scientifically and intuitively.

4.1.Colour harmony in Turner

Birren (1986) in his book Colour Perception in Art, explains that Turner's art and achievements influenced greatly most 'colour and art forms' that followed to the present day. Turner possessed, what Birren describes as, 'foresight into a new perceptionism'; this vision of 'foresight' for Birren was much greater than that of the other art movements that followed (such as impressionism, neo-impressionism, post-impressionism, expressionism or op art). For Birren, Turner is an independent thinker in 'colour in art', granted with a ''fantastic memory and imagination.'' (1986, 8). Turner's artworks, Birren accentuates, meant something and portrayed something, setting the path for an 'abstractionist' understanding, whilst being fuelled by storytelling and mythology. By mixing colours freely, he "(…) anticipated the fascination of the impressionists and the neo-impressionists with additive and optical colour mixtures." (Birren, 1986, p.9). Furthermore, it was this free approach to colour that allowed for a luminosity, never before attained, to emerge in his work; on this, Birren asks and answers: "How? By letting pure clean tints blend with subtle greys, a device that went over and beyond impressionism into modern concepts of perceptionism in art." (1986, 9).

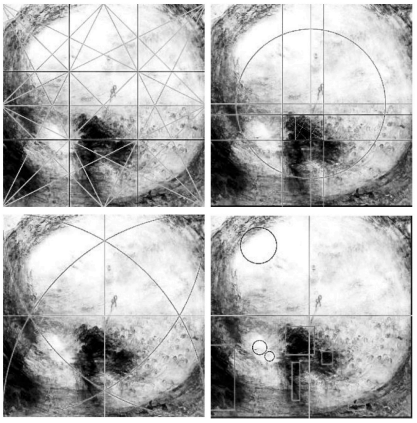


Fig. 2: Form and geometry studies for the principles of harmonies.

5. Principles of harmony

The overall study is composed of a set of a fifteen of Turner's paintings. The choice of these specific paintings were for their qualities and inherent structures: for their strong materialized atmospheric impression and inherent harmonious 'feel'. Some of them define the later period of Turner's work, where he is known to lead towards a complete abstraction; others define his most 'notorious' works and others were simply chosen for their 'appeal' or 'contribution' towards the work itself. For each painting, a series of geometric harmonies were applied: the rule of thirds, the rules of internal division (symmetries and mains lines), the golden section and all of its derivations (such as the golden pentagon and star, the golden spiral, etc.). This search for the inherent structures was done in two distinct ways: firstly the underlying geometries derived from the work itself, searching for the primary lines of reference, within the painting itself and then understanding the relationships between them. And secondly, having the geometric harmonies beforehand, (such as the golden rectangle from the height of the painting, for example) decoding if they are valid, prevalent or even notorious in the work itself, and growing from the relationships that from there emerged. After a series of experiments were conducted from the various studies of each of the paintings, a series of conclusions started to emerge; these were outlined (or each of the paintings individually, and then for the overall studies, drawing abstractions, connections and outlining principles. The intrinsic geometric and colour harmonies, echo universal principles. The principles of harmonies in nature, the DNA that defines its organic structures and its atmospheres as intense scenes (such a snowstorm, tempests at sea, fires, etc.) are reflected intuitively in Turner's creations. These are as follows:

5.1. Man and Nature = A Natural Harmony

Turner's representations of nature, landscapes, his atmospheric representations are intense modes of expressions and emotions: the landscape is intense in the sense that it possesses a life of its own. The beauty of the landscape – representation of nature – is found always with the balance of the presence of man. In almost all of his works, he represents the 'humanized' landscape, a moment in time, where 'man' and 'nature' are either at balance, in conflict or when there is a prevalence of nature over man, or the other way around, man's force imposing over nature. Even in paintings, where 'man' is absent, there is always a reference to man: of man merely being the observer of nature's spectacle. When man is present, it is not direct but in a diffuse way: with the presence of architectural elements in the horizon, the presence of boats in the endless ocean or footsteps on the sand of the sea shore. The presence of man is subdued into nature, and by nature; nature's forces are stronger and more brilliant and more powerful than the 'infinitely' little representation of man. Man, here, is a spectacle and a witness to the marvels of nature, a small participator to the forces of the universe. Even the architectural elements constructed by man are brilliant and beautiful, because they are echoes of the geometries and the harmonies of the skies, the heavens and the solidities of the earth. By this means, the presence of the architectural elements (are metaphorically, symbolically, and existentially) places in the ''horizon line'', at a distance, sitting between heaven and earth, between the celestial bodies of the heavens, and the bodies of matter of the earth. This portrays landscapes that are 'habitated' by man, and defines the most basic and primal kind of harmony: man living in tune and at peace with nature, and man interacting with nature in its most intense modes of expression.



Fig. 3: The principle of the double horizon, or 'perceptual fields' detail of two studies of Turner's painting.

5.2. The double horizon

One of the properties found in the geometric studies is the prevalent condition of what appears to be a 'double horizon'. This means that there is not one prevalent line that defines the horizon line, but a multiple set of 'lines' that define the area of placement where the horizon is. This area seems to reflect the visual perception itself, that does not apprehend the natural world in one 'focused' line but in a multiple array of 'impressions'. As such, this perceptual quality finds echo in Turner's work, where in most of his paintings, no form is defined by a clear single line, but by a complex system of 'blurred' lines that creates a 'mass' or a shape. Furthermore, the horizon is never located in the midpoint of the vertical dimension, but slightly sliding downwards, almost like a mirror of vision itself.

5.3. Relations of balance

Opposites complement each other, and it is highly true and evident in all of Turner's works: if the ground is dark, so the sky is lighter, and the other way around. Imitating the natural balance of opposites and harmony of contrast found in the world of nature.

5.4. Fields of contrast

Another property found in Turner's works is that the areas of most contrast, where the darker and lighter areas are found are defined by the areas outlined by the geometrical inherent forces of the form of the painting itself: its subdivision in mid points, diagonal, etc. By this means, areas of highest contrast are usually placed closer to the mid points of the painting; the darkest areas are closer to the edges, and the lighter areas are usually placed in a centre point or in the intersections of the lines. As such, a high contrast composition is defined: one that echoes life and nature itself in its complexity and dynamism.

5.5. Golden means

Although the golden ratio and the golden section is not completely clear in the organization of the paintings, neither do the dimensions of Turner's work correspond to the ratio, it is possible to identity a number of examples where the harmonious relationships of the golden sections can be found. This is prevalent by the placement of forms in the points that define the golden section, in areas of 'focal points' or by changes of values or contrast in colour patterns.

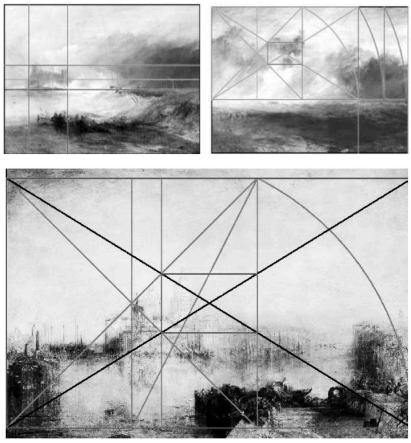


Fig. 4, 5 and 6: Study for the principle of the golden section principle.

5.6. Mirrored existence

The ''as above, so below'' alchemical saying, finds echo in Turner's work. The ''mirrored existence'' is a harmony and an inherent structure that reproduces the geometries in a ''mirrored'' way: the mirror planes can be both vertical, horizontal or diagonal, but in all of them, the ''masses'' of forms and of colour inserted in a ''geometrical grid'', it is possible to understand that they are mirrored to the ''below'' plane in some way. This is found in various paintings, with masses of greater tone and contrast: for example, the darker tones of the skies are mirrored back to reflect darker tones on the ground, in exactly the same area as the ''mirror'' reflects it in.

5.7. Focal Points

The focal points of the paintings always fall on the areas of intersection between geometrical lines that exist in the underlying structure of the work. In these points of

intersection, either more detail, or more elements of more contrast is found.

5.8. Harmonious darkest and lightest areas in relation to each other

It is also possible to clarify that in all the paintings, there is a harmonious balance between the amount of dark areas and light areas. These two, intertwine between each other, forming a complex pattern; also, in order to create a most intense contrast, sometimes they are placed alongside each other, and other times, they are isolated in specific areas; these two play together, never finding one situation without the other.

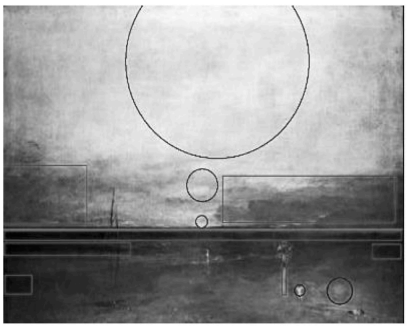


Fig. 5: Study for the principle of harmonious darkest and lightest areas

5.9. Invisible forms and diffused forms

Another component that defines the intuitive geometric patterns in each painting, is that it is possible to identify 'interior invisible forms' that define the centre area of the paintings, where elements are placed in geometric forms: either a circle, a pentagram, or a rectangle, define central 'invisible forms' that compose the overall focus area. However, in general, the forms are diffuse, and do not possess a specific contour, but blend into their surroundings; forms are portrayed as a midst or as a general mass, echoing the perceptual eye in observation of nature; the eye does not make out specific limits, but sees a mass as a whole.

