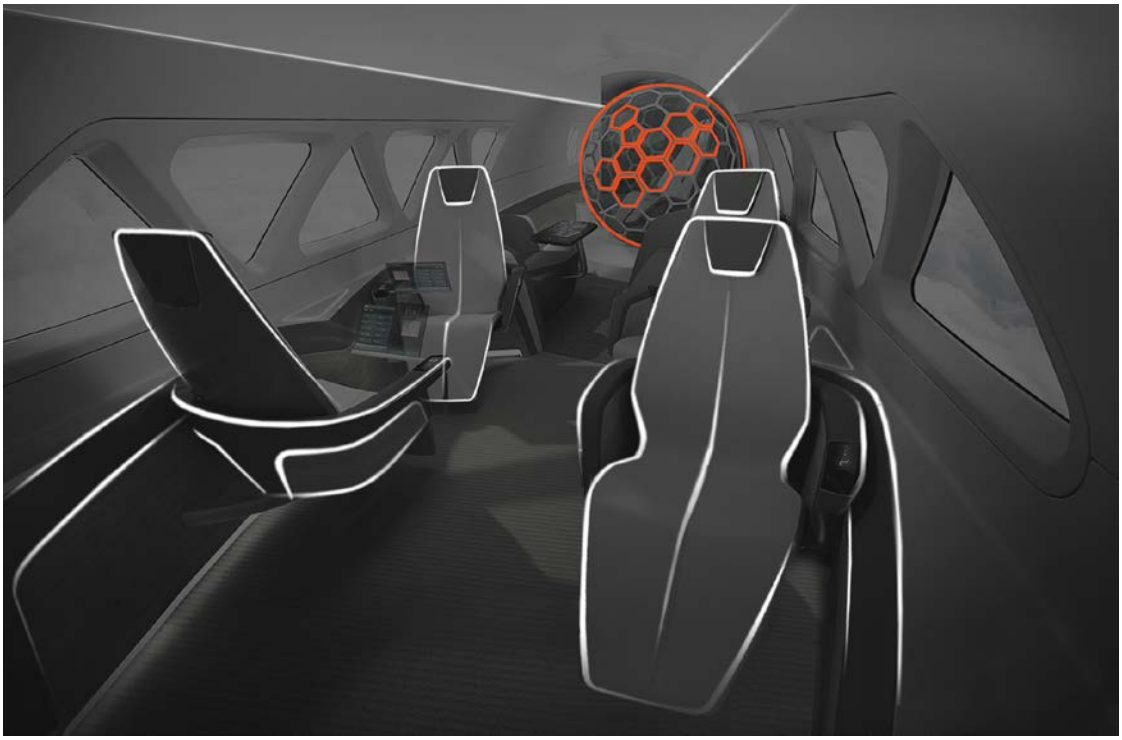
The Form Language of Almadesign

A study on Context, Syntax and Semantics



VOLUME II - ANEXOS

Ramo de Doutoramento:
Design
Doutorando:
André Galhardo Lopes de Castro
Orientadores:
Doutora Rita Assoreira Almendra
Doutor José Rui Marcelino

Ano 2018
Tese especialmente elaborada para a obtenção do grau de doutor

FACULDADE DE ARQUITETURA
UNIVERSIDADE DE LISBOA

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cover image: Form Syntax in project “LIFE” (source: researcher, 2017)

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Presidente e vogal do Júri:
Doutor José Nuno Dinis Cabral Beirão,
Professor Auxiliar
Faculdade de Arquitetura da Universidade de Lisboa.

Vogais do Júri:
Doutor Carlos Alberto Miranda Duarte,
Professor Catedrático
IADE-Universidade Europeia;

Doutora Rita Assoreira Almendra,
Professora Associada com Agregação
Faculdade de Arquitetura da Universidade de Lisboa;

Ph.D Christine De Lille,
Professor
Delft University of Technology;

Doutor João Paulo do Rosário Martins,
Professor Auxiliar
Faculdade de Arquitetura da Universidade de Lisboa;

Doutor Pedro Duarte Cortesão Monteiro,
Professor Auxiliar Convidado
Faculdade de Arquitetura da Universidade de Lisboa.

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1 Planning and Investigation Design

PhD Thesis: "The Form Language of Almadesign" - Planning 2015-2018

	TASKS	2015												2016																								2017																							
		OUTUBRO				NOVEMBRO				DEZEMBRO				JANEIRO				FEVEREIRO				MARÇO				ABRIL				MAIO				JUNHO				JULHO				AGOSTO				SETEMBRO				OUTUBRO				NOVEMBRO				DEZEMBRO				JANEIRO				FEVEREIRO				MARÇO				ABRIL				MAIO				JUNHO				JULHO				AGOSTO				SETEMBRO				OUTUBRO				NOVEMBRO				DEZEMBRO			
		1	2	3	4	1	2	3	4	1	2	3	4

PILOT #1
REVERSE INSPIRATION // MDP 1 STUDENTS
Analysis and critical evaluation
Pre-validation of hypothesis

SUB-QUESTION #1
CONTEXT
In which Context did the Form Language develop?

SUB-QUESTION #2
FORM SYNTAX
How can we characterize the Form Syntax?

SUB-QUESTION #3
DESIGN SEMANTICS
How is the Form Language interpreted by clients / partners?

LITERATURE REVIEW #1
Design history, Social context, Technological changes; Popular Culture (Sci-fi, Comics)

LITERATURE REVIEW #2
Theory of product language; Form language characterization; Styling principles

LITERATURE REVIEW 3
Product esthetics; Universal principles of design; Semantic transformation and interpretation

ALMADESIGN HISTORY
History of the company, Chronology of Almadesign projects, Case study definition

LITERATURE REVIEW #4
Design and Architecture Critique, Film Studies

REPORT LAB1 // JULY 2016

FRAMEWORK DRAFT
for Case Studies analysis

CASE STUDY #1
CAETANO WINNER
Critical analysis on: Context, Syntax, Semantics

PILOT #2
BOX OF FAVOURITE THINGS / ALMA DESIGNERS
Analysis and critical evaluation

REPORT LAB2 // JANUARY 2017

REVISION OF FRAMEWORK
Confirmation / Reframing of hypothesis based on Case Study #1 and Pilot #2

CASE STUDY #2
INTRAIN PROJECT
Critical analysis on: Context, Syntax, Semantics

CASE STUDY #3
LIFE PROJECT
Critical analysis on: Context, Syntax, Semantics

PILOT #3 – ONLINE SURVEY
Design Semantics: Clients and Partners

REPORT LAB3 // JULY 2017

PRELIMINARY MODEL FOR ALMADESIGN VISUAL LANGUAGE
Confirmation / Reframing of hypothesis

CONCLUSIONS AND WRITING
Writing, Literature check

MODEL FOR ALMADESIGN LANGUAGE
Confirmation / Reframing of hypothesis

PROOFING
Formating, Proofing, Printing

PROVISIONAL DOCUMENT
January 2018

2 Experimental Study #1 - Reverse inspiration

LISTA DE PALAVRAS-CHAVE															
ALUNO	AIRLINE 1.1	AIRLINE 1.2	AIRLINE 1.3	AIRLINE 1.4	AIRLINE 1.5	PRIVATE 2.1	PRIVATE 2.2	PRIVATE 2.3	PRIVATE 2.4	PRIVATE 2.5	RAILWAY 3.1	RAILWAY 3.2	RAILWAY 3.3	RAILWAY 3.4	RAILWAY 3.5
															