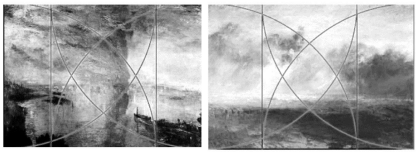


Fig. 6 and 7: Study for the principle of harmonious darkest and lightest areas

5.10. Faded tones and atmospheric muted colours

In each painting, intense colours are used to intensify focal areas and contrast fields; simultaneously, a balance is achieved by the pervading use of faded and toned down tones that define the 'mood' and the 'atmosphere' of the overall composition. The overall colour palettes, that compose a harmonious complex connection, are propelled by an 'idealistic' representation of nature, where each combination allows for a portrayal of an intense scene, by its overall tonalities. Overall, there is a prevalence of combinations of secondary colours and neutral tones: light blues, light pinks, shaded and light purples (define the hazy atmosphere of the sky), light ochers for grounds, dark browns for small areas of contrast, and also whites for contrast, provides an ethereal and harmonious composition.

5.11. Overlaying harmonies

Each painting is a complex array of intuitive harmonies where not one geometrical property or patterns defines one paintings, but where a complex use of a series of geometric harmonies can be found working together, overlapping each other to define one single ''harmonious'' atmospheric landscape abstraction. By this way, a balance between all the elements is achieved in a subtle and ''simplistic'' and ''invisible'' way. The inherent structures work together to define the whole, and each mirror and complement each other (like a body of ''nature'', where all the parts co-operate towards the whole), the details echo the whole and the whole echoes the parts.

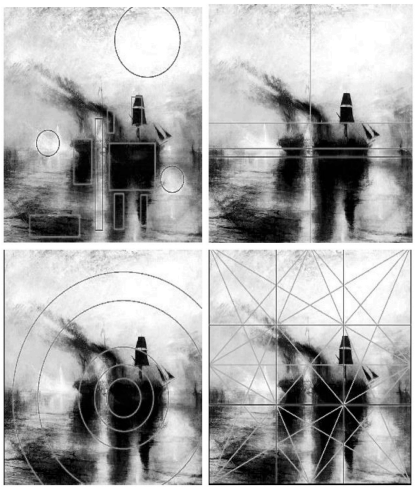


Fig. 8,9,10 and 11: Various harmony and composition studies.

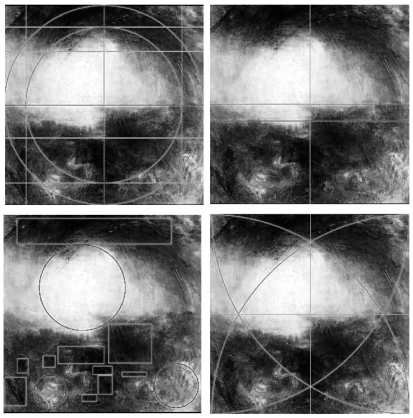


Fig. 12,13,14 and 15: Various harmony and composition studies.

6. Ending remarks

Understanding the natural relations of balance and harmony and the intuitive geometric and colour relations that define Turner's work is key to understanding his paintings and his principles. Although particular, they echo universal principles from the overall whole painting to the most infinite detail. This relation of macro and micro is another characteristic of the 'work's' of nature and are echoed by Turner. The means and ways by which the 'harmonious' relationships are achieved are similar or even the same for several of the works analyzed. In general terms, the underlying geometrical order, balance and harmony that defines Turner's work, the means by which he uses geometry and colour to define those harmonies and inherent balance are the same. Relying in what seems to be the 'principles of nature' and 'principles of timelessness', materialized by colour and form, to characterize his whole volume of work. The harmonious patterns and principles presented and studied throughout the work structure a 'meaningful' significative artistic composition, understood by means of harmony in an atmospheric creation. Thus, a harmonious balance is prevalent in all his work, one that echoes the principles of nature and the universe, and finds 'man's' place within it; one that creates a timeless way of existence.

Bibliographical References

Books:

BIRREN, F. 1986. *Color Perception in Art.* West Chester, Pa: Schiffer Publishing.

BIRREN, F. 1970. *The Elements of Color: A Treatise on the Color System of Johannes Itten Based on His Book the Art of Color*. New York: John Wiley & Sons, Inc.

BOCKEMUHL, M. 1994. *J.M.W. Turner, 1775-1851: The World of Light and Colour.* 1st edition. Köln: Taschen.

GHYKA, M. C. 1946. *The Geometry of Art and Life.* Courier Dover Publications.

VON GOETHE, J. W. 1840. *Theory of colours*. 3. The MIT Press.

HEMENWAY, P. 2005. *O Código Secreto: A fórmula misteriosa que governa a art, a natureza e a ciência.* China: Evergreen, GmbH, Koln.

KANDINSKY, W. 1977. *Concerning the spiritual in art.* New York: Courier Dover Publications Inc.

SAARINEN, E. 1948. *The search for form in art and architecture.* Courier Dover Publications.

APPENDIX D

INTERVIEW TO CONTEMPORARY ARTIST JOSÉ DE GUIMARÃES

Data: 24.03.2014
Duração: aprox. 1.00 hour
Interview by: Sarah Frances Dias and Teresa Almendra

I: O que considera fundamental para um desenvolvimento criativo?
JG: No fundo... quando é que me sinto bem a criar. O problema da criação é um fenómeno complexo, que envolve uma serie de factores, nomeadamente a aquisição de conhecimento. A criação artística embora parecendo aquilo que não é, parece ser muitas vezes um acto espontâneo e não o é; a criação artística é um processo que se vai desenrolando ao longo do tempo, que vai evoluindo e crescendo. Um artista quando começa vai atitubiando, hesitando, não tendo ainda referencias, etc. Com o passar do tempo, então vão surgindo as referencias e os pontos de ineteressa, e começa a criar uma autonomia no seu processo e a desenvolver uma atitude criativa própria que o leva mais tarde a descobrir um estilo. Creio que um artista começa a se sentir a vontade na criação, quando passou uma fase de aprendizagem que pode ser muito longa. Recordo-me de alguns artistas na historia de arte (o Miró, o Picasso, etc.) andaram trinta anos a descobrir, e só ao fim de trinta de anos começaram a encontrar as suas orientações e caminhos.

I: E Você?
JG: Mais ou menos a mesma coisa. Não sei exactamente se foram 30 anos ou menos, mas foi um processo demorado. Até encontrar um caminho...

I: Pois, os fundamentos são dificeis de encontrar.
JG: Sim, claro. Mas é a partir dessa altura, desse momento, que o artista se sente mais a vontade. Domina as técnicas, tem uma ideia, começa a ter uma direcção e a saber o que pretende no futuro, etc.

I: O que está aqui na sua entrada, estas esculturas africanas, são os fundamentos únicos e primeiros da tua arte? Qual é a importância da arte africana no seu trabalho e no seu desenvolvimento? JG: Antes de estar em África, nomeadamente em Angola onde estive 7 anos, vive aqui na Europa. Durante o perido antecedente à minha ida à África, fui aprendendo os rudimentos de uma prática artística, sobretudo na Sociedade Cooperativa de Gravadores Portugueses. Ao fim desses 7 anos, nos anos 50, tinha já uma 'bagagem' como pintor, e fui para África. Quando chego à África, deparo-me com uma cultura que não era a minha, que considero exótica, e quis percebê-la e sobretudo perceber fundamentalmente qual o meu papel em relação a ela; assim, comecei a me interessar pela Arte Africana e pela Arte Tribal. Os meus pontos de referência eram fundamentalmente uma pequena colecção de arte tribal no museu Lanzaro, mas sobretudo li imenso de publicações que existiam e que me forneceram informação sobre este tipo de Arte Tribal.

I: Algumas em especial?
JG: Recordo-me de publicações especificamente sobre uma tribo de Cabinda que eram os Milhoes, que faziam tampas de rina. Eram um conjunto de pequenas esculturas, de baixos relevos, sendo que cada tampa era uma história em si; historias essas com um fundo moral. Eram usadas na familia (entregues de pai para filho, de tio para sobrinho, etc.), e quando se entregava uma dessas tampas, eram mensagens de atenção e repreensão; uma tampa com um tumulo limpo e vazia, por exemplo, significava que tiveste uma vida desregrada, e vais ter uma morte isolada e vazia. Essa foi uma das coisas importantes. Outras publicações, foram por exemplo, as das tatuagens: elementos gráficos que tinham uma determinada finalidade, usadas em determinadas circunstâncias. E mais alguns elementos das produções artisticas dos africanos. Permitiram-me fazer uma análise introspectiva e sobretudo uma análise dos simbolos. Todos esses elementos idiográficos tinham um conteúdo psicológico e mágico. Esse fenómeno, para um artista plástio, é fundamental. No fundo, temos ao nosso dispor material importantissimo para o desenvolvimento artístico.