Raquel Borrêga	espacial	conforto	estilo moderno	open office/trabalho	aspecto masculino	globalização	convívio nocturno	sala de estar	simples	terceira idade	casino	para toda a família	amplo	qualidade	alta velocidade
	azul	conforto sensorial	conforto pessoal	viagem de trabalho	assuntos importantes	high-tech	*fancyness*	espaço elegante e bonito	espaço muito transformativo	espaço bonito	quiosque	socialização	espaçoso	bom ambiente	viagem não aborrecida
	dinâmico mas tranquilo	conforto espacial	espaço para pernas	segurança	brilhos bonitos	luz do amanhecer	espaço onde não se tem noção do tempo	biblioteca		casa	entretenimento	sala de estar	fácil deslocação de pessoas	ente um pouco mais s	impessoalidade
	esfera	ar agradável	demasiados ecrãs	ruído de fundo		elevada altitude	pessoas adultas de espírito jovem	espaço semi-privado		lar	conversar	cultura	natureza	tons agradáveis	
	universo	qualidade de ar		trabalho 24/7		equipa	ambiente controlado	refeição agradável		cão de estimação com pelo claro	classe executiva	entretenimento			
	silêncio	harmonia cromática apesar de contrastante				saúde		diversidade de idades			feminino e masculino	jogos de tabuleiro			
	água					autonomia									
	gelo														
	luz														
	frigorífico														
Rodrigo Baptista	Relaxante	Minimal	Aconchegante	Claustrofóbico	Claustrofóbico	Futurista	Futurista	Escritório	Luz natural	Chique	Mercedes	Minimal	Luz natural	Espaçoso	Longo curso
	Pouca luminosidade	Claustrofóbico	Luz natural	Microondas	Lado negro	Holograma	Minimal	Luz natural	Luminoso	Restaurante	Clássico	Luz natural	Espaçoso	Urbano	Veloz
	Aconchegante	Luminoso	Clássico	Zona individuais	Pouca luminosidade	claustrofóbico	Sala de Chá	Luminoso	Relaxante	Escritório	Luz artificial	Apertado	Elegante	Colectivo	Aconchegante
	Cinema	Desconfortável	Robô	Claridade	Zona individuais	Minimal	Pacifico	Relaxante	Aconchegante	Clássico	Ambiente escuro	Acolhedor	Minimal	Luz artificial	Luz natural
	Dormir		Individual	Luz natural	Tuning	Illuminati	Clássico	Aconchegante	Minimal	Aconchegante	Espaçoso	Zonas destintas	Arrumado	Classico	Classico
	Eco		Quente	Segurança	Cinema	Controlo	Outono	Minimal	Gamers	Assentos da Volvo	Confortável	Arrumado	Futurista	Mobilidade reduzida	Zonas colectivas individuais
	Verde		Outono	Leite		Poder	Clean	Chocolate	Laboratório	Magnata	Camião	Sossegado	Urbano	Árvore	Minimal
	Sustentabilidade									Lazer		Escritório			
										Lobo de Wall Street					
Rodrigo Aranha P.Lopes	tranquilidade	limpeza	sobriedade	relaxamento	contraste	sobreposição	poder	maturidade	claustrofobia	tranquilidade	tranquilidade	ambiente de trabalho	playground	Japão	túnel
	abrigo	farmácia	executivo	continuidade	produção	layers	zaha hadid	repouso	desconforto	sobriedade	breakfast	sóbrio	divertido	respeito	passagem
	caverna	infância	pai	ambiente de tranalho	cinema	treliça	funcionalidade	secretaría	repouso	relaxamento	café	executivo	agradável	sobriedade	monotonia
	água	Jetsons	abraço	monotonia	individualismo		interior de barco			agradável	respeito		unidade	força	
	templo		loja de eletronico							direto			comunidade	maturidade	
	recompensa													wild west movies	
	Louis Kanh														
	escolha														
	caminho														

LISTA DE PALAVRAS-CHAVE

ALUNO	AIRLINE 1.1	AIRLINE 1.2	AIRLINE 1.3	AIRLINE 1.4	AIRLINE 1.5	PRIVATE 2.1	PRIVATE 2.2	PRIVATE 2.3	PRIVATE 2.4	PRIVATE 2.5	RAILWAY 3.1	RAILWAY 3.2	RAILWAY 3.3	RAILWAY 3.4	RAILWAY 3.5
															
Margarida Mendes	Noite	Campo	Negócios	Linear	Automóveis antigos	Colmeia	Casa moderna	Sala de estar	Power Puff Girls - janelas da casa	Restaurante	Café	Consultório	Espiga de trigo	Árvore	Comum
	Galáxia	Relva	Ergonómico	Privacidade	Cantina	Sci-fi	Sala de estar	Caravana	Serenidade	Café	Citadino	Sala de espera	Verão	Ramificação	Água
	Casulo	Natureza	Informal	Cúbiculos de escritório	Mecânico	Via Láctea	Stormtrooper	Restaurante	Convívio	Caseiro	Prático	escritório	Cidade	Luminosidade	Simples
	Dormir	Céu	Tecnológico	Sala de estar	Privado	Cartoons futuristas	Convívio	Serenidade	Lazer	Entretenimento		Cómodo		Hospital	
	Relaxar	Alegria			Robots	Relaxamento			Autoestrada	Tempo livre		Linear			
	Aqueduto	Bom humor							Sol						
	Laser	Estufa													
Maria Lage Bateira	Nave espacial	Canal	frio	Casúlo	módulo	insecto	liquido	casa	reunião de negócios	confortável	Retro	confortável	ramificação	artificial	agua
	pesado	Ramificação	rigído	privado	privado	colmeia	casa	modúlo	sci-fi	escritório	confortável	prático	natureza	rigido	subaquatico
	sci-fi underground	Orgânico	aberto	orgânico	eficaz	petalas	orgânico	caravana		castanho+cinza confortável	rigido	escritório	fluidez	fluido	natureza
	artificial	artificial		fluído	rigído	orgânico	pessoal	comboio				studio	transparencia	luz	rigido
	natureza	maleável		confortável	fluído	natureza	dinamismo 3D					flexivel	confortável	madeira = confortável	luz
	iluminação fluída					bionica						social			espaço fechado
						transparência						eficaz			
						clareza									
						leveza									
Maria Geraldes	espaço; nave espacial	ecológico	tradicional	individualismo	escuro - viagens à noite	tecnologia	luxo	luminoso	pequeno	espaço quente	técnico	conforto	viagem rápida	subterrâneo	TGV
	medusa do mar	logótipo da NOS	espaço fechado	cabines de escritório	máquina de café	conferências	interior de uma autocaravana de	confraternizar	apertado (claustrofobia)	cores secas e beges	"quadrado"	:ialização/ individualis	espaçoso	luminoso	viagens longas
	eficiência	áreas espaçosas	almofadas - conforto	limpeza	auditório	triângulos - Gaudi	limpeza	conforto	sofás robustos	árabe	organizado	luminoso	casulos, estames	tradicional	espaçoso
	silêncio	descontração	ona executiva espaços	eficiência	ecra de cinema	esfera plástica de brincar	conforto	cadeiras de massagens	disposição "rígida"	viagens médio/ curto prazo	espaço bem distribuído	para confraternizar/ t	união	impessoal	pouco luminoso durante a noite
	simetria	conforto	hospitaleiro	coluna vertebral	cadeiras de cinema 4D	cadeiras de psicólogo	eficiência	afável	eficiência	porta de passagem - goela	"transparência"	biblioteca	visibilidade	sala de espera clínico	cores que se sujam muito
	conforto	limpeza	televisores muito em baixo	sossego	simetria	cadeiras de dentista	relaxamento	"alegria"			silêncio				
	limpeza	espaço luminoso		luminoso	individualismo	conforto	espaço definidos								
		esqueleto de baleia		eficiência	sossego										
					eficiência										
Maria Guerreiro	nave espacial	claro	espaço individual	confessionário	escritório	sala de cinema	inovador	restaurante	sala de espera	restaurante	gamers	escritório	autocarro	metro	jogo a pares
	desenho animados	espaço (-)	conforto	individualismo	jogo de futebol	consultório	elegante	conforto	consultório	casa	ficção ciêntifica	simples	metro	ficção ciêntifica	viagem
	curiosidade	natureza	formal	inovador	casa de banho	abelha maia	organico	espaçoso	simples	elegante	sobrio	espaçoso	leve	espaçoso	social
	leve	máquina	cores sobrias	dinâmico	inovador	organico	confortável	cores neutras	agradável	linhas simples		agradável	organico		dinamico
	dinâmico				cores escuras		cores formais			materiais confortavéis			confortável		conforto