I: A partir daí teve um vocabulário próprio, atrvés dos simbolos que recolheu?
JG: Exactamente. Permitu-me criar um alfabeto, chamado o alfabeto africano, que criou, uma especie de interface de comunicação entre 'qu proprio' e essa cultura, a cultura africana. As minhas obras passaram ater uma hipotese de entendimento, pelos outros; foi a partir dai que a minha produção começou a ter uma autonomia e uma marca. Esse alfabeto africano, foi também o inicio de um processo que tenho vindo a utilizar ao longo dos anos, depois fui introduzindo conforme as situações que ia vivendo, nomeadamente a temática do México, o Mexicano, da China, entre outros. Construi ainda outros alfabetos deacordo com situações: a série Reubens também me deu possibilidade de desmontar outras situações, etc.

I: A Série Vélasquéz.
JG: Exactamente. Os anos que passaram até eu ter essa autonomia. O facto desse choque com uma outra cultura permitiu que eu acelerasse o processo. Porque havia uma prática, eu estava no terreno, nao era uma situação de informação recebida (livresca ou académica), mas sim através de coisas visiveis e palpáveis, que pude construir este processo de trabalho.

I: Esse processo de trabalho, enraizaido no seu processo criativo, define o seu trabalho, a sua marca e a sua identidade? JG: Este processo sim. Mas vai evoluindo. O alfabeto africano, data dos anos 70, tenho multiplicado as actuações e desenvolvido o processo.

I: Mas qual é a grande mudança entre os Alfabetos e os Neons actuais, como evoluiu e porquese transformou?
JG: Este processo, este fenómeno... de evolução, de ir acrescentando e de ir roubando, altera-se e evolui. Já tudo foi feito... Vamos vendo, adaptando e crescendo. O Vélasquez por exemplo inspirou os mostros sagrados artisticos deste mundo: o picasso, o Franis Bacon, todos eles olharam para o Velasques. E o hoje nao há ninguem que nao tenha olhado para o Picasso. Mas hoje, continuo a olhar para as artes africanas, nao para replicar formas, mas sim para tentar perceber o mecanismo de criação das artes tribais africanas, que é um processo de criação completamente diferente das artes ocidentais. A arte tribal africana, é uam arte para ser usada, não é uma arte decorativa. Estas peças, quando olhamos para elas, elas são agressivas, nao sao propriamente decorativas; elas sao usadas pelas tribos em rituais, etc. São peças que foram usadas e que teem essa intenção. São peças sacralizadas. Para um africano, isto tem o meso valor ou mais que para os ocidentais as imagens religiosas. As pessoas esquecem-se que as imagens religiosas, sao imagens sacraliaadas. E esse poder magico da imagem ninguem lho tira. O artista, ao ver uma peça que provoca uma determinada emoção, pode a partir do que viu, emocionar-se e transformar a emoção. Pode acrescentar ou nao. Hoje as imagens reproduzidas pelos jornais, sao de tal maneira violentas que muitas podem servir de um optimo motivo de trabalho.

I: Em que ambiente cria, considera o espaço de atelier um factor importante? Que propriedades?
JG: Eu creio que há uma confusao entre criação e trabalho. Eu ando sempre com estes livrinhos no bolso, onde escrevo muitas coisas e tomo imensos apontamentos. Estes apontamentos que tomo, sao importantes, é a partir daqui que desenvolvo depois coisas que demoram muitos anos ou imenso tempo a construir. Mas este momento da ideia, a ideia é realmente importante, isso escreve-se num papel e depois desenvolve-se porque depois para se chegar ao problema, é preciso experimentar muitas coisas, muitos materiais, muitos processos, etc. A ideia é o que traz a inovação, depois é materiza-la, e isso é que demora muito tempo. A historia dos neos, foi importante, mas agora estou a trabalhar om Leds. Hoje quase inguem faz neons, são acidentes de percurso. Tenho estado a introduzir os leds no trabalhos, mas a luz de leds é diferente, é uma luz misteriosa, que nao perturba, cria um ambiente magico. Tem presensas completamente diferentes. O led é outra coisa.

I: Estavamos a falar de pinturas, para os materias. Passamos da pintura para a escultura, como vê essa transição entre as artes? JG: Aqui há dois fenomenos, a produção do artista no seu atelier, sem finalidade... vai fazendo e produindo sem fim. Quando se fala de obras exteriores, publicas, é outra coisa. É uma encomenda, que se tem de realizar. Enquando no atelier, posso realiza-los pensando que sao que sao protegidas, de interior; uma peça de exterior, tenho de pensar, que vai ficar sujeita ao exterior, à chuva, ao vandalismo, e tenho de usar outros materiais. Isso implica ter de alterar a forma, nao o conceito, mas sim a sua concretizaçõ. Todas as peças de exteriores, nao andam longe das peças de interiores. As peças de papel, nao teem espessura, mas essas esculturas interiroes de papel, eu sabia que iam ficar resguardadas e protegidas. Quando passei para esculturas exteriores, ou mudava radicalmente o estilo, e passavam a ter volume, peso, etc. Ou continuava a tentar manter uma definição de obra que se aproximasse do que sempre fiz. E entao, conforme as ciscunstancias, fiz por exemplo

aquela peça grande que esta na maginal, que parecem folhas sobrepostas umas sobre as outras, no entanto foi feita em betao armado e tem uma estrutura de ferro no seu interior. No entando, no Japao, as peças sao feitas em aço inox; para já em betao armado é mais caro, o aço inox, é mais facil, sao chapas soldadas, e lá percebem imenso sobre o assunto. Há todo um processo de adaptação às circunstancias que se vao surgindo e isso faz parte do processo de trabalho.

I: O que considera ser a fronteira entre a pintura e a escultura? O seu trabalho define-se por ambas, pelas duas coisas, mas o que é fronteira, há ou nao há? JG: As minhas formas, porque sao formas muito graficas, muito recortadas, sempre se prestaram a se autonomizar da tela. So que, primeiro foi preciso pensar que se podiam autominizar, e depois, como. Isso teve o seu tempo. As pinturas que hoje tenho estado a fazer, sao um bocado mais complexas, mas sao sempre muito gráficas. E muitas dessas obras, tenho-as feitas em caixas, com luz de led no interior; são obras de parede, são pinturas, mas em vez de serem em telas sao em madeira, tem três dimensões, e tem uma caixa furada com luz no interior. Eu acho que as obras de extetiores, continuam a ser obras de pintor.

I: Não conceptualiza uma diferença ? Portanto a génese é a mesma?
JG: Certo, exactamente. Qualquer material permite um desenvolvimento.

I: Como conceptualiza o seu processo criativo? Como o definiria? Intuitivo, expressivo, mágico, psicologico, ou tudo? JG: Eu não sei, eu acho que o meu processo criativo é um processo de aproximações sucessivas, é um processo laborioso. De repente encontro-se numa zona que me apetece desenvolver até à exaustão, e fico dois tres quatro anos a trabalhar nessa; depois canso-me ou a zona já nao funciona, e ando numa zona cinzenta que pode ser longa. É uma zona em que tudo o que se faz, não sai... e sente-se que estamos a tentar encontrar uma saida para aquilo. Para sair, tenho de ecnontrar algo novo, que me entusiasme novamente; que nao seja mais um patiche, que nao seja moer e estar sempre ali a patinar a fazer sempre o mesmo quadro.

I: A genuidade é muito importante para si?
JG: É fundamental.

I: Podemos definir como um ideal? Quando considera que o seu ideal foi atingido?
JG: É sempre dificil chegar ao fim da obra e achar que está satisfeito. Porque continuamos a olhar e a ver coisas, que nao deviamos ter feito, muitas vezes encosto os quadros à parede, e ali ficam... à espera que um dia, qualque coisa. Tenho quadros com diferenças de anos de produção. Muitas vezes, depois revejo o quadro e considero-o acabado. Depende. É normal.

I: Portanto é interior?
JG: Sim. Completamente. Como sabe já o Kandinsky dizia 'A pintura é uma coisa mental.' Aliás já o Leonardo da Vinci dizia o mesmo.

I: Em relação à metodologia de trabalho, o que procura exteriorizar nessa procura de ideias, procura de significado, o que é importante? Um conceito, uma ideia? Como transforma para uma tela final?
JG: Estes apontamentos, ao longo de dias, meses... são ideias. Estas ideas surgem da obessao com que nos vivemos, obcessao de encontrar soluções para os problemas que temos para resolver. Por consequinte, as vezes surge aquela coisa rápida, que ou toma nota, ou esquece. EU tomo nota. Muitas vezes nunca mais penso nisso, outras vezes sim. Aquilo é uma ideia, um esboço, uma coisa em bruto, que depois é preciso lapidar. E esse trabalho de lapidação é que depois é uma coisa muito longo que pode demorar muito tempo. A feitura de uma obra, é um tempo longo de trabalho, estruturada e alicerçada numa ideia que surgiu num ápice. Aliás, os arquitectos fazem milhares de dseenhos, até se chegar a forma final. Comigo acontece o mesmo. Fiz uma exposição, uma restrospectiva de desenho, que compilei ao fim de 50 anos; essa exposição deu um catalogo, um bom catalogo, mostra o que é a prática do desenho. Nos anos 60, eu fazia desenhos abstractos com uma maquina de escrever, onde incluia por vezes poemas e outros elementos escritos, etc; depois foi evoluindo, fui utilizando outros materias... sempre neste conceito do desenho, neste conceito da experiementação basica. Os materiais sao inumeros, podemos fazer obras so com os dedos ou com a ponta de um lápis, mas a experimentação nesta materia, é fundamental.

I: Se pudesse identificar alguns valores que considere fundamentais à sua obra, quais seriam?
JG: Eu acho que, um autor produz obras para expressarem o seu pensamento. Há os autores que

escrevem, e há os autores que se expressam através de pinturas, esculturas, através de meios mais visuais. Eu acho que a arte ou tem uma finalidade, a beleza ou o belo, mas sobretudo a arte tem de servir para alguma coisa: ou serve para resolver os problemas do mundo, ou entao nao serve para nada. A arte tem de ter um poder de actuação. E é nesse sentido que tenho vindo a desenvolver temáticas, onde se percebe de que lado estou. Considero isso fundamental.

I: Em relação a propriedades, a relação da obra com a espaço, quais considera fulcrais?
JG: Uma obra de arte, ocupa o espaço das pessoas. As obras de arte publica estao no espaço das pessoas, e por consequinte, nesse sentido, ou sao meramente decorativas ou teem um poder de presença e actuação no espaço. As pessoas nao imaginam o poder de uma obra de arte em casa, é sobressivo. Uma obra de arte tem um poder mágico. Se não tiver, é um calendário como outro qualquer.

I: Contamina. Toca a todos os niveis, psicologicas, emocionalmente e espiritualmente, concorda?
JG: Sim, claro. Exactamente.

I: Podemos falar um pouco sobre a cor: o seu modo de uso da cor, enquanto caracteristica das suas obras.
JG: Porém, agora tenho estado a fazer coisas exclusivamente a preto e branco. Tenho estado, nos ultimos três ou quatro anos, a fazer uma serie grande, de obras sobre o tema dos Negreiros. Alias fiz já uma ou duas exposições que se chamavam os Negreiros e os Guaranis. É o problema das relações Africa e Brasil. Há uma meia duzia de anos, andei pelo Brasil, por Salvador e isso... comecei a perceber que era África, e fechou o meu ciclo. Trazendo ao de cima toda esta ideia de África e do Brasil, os Negreiros e os Guaranis (indios brasileiros); e é isso que tenho estado a fazer ultimamente, sao formas tatuadas, tatuagens nas formas. Mas voltando à questão, no fundo, o preto é uma cor. A cor, ao contrario do que se possa imaginar, é cor, tem exuberancia e tem presença. Mas no fundo também é um artfício usado por artistas, para poder levar as pessoas a pensar que é so cor. Mas nao ha, no fundo há todo um processo, que subverte depois a cor, e trasnforma a obra num poder mágico, poder actuante, etc.

I: África tambem influenciou esse poder da cor?
JG: Acho que nao. Eu acho que ja usava a cor antes de ir para africa. Acho que a cor veio mais das minhas origens minhotas do que propriamente de áfrika.Quando fui para africa, já era colorista digamos, já era pintor de cor. Alias, toda a POP arte, é uma arte de cor, de impacto visual, dos cartazes publicitarios, etc. Mas africa deu-me o poder magico das formas, que ainda nao tinha percebido e compreendido. Alias a minha pintura tornou-se muito mais simbolica depois de ir para África.

I: Podia falar sobre esse poder simbolico da forma, do simbolo, dessas abstracções que conteem mensagens?
JG: Quando falei no alfabeto africano, é um conjunto de 140 simbolos. Sao formas ideográficas, sao formas que teem um conteudo: mágico, psicologico, etc. E cada forma tem o seu poder de actuação especifico. Quando coloco duas ou três, estou a construir uma história. O simbolo, tem um codigo, que tem essa capacidade.

I: Neste contexto, o que considera ser a relação entre a pintura, a escultura e a arquitectura? Apesar de a genese ser a mesma, como considera ser essa relação? JG: Repare, houve um periodo nos anos 50 com o Arquitecto Conceição e Silva, que convidava artista para colaborarem e intervirem nos seus projectos; havia outros: o Teotónio Pereira, o Nuno Portas. A partir de uma determinada altura, houve um divórcio: Siza Vieira e Souto Moura, dificilmente permitia que um artista agisse nas suas obras. Por acaso, fiz com o Siza Vieira e com o Souto Moura, uma intervenção nos Armazém do Chiado. Mas quando eu penso nos muralistas mexicanos, que pintavam paredes inteiras... isso nao se ve na Europa. Na Europa, a maior parte dos grandes arquitectos, como o Jean Nouvel em Paris entre outros, nao existe essa colaboração. A integração que existiu na Renascença acabou; mesmo no Sec.XVII havia ainda alguma.. mas mais recentemente isso acabou. Contudo, há uma lei, que permite que 1% das verbas da obra publica fosse utilizada com os artistas, contudo, isso nunca foi aplicado. Há paises onde ainda há essa colaboração, por exemplo no Japão, há um convite de artistas recorrente para intervenções em obras publicas, em projectos de grandes escala, de reabilitação e recuperação de espaços antigos, etc.

I: Portanto, acha que há mais interesse nessas colaborações no Oriente?
JG: Acho que sim, diria que sim.

I: Em relação à sua fundamentação teórica, filosofia, que fundamenta o seu trabalho; considera importante? Qual?
JG: Acho fundamental. Todo o meu trabalho tem sido alimentado com investigação. Existe uma vertente atropologica que entrou em mim com força, é um vector que cada vez mais tem vindo a impulsionar e influensionar a minha obra. Hoje nao compreendo a arte contemporâneos sem essa relação antropologica, com por exemplo o Levi-Strauss. Acho fundamental.

I: E faz parte de si, a sociologia e a antropologia?
JG: Desde à 50 anos que sim, que acompanha o trabalho.

I: E a poesia e a escrita?
JG: Sim. A antropologia é fundamental, de facto. E depois há aquelas leituras que fazem parte, que temos obrigação de ler e compreender, os grandes autores. E ainda há aqueles autores que fazem parte das tendências, por exemplo, gosto imenso dos autores da américa latina como o Cortazá, o Gabriel Garcia Marquez. Que preencheram zonas do meu trabalho tabém; quando andei no 'méxico' devorei tudo o que havia e exstia.

I: Há uma imersão na cultura?
JG: Sim, exactamente.

I: E a música? Interfere, ou cria uma pre-disposição?
JG: A música... ha musica que ouco quando trabalho, e depois há musicas que se relacionam com as obras de alguma forma. Isso aconteceu, existe um CD editado de musica de uma compositora, musica electrónica, foi editado quando fiz a grande exposição Retrospectiva na Cordoaria, em que haviam peças musicais inspiradas nas minhas obras. Tenho também a música clássica, usada como fundo ao meu trabalho; motiva e ajuda... serve de base. Ajuda a concentrar.

I: Será que podia explicar melhor, o que considera ser esse papel mágico da arte.
JG: Por vezes olhamos para um quadro.. um quadro do Albers, um quadrado amarelo. Cria em nos uma emoção; um quadro do Matisse, cria em nós uma emoção. Isso é o poder mágico da arte. Despertar emoções, nós sertirmo-nos levados para um estado emocional... isso é o que acho que é o poder mágico da arte.

APPENDIX E

INTERVIEW TO CONTEMPORARY ARTIST PEDRO CABRITA REIS

Data: 4.03.2014
Duração: aprox. 1.00 hour
Interview by: Sarah Frances Dias and Teresa Almendra

I: O que considera fundamental para um desenvolvimento criativo?
PCR: Nenhum artista poderia responder a essa pergunta nem de uma forma conclusiva nem de uma forma clara. Eu reivendico e continuo a acreditar, que um artista é uma provocação, nao é uma decisao exterior ao modo de ver o mundo. Partindo do principio o que assiste à diferenca entre um ser humano que é artista e aquele que não o é, é precisamente porque aquele que é artista, tem por diversas razões, por eemplo razões culturais, de ADN, etc. Tem efecticamente, uma forma diferente de ver a realidade. No fundo, o que se chama a vocação, ou a capacidade criativa, é acima de tudo existir... existe-se sendo artista, existe-se sendo artista. Pode parecer uma tautologia, mas não o é: é-se simplesmente. A partitr daí é que começam as opções. Pode-se decidir, por razoes culturais, por pessoas conhecidas, esperiencias que nos marcaram de forma alienavel, pode-se decidir ser uma pessoa que está em permanente ruptura, que se interroga, que se poe em si proprio a questão de estar em busca de alguma coisa que está um pouco mais à frente, ou pode ser um praticante de belas- artes que faz coisas bonitas que agradam aos outros; o mundo está cheio de praticantes desta ultima qualidade e um pouco menos da primeira, mas também nao sao precisos muitos para poder mudar as coisas. São precisas é pessoas que deixem uma marca historica. Eu, já que a pergunta me foi dirigida, não pertenco decidadamente à qualidades das pessoas que fazem coisas bonitas, embora as coisas que eu faco também agradam muita gente, e provavelmente nao farei parte tambem do grupo das pessoas que ficaram na historia por serem criadores de rupturas, porque as rupturas nao me interessam. Interessa- me o processo da reorganização dos escombros. Eu, acima de tudo como intelectual e criador, interessa-me o processo da reconstrução, em permanência, da memória da humanidade. Nesse aspecto interessa-me muito mais, ir silenciosamente e individualmente, ir pela estrada fora apanhando aquilo que os outros deitaram no lixo, e construir com isso, aquilo que se chamará a contribuição do Cabrita, e que não sera historia de arte, nao e a historia da amabilidade das coisas belas, é aquilo que este personagem em particular nos deixa. As minhas motivações... eu nunca fiz outra coisa desde miudo, em casa dos meus pais, sempre houve quadros a oleo, ao contrario dos outros jovens da minha idade, eu nao tinha o menor interesse por desporto, embora tivesse feito vela muitos anos, nao tinha o menor interesse por ciencia, embora me ineteressasse pela cosmogonia e pela ciencia politica mais tarde, a unica coisa que eu verdadeiramente tinha interesse era desenhar, pintar, e ler muito; fui encontrando ao longo da minha vida pessoas que me ajudaram a fazer isso de uma forma cada vez mais parecida comigo proprio, repare que nao estou a dizer cada vez melhor, mas sim cada vez mais parecida comigo proprio, porque, como saberão, nao podemos em arte definir nem um juizo de valorativo visto de uma perspectiva cronologica, (porque se isso fosse verdade um Tintoretto seria melhor que o Picasso porque estaria mais atrasado no tempo, e nos sabemos que isso não é verdade); nao podemos ter outra perspectiva do que aquela de acreditar que cada artista tem como pretenção uma coisa muito simples que é restabelecer a verdade à imagem da forma como ele olha para o mundo, portanto, as obras nunca serao comparaveis, porque nao se podem comparar dois objectos que pretendem o absoluto e que se excluem mutuamente. Mas isso já um problema de filosofia.