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Joana Garrinhas	Relax	vida	escuro	confortavel	escuro	futurista	confortavel	confortavel	clean	elegante	rigido	dinamico	espaçoso	natureza	confortavel
	dinamico	natureza	empresarial	individual	dinamico	elegante	dinamico	estrelas	elegante	chique	linear	lazer	ramos	arvore	oceano
	espaçoso	dinamico	tecnico	pratico	rigido	trabalho	clean	binoculos	rigido	confortavel	tecnico	convivio	diamantes	espaçoso	praia
	água	futurista	contraste cor	dinamico	auditorio	bolas-sabao	elegante	classico	confortavel	rigido	mecanico	biblioteca	clean	clasico	rigido
	confortavel	ar puro	estatico	interativo	interativo	confortavel	moderno	clean	flexivel	lazer	gotico	clasico	natureza	clean	
	futurista	tron (filme)	interativo	reservado	reservado	espaçoso	casa	elegante	simetrico	social		trabalho	vida	rigido	
	acolhedor	baleia	espaçoso	armonioso	elegante	harmonioso	acolhedor					estudo		hospitalar	
	fachada	nave espacial	individual	vida	modular		familia					modelar		harmonioso	
	arco	confortavel	rigido												
	harmonia	saudavel													
Joana Terceiro	pacifico	calmo	executivo	individualismo	negocios	luxo	luxo	luxo	luxo	conforto	malas da channel	familia	passatempos	cidade	intercidades
	luxo	leveza	New York	luxo	rapidez	casa	festa	trabalho	openspace		individual	convivio	escritorio	natureza	ir para casa
	fundo do mar	terra/natureza	fato e gravata	movimento	cores neutras	mar	sala de estar	convivio	individualismo		conforto	conforto	conforto	viagens	malas
	casa dos teletubies	starwars as espadas	rapidez	call center	reunioes/formações	natureza	convivio	jantar	conforto						dormir
	futurista		individualismo			dentista			trabalho						
			rigido												
			luxo												
João Agostinho	mar	natureza	preto	lavatorios	preto	espaço	branco	corredor	apertado	elegante	cozinha	janelas	metro	branco	quente
	raia	ceu	contraste	bar	contorno	tecnologia	descanso	sala de espera	fechado	madeira	submarino	alinhamentos	amplo	arvores	conforto
	arcos	estrelas cadentes	tecnologico	convivio	bar rustico	bola de cristal	conforto	quente	gammimg	luz natural	refeitorio	simetrico	luz natural	rua	apertado
	espaço	madeira	fechado	quadrado	escritorio	olho que tudo ve	relax	restaurante	luz	restaurante	janelas	sala de espera	parque de diversão	madeira	teto panoramico
	profundo	crescimento	individual	fechado	individual	poder	sala de estar	salão	branco	quadrado		call center	quarto de brincar	toldos	agua
	relax	floresta		individual	fechado	triangulo	contraste			conforto		escritorios	madeira	estradas	
	azul	tunel			pesado		familia			cinza			panoramico		
	subaquatico				divisorias		casa			natural					
	neon						espaço comum								
Letícia Lourenço	Nave espacial	Complexo	Geométrico	Individual	Escuro	Nave espacial	Casa	Conforto	Sala de espera	Clássico	Café	Autocarro	Espaço	Laboratório	Viagens médias
	Seguro	Parque	Linhas retas	Conforto	Escritório	Colmeia	Cenários	Sala de espera	Individual	Ambiente trabalho	Sala de estudo	Sala de espera	Autocarro	Muita gente	Conforto
	Futurista	Cor	Escritório	Espaço	Robot	Futurista	Minimal	Biblioteca	Linhas retas	Organizado	Linhas retas	Compartimentos	Metro	Espaço	Espaço essencial
	Minimal	Fresco	Individual	Escritório	Organizado	Linhas retas	Organizado	Individual	Ambiente grupo	Escritório	Espaço essencial	Escritório	Ginásio		Geométrico
	Orgânico	Menor espaço	Pequeno espaço	Robot	Cinema	Planetário	Divisórias	Luminoso	Neutro	Espaço			Parque		Peças lego
	Aurora boreal	Ar livre	Lazer	Neutro	Individual	Ambiente grupos			Claridade				Apenas para transporte		
	Zaha Hadid	Simétrico	Conforto	Espaços saude							\				
	Wall-e														

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ALUNO	AIRLINE 1.1	AIRLINE 1.2	AIRLINE 1.3	AIRLINE 1.4	AIRLINE 1.5	PRIVATE 2.1	PRIVATE 2.2	PRIVATE 2.3	PRIVATE 2.4	PRIVATE 2.5	RAILWAY 3.1	RAILWAY 3.2	RAILWAY 3.3	RAILWAY 3.4	RAILWAY 3.5
															