I: O que entende por restabelecer a 'verdade'? Como se define essa 'verdade'? E é o papel da arte?
PCR: A verdade não tem qualquer capacidade de ser definida porque nao sabemos de ela se prende com valores morais, éticos, de indole religiosa, cientificos ou qualquer outros. A verdade so pode ser aquilo que é absolutamente igual ao modo como 'te vês no mundo'. As verdades são tantas quantas as pessoas que existem, e em arte sao tantas quantas os artistas que criam, sob qualquer forma, seja na musica, na poesia, ou na pintura; a verdade é uma inevitável vertigem para o absoluto que toda a criação artistica pressupoe, todos os artistas com a nocao exacta de si proprios, com uma consicencia absolutamente clara daquilo que se espera que facam e daquilo que têm de fazer, têm como unico objecto reorganizar todo o conhecimento, transformar o mundo, e refazê-lo desde o principio. Desde o primeiro e mais primordial traço numa folha de papel, até às especulações teoricas que possam deixar-

nos através dos seus escritos ou das suas palavras; até à ultima obra que fazer e definir todo o corpo do trabalho do artista, é uma gnose, um exercicio de conhecimento, que implica restaurar uma harmonia inicial no mundo, perdida apos o comeco do conhecimento. Se olharmos por exemplo para a gnose crista, ela nao difere muito das outras religioes monoteistas, há um estado inicial de pureza, que é quebrado no momento em que o homem ganha consciencia de si proprio, que é o momento da separacao, do corpo da mae, o corpo teologico, quando o homem ganha conhecimento de si proprio é o inicio do principado da inteligencia, mais tarde virá a cultura e com isso a sensação de perda do paraiso e a necessidade de restaurar essa harmonia. A arte tem esse objectivo. Tem o objectivo de poder de alguma forma recompor, recompoem-se diariamente em todos os atelier, em todos os auditorios de musica, em todos os escritos de poesias e romances, recompoe-se diariamente; nunca obviamente chegará a qualquer fim, como nos bem sabemos e ainda bem que assim é, mas é o exercicio dessa busca que torna acto esta ideia de atingir a perfeição.

I: E portanto, assim se define 'beleza'? Ou não?
PCR: Sim. A beleza é de facto a contrução da harmonia. A beleza é a tentativa frotifera, mas sempre continuada; o exercicio da beleza é o exercicio da procura da harmonia, é preciso restaurar a ferida inicial, essa perca da harmonia persegue, queremos fechá-la, queremos fazer desaparecer essa ferida da pele, queremos encontrar de novo esse estado de graça. Fazemo-lo de muitas maneiras e todas as maneiras que o fazemos, são sempre formas relacionadas com o pensamento: a matemática, a astronomia, ao desenho, a musica, etc.

I: E a sua pintura? È 'bela'?
PCR: A minha pintura tem momentos em que é mais harmonica do que outros.

I: Mas não é o teu 'fito'?
PCR: Não. Por muito distante que isto possa parecer, não há um fito. Quando faço um trabalho, ele já está feito na cabeça e resolvo-o. Há uma especie de visão, que antecede o trabalho, alguna autores e amigos meus artistas, trabalham muito sobre o que estao a fazer; é uma questao de disposição mental. Eu trabalho em extenção e muito rapidamente, posso fazer dez peças numa manha, e de repente, no final da manha escolho aquela e limpo as outras e faço outra coisa qualquer. Cada vez mais à medida que vou envelhecendo há um menor espaço e tempo, entre a forma como se me aparace aquilo que eu quero fazer e aquilo que eu acabo por fazer.

I: Então as suas obras começam com uma visao, e concretiza essa visão. É isso?
PCR: Sim é isso. Eu executo a visão. A visão pode vir por diversos caminhos: uma conversa, um momento de duas pessoas, que me conecta com um pensamento mais visual, que arredondo e transformo num desenho ou noutra coisa qualquer; outra coisa é o que vejo na rua... A unica coisa que distingue realmente um artista de um praticante de belas artes é a curisiodade. Nada que nos facamos existe em nenhum outro lado que nao seja na realidade, por muito abstracta que seja uma pintura ou uma escultura, a verdade é que ela um momento final de um processo mental que partiu de uma coisa qualquer. E, sabendo isso, temos que admitir, é a capacidade interior de um artista se manter em permanente estado de curiosidade que o define. Se tivessemos a fazer este debate do plano da filosofia, estariamos a debater uma categoria filosofica que é o espanto, é a capacidade de uma pessoa poder estar aberta em absoluto aquilo que he chega de fora, e nao exercer nenhuma forma de juizo que criasse hierarquias e recusas, a nao ser baseado num processo de especie de escolha interior.. assim ao longo da vida, ao longo desse processo, define-se a 'tua' marca e a 'tua' autoria. Eu por exemplo, por razoes que desconheco, sempre fui extremamente curioso em relação as coisas que teem a ver com a construcao e com a paisagem; nesse particular, a minha obra, foi ao longo do tempo, sendo construida e conhecida, analisada e clasificada pelos outros, como estando muito proxima desta especie aparente de impossibilidade entre um olhar sobre a paisagem e um olhar sobre a construção. A curiosidade é de facto a unica matéria de que um artista se serve para trabalhar ou que define a sua essencia como artista, porque os que fazem as coisas belas amaveis, sao pessoas que reproduzem modelos ou coisas legitimadas socialmente, e que sabem que de forma ou de outra hão-de vir a encontrar a adesão dos que estao de fora do processo... o publico m geral. Outro tipo de artistas, optando por nao ter esse tipo de adesão teem outra forma de estar no mundo, que é um abraçar, introduzir, interiorizar, trazer o que está fora para dentro de um qualquer sitio onde o pensamento actua e depois faz a seleccao (psiquica, comportamental e que define a nossa individualidade). Essa curiosidade é a base da acção, e dá-nos a coragem de amarmos as coisas muito simples: uma janela, uma sobra no chão, uma laranja que caiu de uma caixa... e essas coisas na sua singeleza e no seu misterio sao de facto o vocabulario do trabalho. Mas para isso, é preciso ter a humildade de ser curiosos, nao podemos ter a arrogancia de achar que

sabemos, essa arrogancia equivale a secura.... e essa secura transforma-se nas artes plásticas. A humildade e a curiosidade ligada a aceitação do que nos é oferecido, transforma-se na arte. A é essa diferença entre Arte e Artes Plásticas.

I: É a curiosidade que dá a qualidade? Que confere a essência à obra?
PCR: Podemos imaginar que estando num permanente exercicio de curiosidade perante o mundo, o artista nao reproduz modelos, mas está preparado para receber estimulos e coisas que nao conhecia e que lhe sao reveladas, e que eles terá de ter a humildade e a inteligencia para as integrar no seu trabalho. Transformando-as, sem duvida... A laranja no chão pode despertar arcos de pensamentos, relacionados com por exemplo a intensidade da cor – traçados universos, chegamos ao sol, e podemos fazer reflexoes teóricas sobre a cor, e de repente transforma-se numa pintura. Quem sabe se por exemplo o Barnett Newman, quando pinta a sua tela laranja dedicada à mae, nao o fez, por ter visto uma laranja no chão.

I: Em relação a esses processo mentais que refere... são fundamentais?
PCR: Teremos que perceber (ou imaginar) que existe um conjunto de factores. A unica coisa que nao conta muito de facto é o grau de cultura (se a assumirmos como conjunto de conhecimentos adquiridos) temos que imaginar que as culturas sao etnocentradas, por um lado temos a cultura ocidental, cristã, com todas as questoes da dialetica, do espirito positivista etc, por outro lado, a cultura chinesa, sofisticadissima, com milhares de anons, sem um pesnamento centrado, mas sim explodido e horizontal. São totalmente diferentes, contudo., o que fara que um olhar ocidental se emociene com uma obra de arte feita a partir de um pensamento ao qual esse olhar é completamente estranho. Portanto, a capacidade de nos podermos emocionar com objectos que nao sao anacronicas (porque nos emocionamos com as pinturas do El Greco?)... o processo pelo qual a arte transforma o pensamento e muda o olhar dos individuos, nao é um processo que é exclusivamente baseado na cultura. Existe uma instancia subjectiva e psicologicamente analitica, que faz com que esses objectos, que sao criados, sem qualquer utilidade imediata, somos a unica especie, em que alguns de nos produzem coisas que nao servem para nada. Isto é a quintessencia do milagre da nossa existencia. Passam-se milhoes anos, aparece uma espécie, que consegue chegar a uma instancia extraordinaria que é: faz coisas que nao teem utilidade (inscrita no processo normal da vida). Será verdade? Será que nao teem mesmo? Será que essa forma de inutilidade nao tem a capacidade de despertar em nos estimulos mentais? Se calhar será atraves da criação artistica, que podemos imaginar que o cerebro possa ser expandido por alguma razão. Nesta especie de inquietação permanente que podemos esperar ser melhores de alguma forma, numa forma de preservação e contunuação da vida. Nesse aspecto, o processo mental na criação artistica, ... a palavra processo faz me pensar que existe qualquer coisa que desenrola um conjunto de acções e actividades, fisicas, manuais, ou meramente espirituais, pretendentes a obter determinada coisa mais além ou fora de si proprio. Se calhar, o processo, não existe. Somos nós próprios em acção. Eu tenho um processo para espetar um prego numa madeira, em relação ao processo da criação artistica... nao sei se podemos falar em processo. Agora lembrei-me de uma coisa, aquela frase extraordinária da Gertrude Stein: 'Uma rosa é uma rosa é uma rosa' provavelmente é a coisa mais proxima do quero esclarecer: esta frase, que tem uma carga poe´tica extraordinaria, mas tem muito mais do que isso, tem uma espécie de processo de revelação continuado (uma coisa que sai de dentro de uma coisa que sai de dentro de uma coisa) e nao so o plano de analise semantica é complexo como tambem no ponto de vista de imagem, que quase absorve a propria noção da realidade. Pode sempre continuar, sem nenhuma repetição.. há uma noção clara de que no entendimento de um qualquer acto performativo de indilo espiritual ou fisica, nao ha uma compreensão que separe a causalidade do objecto. Os orientais nisso sao melhores, têm a noção de como as coisas se gerem umas às outras, e de como por contaminação se pode imaginar uma concepção do mundo, intuitiva mas ao mesmo tempo reveladora. Não conseguimos explicar a realidade adoptando um principio de aritmética. Um mais um não é necessáriamente igual a dois. É claramente insuficiente para explicar a realidade.

I: A relação entre arte e arquitetura.
PCR: Temos uma coisa muito bonita que é 'arquitectura' em grego quer dizer carpintaria, e prende-se muito com a questão do travejamento e da construção da casa. A consolidação da cultura clássica, a questao da arquitectura arrasta inevitavelmente a questao da origem do mundo. Não é por acaso que nalguams perspectivas teologicas ou mesmo sectoriais, há uma identificação do criador do universo com o grande arquitecto. O que se passa aqui? A presença humana no mundo nunca poderá ser caracterizada pelo enetendimento desse mundo. Nos temos de facto uma irrevogável diferença da natureza, somos parte dela (biologicamente), mas somos o palco da existencia duma outra qualidade, e fazendo parte dela, nao temos a capacidade de a conhecer. Temos presente uma gravissima questao

filosofica, que é, como é que nos fazemos parte de um grupo em relação ao qual nao temos qualquer capacidade de adesao ou de fazer parte. Assim, afirmamos sobre a natureza (o territorio de Deus), de forma a reencontrar uma proximade (impossivel) com a natureza, é sobre construirnos, ou seja, criarmos a casa. So temos a perspectiva de natureza a partir do momento que definimos duas linhas: a linha vertical (presença do homem) e a linha horizontal (horizonte – dános a medida da distancia). A natureza... o que nos rodeia, so pode ser vista a partir da casa, e só ganha sentido quando a vemos a partir da janela e da porta da casa. No meio da natureza, nao ha filtros de entendimento. O mundo é de facto da forma do que construimos. Só e mensuravel a partir desse além e de nos (horizontal e vertical), e só ganha sentido através da construção. Neste sentido. Aquele grupo restrito que acha que a arquitectura é a mae das artes, terá razão. Mas esbate sobre outras razoes, porque a arquitectura tem um pecado, uma mancha original no fundo do coração, que é o facto de ser útil. Enquanto que as artes foram abensoadas com um selo de falta de mácua, que é a sua absoluta inutilidade. Há uns anos que andamos neste problema. Sendo certo que os piores arquitectos sao aqueles que pretendem e querem artistas, os grandes arquitectos são aqueles que têm que construir. Aqueles que pretendem encontrar-se numa sombra que julgam ter perdido de artistas... esses estao perdidos.

I: (pausa)
PCR: Há uma frase extraordinária do Picasso que dizia que as melhores esculturas são sempre feitas por pintores. Esta fase, de alguma forma podemos traduzi-la para esta conversa com o Barragan. No fundo, é preciso ter um olhar sobre o mundo e isso é que define como artista. Uma coisa é seres arquitecto que tens um modo de pensar como artista, e fazes obras que ganham essa qualidade unica de serem obras de arte. Outra coisa é seres um arquitecto que acha que quer ser artista, e anda a inventar coisas e enterrar a arquitectura em formaa de 'bolos' para artistas, e a fazer coisas que sao inuteis mas que tambem sao manifestamente desagradaveis para viver. A casa em Nápoles, a casa Malaparte, é um exemplo de um objecto puro de arquitectura e de arte, vamos esquecer de ambos arte e de arquitectura, a casa é um objecto puro e pronto. É uma coisa em relação à qual há uma harmonia plena com toda a humanidade. Agora, o que que essas coisas tem? Que passam os anos e ficam assim? Uma pintura do giotto, ou uma poesia japonesa... ha coisas que fiemos ao longo da nossa existencia que se um dia fizerem um capsula para enviar para o espaço, provavlemente o que teremos que mandar é coisas dessas. Nada na politica internacional me faz pensar que tenhamos dado grandes saltas na humanidade.

I: Gostava que elaborasse um pouco sobre esses modos de representação e unioes entre escultura, pintura, arquitectura e espaço. Quando fez aquela exposição em Serralves das paredes, em que fase estava? O que pretendia atingir?
PCR: É notória e publica a minha dissenção entre o meu trabalho e a arquitectura. Do ponto de vista do jornalismo (repare que nao digo critica), existe uma tendencia para facilitar, por falta de discernimento e cultura e em geral. A maior parte das pessoas que escreve sobre o meu trabalho, afirma que eu trabalho na area da arquitectura, e eu passo a vida a explicar que nao. Sou fascinado pelo acto da construção, sobre a questão da marcação no territoiro do homem sobre o mundo, por uma razao muito simples, a arquitectura, para mim, terá muitas facetas e muitas ramificação, mas a meu entender a sua marca original é de indole sociológico. A arquitectura faz a gestao das tenções relacionais no quadro urbano, ou seja, cria equipamentos, desenha cidades, rasga estradas, para gerir as contradições de um sistema social injusto (tem que por a viver na mesma cidade), tem a preocupação de fazer a gestao desta enorme panela de pressão, que é como vivemos nesta cidade nesta polis, sem nos desatarmos aos tiros uns com outros. O grande arquitecto a esta luz é o Haussmann, que com uma experiencia de construir prisões, deram-lhe paris, e ele fez aquelas coisas belissimas, com uma função de ordenar e controlar a população. Essa é a essencia da aqruitectura: gerir as contradições sociais, politicas, e economicas, e fazer convivr no espaço da polis todas as fragmentações do edificio social. Isso é arquitectura e eu nao tenho nada a ver com isso. Eu tenho a minha forma particular de olhar para as coisas, mas eu serei um artista envolvido pela questao da construção, a um nivel relacionado com a filosofica, com a sociologia mas nao radica no terreno de entendimento sociologico e de gestao de politica imediata – esse sim, o dominio da arquitectura. Nesse particular, e considerando que o meu inetresse é esse momento poetico e silencioso de por uma pedra sobre a outra, e essas duas pedras sao ja o retrato do mundo, sao a nossa forma de poder entender o mundo.

I: Esse momento poético é transversal aos diferentes modos de representação ou de concretização? Certo?
PCR: Certo. Nos temos a noção, de que a poesia como utilizacao de linguagem é de longe mais eficaz e mais rica, e mais plena do que por exemplo um romance. Ou seja, a circunstancia de que um conjunto de palavras, aparentemente desprovida de narratividade, poder ser ao mesmo tempo mais

enriquecedora e estar mais proxima do cerne da representação do mundo, do que propriamente a prosa, faz-nos pensar que essa qualidade poética, nao tem apenas a ver com a palavra, mas é provavelmente uma forma condensada de ver o mundo e pode-se manifestar como uma equação matematica de repente aparece, como tambem ser aplicado na musica. A qualidade da poesia (nao as rimas e as quadras) é a qualidade de exercer de uma forma concentrada o brilho da inteligencia, como se houvesse a criação de uma especie de chave de entendimento.

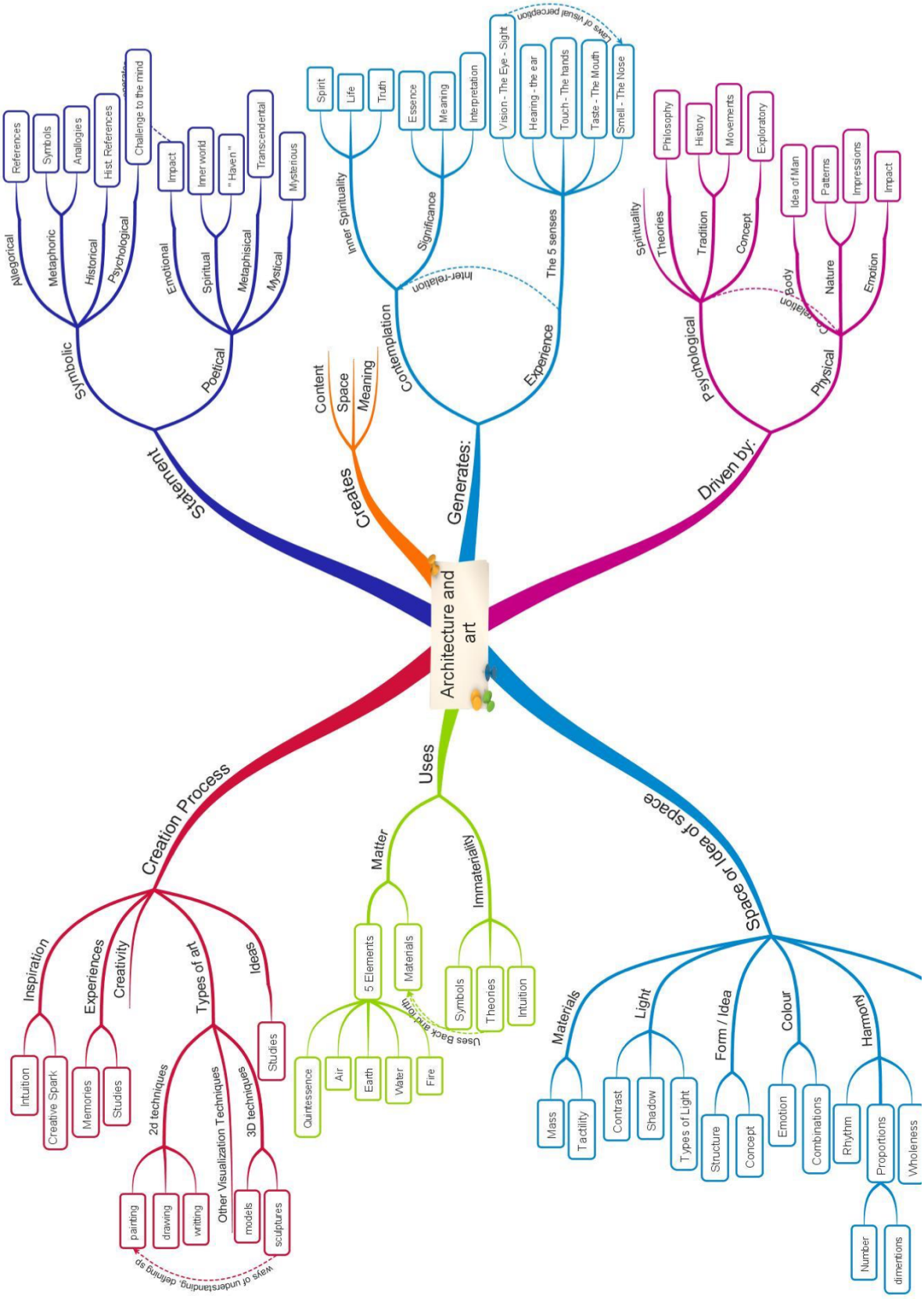
I: Um dos conceitos recorrentes no seu trabalho, é a noção de 'Habitar a Ausência' e de 'Compensar o Eu'. É esse o objectivo recorrente comum em todas as suas obras?
PCR: Não é um objectivo, é uma condição inevitavel porque, diria, é o ponto de onde se parte (que se coloca em antagonia, com o objectivo, que pressupoe ser o ponto onde pretendemos chegar). Porquê a Ausencia? Tal como disse que nao interessa ser de vanguarda, e que nao me interessa essas questões de ruptura. Sim, estou interessado na reconstução de apanhar os restos e com eles repor uma qualquer possivel harmonia, interessa-me os lugares pelos quais passou a humanidade. Essa ausencia, é o territoria que tem o sintoma de uma presença que ja nao existe, mas que foram deixadas sinais e marcas, que nos faz saber que foi uma terreno habitado. Interessa-se percorrer essa estrada em que os lugares vazios se vao acrescentando uns aos outros, à frente, estou eu, que se vai movendo, para perceber como vao avançando. E dou-lhes o que nem eles sabem de si mesmos, a partir dos restos que deixaram. Quando se fala nessa ausencia, eu diria sim, há uma ausencia. Fiz uma peça chamada Absent Names, que concentra o que estou a dizer; essa aunsencia é mais rica do que o som e o caos da presença; para se ouvir bem, fechas os olhos e ouves o que se passa, atras dos movimentos das pessoas, e perceber porque fizeram isto ou aquilo... se tizemos que os artistas sao os testemunhos sociais do seu tempo, isso é apenas meia verdade, eles sao os testemunhos sociais daquilo que o tempo se virá a transformar, porque sabem, com aqueles residuos, conseguem antever; os artistas veem além...

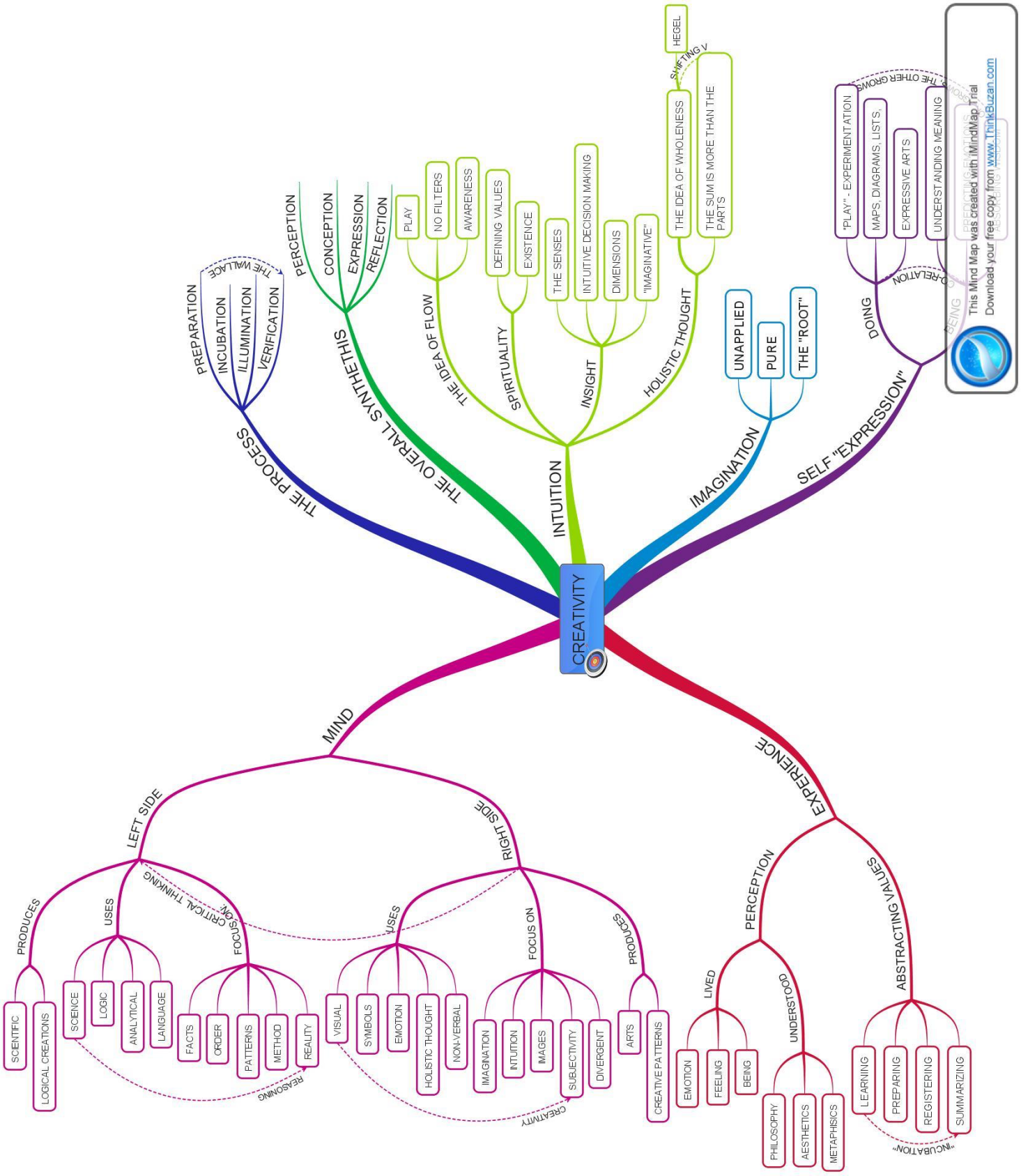
I: A questão da Memória. Quer salientar algum aspecto?
PCR: Há tendencia de confundir Memoria com Nostalgia, sao conceitos diferentes. Aliás a memoria é um conceito, a nostalgia é apenas um estado de espirito. Por memória, um territoria particular da criação artistica, entendemos a capacidade... de facto a memória e uma capacidade projectiva, é a construç~~ao de um corpo terorica, estetico, de beleza, que se reporta mais a frente. Nos construimos a 'memoria'. Devolvo o que me deram, acrestado de um olhar que sintetiza, transforma e projecta. A memoria, aqui, passa a ser um acto de lancamento para a frente e nao a recolha que está para tras. Neste aspecto é preciso perceber o conceito de mempria fatalistica e quase romantica que se prende com o conceito de nostalgia... a memoria nao é lembrar-se de uma coisa que aconteceu, é a construção de um modo de pensamento para a frente, atraves de pedaços deixados.

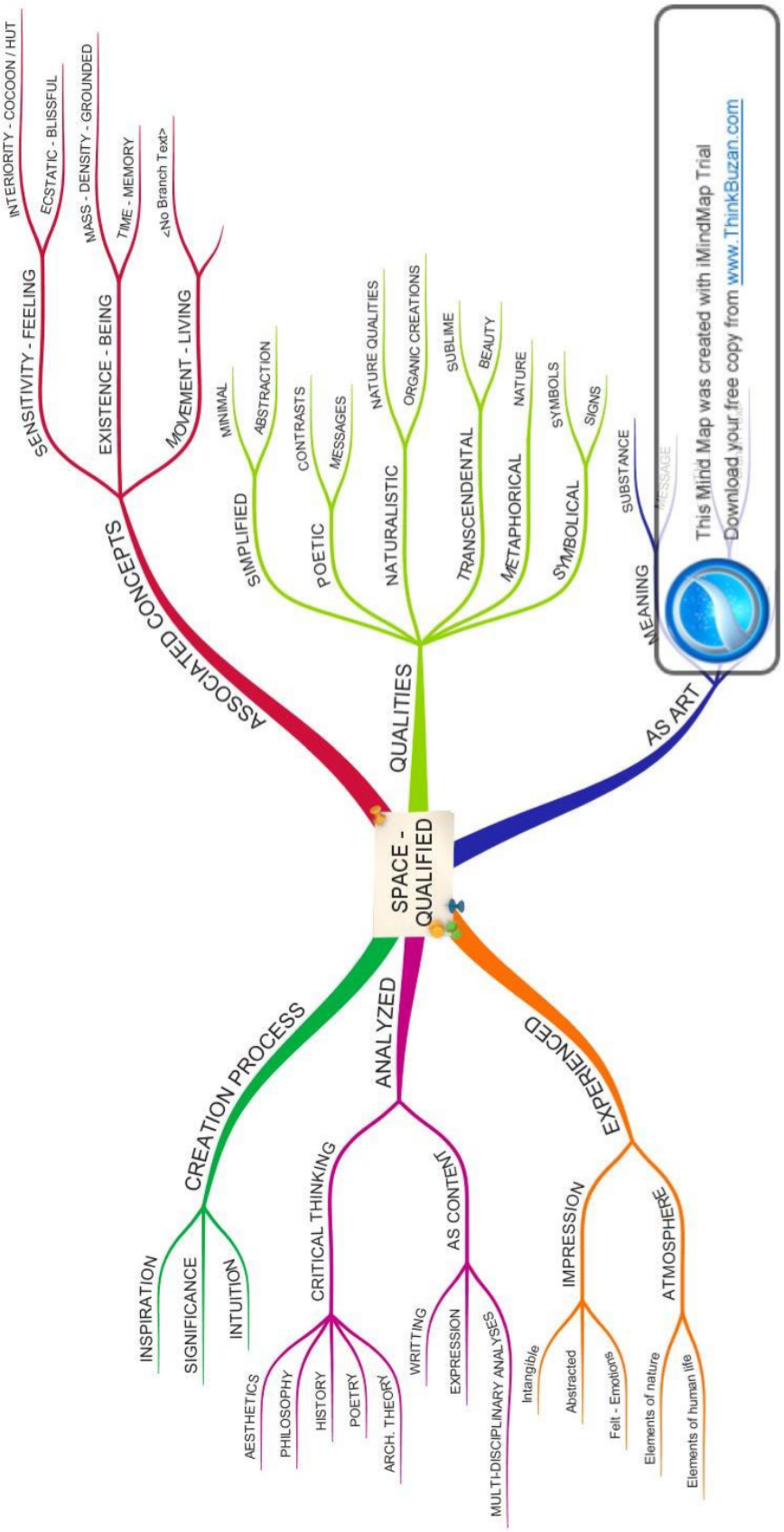
I: Absolutamento intenso? Define-o?
PCR: So podemos convocar a noção de artista para ti proprio, se formos absolutamente impiedoso. Intensidade prende-se com uma forma absoluta, de como desaperces no que queres ser e fazer. Não conseguimos nunca desenhar um espaço, num verdadeira, nao existe espaço entre o que é o que faz. Por muito contraditorio que possa parecer... é um todo. Essa intensidade é absoluta, a curiosidade, tem de ser uma abertura total, sem constrangumentos. Poderas manter uma vida normal, um artista em isolamento nao será artista.

APPENDIX F

ANALYTICAL TREE DIAGRAMS OF THE THESIS




CREATIVITY
INTUITION
THE PROCESS
PREPARATION
INCUBATION
ILLUMINATION
VERIFICATION
THE WALLAGE
THE OVERALL SYNTHETHIS
PERCEPTION
CONCEPTION
EXPRESSION
REFLECTION
THE IDEA OF FLOW
PLAY
NO FILTERS
AWARENESS
SPIRITUALITY
DEFINING VALUES
EXISTENCE
INSIGHT
THE SENSES
INTUITIVE DECISION MAKING
DIMENSIONS
"IMAGINATIVE"
HOLISTIC THOUGHT
HEGEL
SHIFTING V
THE IDEA OF WHOLENESS
THE SUM IS MORE THAN THE PARTS
IMAGINATION
UNAPPLIED
PURE
THE "ROOT"
SELF "EXPRESSION"
DOING
"PLAY" - EXPERIMENTATION
MAPS, DIAGRAMS, LISTS,
EXPRESSIVE ARTS
UNDERSTANDING MEANING
"THE OTHER GROWS"
CO-RELATION
BEING
MIND
LEFT SIDE
PRODUCES
SCIENTIFIC
LOGICAL CREATIONS
USES
SCIENCE
LOGIC
ANALYTICAL
LANGUAGE
CRITICAL THINKING
FOCUS ON
FACTS
ORDER
PATTERNS
METHOD
REALITY
REASONING
RIGHT SIDE
USES
VISUAL
SYMBOLS
EMOTION
HOLISTIC THOUGHT
NON-VERBAL
FOCUS ON
IMAGINATION
INTUITION
IMAGES
SUBJECTIVITY
DIVERGENT
PRODUCES
ARTS
CREATIVE PATTERNS
CREATIVITY
EXPERIENCE
PERCEPTION
LIVED
EMOTION
FEELING
BEING
UNDERSTOOD
PHILOSOPHY
AESTHETICS
METAPHISICS
ABSTRACTING VALUES
LEARNING
PREPARING
REGISTERING
SUMMARIZING
"INCUBATION"
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SPACE - QUALIFIED
ASSOCIATED CONCEPTS
SENSITIVITY - FEELING
INTERIORITY - COCOON / HUT
ECSTATIC - BLISSFUL
EXISTENCE - BEING
MASS - DENSITY - GROUNDED
TIME - MEMORY
MOVEMENT - LIVING
<No Branch Text>
QUALITIES
SIMPLIFIED
MINIMAL
ABSTRACTION
POETIC
CONTRASTS
MESSAGES
NATURALISTIC
NATURE QUALITIES
ORGANIC CREATIONS
TRANSCENDENTAL
SUBLIME
BEAUTY
METAPHORICAL
NATURE
SYMBOLICAL
SYMBOLS
SIGNS
AS ART
MEANING
SUBSTANCE
MESSAGE
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CREATION PROCESS
INSPIRATION
SIGNIFICANCE
INTUITION
ANALYZED
CRITICAL THINKING
AESTHETICS
PHILOSOPHY
HISTORY
POETRY
ARCH. THEORY
AS CONTENT
WRITTING
EXPRESSION
MULTI-DISCIPLINARY ANALYSES
EXPERIENCED
IMPRESSION
Intangible
Abstracted
Felt - Emotions
ATMOSPHERE
Elements of nature
Elements of human life