Alexandra Silva	Hospital	mala	Publicidade 50´s	Star wars	insecto	Hubble	sala de estar	interior comboio	episódio de mentes criminosas	portal de skyrim	autocarro carris	sala de espera	espremedor philipe stark	arvore	aquário
	Colunas	holofotes	televisão	storm trooper	televisores	Bola de futebol	café de anos 50	psicoanálise	episódio de Mr robot	limpeza	radio da braun anos 50	escritório	mala	arte deco	velocidade
	gótico	Snow piercer filme	kispo	Ex machina	escritório	Avatar	Móvel de Karl Weber	sala de espera	Iron man	barco	viajem alfa pendular	torneira	metro de lisboa	hospital	usb pens
	colunas	sala de cinema	deira de Charles Eam	R2 star wars	pneus	holograma	ex machina	rádio	resturante	restaurante	citroen	cabeleireiro	limão	macas	piscina
	aquário	autocarro	televisão	escritório	café anos 50	estrelas	avião		autocaravana interior	macio	olho	sala de estar	velocidade	limpeza	automóvel
	hotel de gelo	arte deco	azerbeijan airlines	videoclip da Bjork	cabines de casa de banho	colmeia	autocaravana		café	retro	autocaravana interior	design escandinávio	cortiça	deficientes	mala
	água	hotel	maquinas de lavar roupa	nave espacial	borracha	comando	sede		viagem de barco	holofotes	claraboia	casinha		casa de banho	multidão
	oceano	mobília Bauhaus	escotilhas	casa de banho	cinema sala	Avengers	navio		ex machina	sala de estar	teletransporte portal	placar de anunciar as viagens carris		interior autocaravana	
	star wars		barcos	escritório		dge of tomorow alien	comboio interior		vespa	escotilha	sala de espera	enu restaurantes plac		portas	
	igreja		cartaz de publicidade	café americano 50's					macio		mala channel	sala de espera			
Ana Filipa Maceira Fonseca	nave espacial	sala primavera	advogados	casulos	cretários do submun	imponente	frio	calmo	calma	seriedade	industrial	berço	vivo	citadino	conforto
	debaixo do mar	ameno	seriedade	quentinho	atenção	conforto	neve macia	relaxar	executivo	conforto	sóbrio	descontraído	movimento	neutro	neutro
	túnel	livre	formal	confortável	confortável	pronto a trabalhar	sushi	elegante	classe	clássico	executivo	elegante	conforto	utilitário	calmo
	glaciar	arejado	pressão	privado	frio	warm e cool	conforto	classe	sereno	outono frio	utilitário	confortável	respirável	passagem	gato a dormir ao sol
	serenidade		investidor	relaxar no sofá	privado		sofisticado	serenidade	conforto					frio	
	conforto		1984, George Orwell	calma				clássico							
	descanso			manhã de domingo no inverno											
Ana Rôlo	Planetas	Leve	Frio	Acolhedor	Escuro	Energia	Senior	Coletivo	Simples	Equipa	Alto	Equipa	Natural	Metalico	Convivio
	Galáxias	Fresco	Comum	Quente	Trágico	Espacial	Chá	Longo	Prático	Reunir	Funcional	Convivio	Flores	Arvore	Linear
	Azul	Luminoso	Individualista	Sossegado	Gótico	Colmeia	Aborrecido	Luminoso	Equipa	Trabalhar	Individual	Luminoso	Tulipas	LED	
	Adormecido	Moderno	Comercial	Confortavel	Assustador	Centralizar	Tradicional	Convidativo	CSI	Espaçoso		Arejado	Dinamico	Shopping	
	Silencioso	Tecnologico	"Engravatado"	Funcional		Cérebro		Multifuncional		Descansar		Espaçoso	Crescimento		
	Frio	Alienado		Privado		Amanhecer		Pacifico		Confortavel			Movimento		
	à espera	Conexoes				Descanso		Relaxador		Cru			Publico		
	Espaço	Divertido											Luminoso		
		Praia											Acolhedor		
Caio do Valle	Lua	Floresta	Previsível	Inusitado	Escuro	Arquitetura	Luxo	Tradicional	Minimalismo	Conforto	Cafeteira	Descontraído	Livre	Natureza	Apertado
	Espaço	Ecológico	Executivo	Restaurante	Masculino	Ponte	Exclusividade	Pai	Túnel	Acolhedor	Robocop	Jovem	Ginásio	Árvore	Tradicional
	Galáxia	Sustentável	Trabalho	Japão	Negócios	Futuro	Iate	Família	Odisseia no espaço	Família	Escuro	Socializar	Crossfit	Impessoal	Econômico
	Orgânico	Bar	Escritório	Individual	Individual	Minority Report	Futuro	Casa	Capsula	Casa	Tradicional	Estudante	TRX	Futuro	Quente
	Nave Espacial	Socializar	Empresas	Casulo	Máquina	Nave Espacial	Lua	American way of life	Negócios	Home Office	Sóbrio	Biblioteca	Confortável	Tron	Televisor Antigo
	Cromoterapia	Festa	Negócios	Minimalismo	Sóbrio	Astronauta	Festa	Restaurante	Frio	Apartamento	Café	Dentista	Luz	Mangue	Previsível
	Noite	Storm Tropper	Secretária	Colmeia	Escritório	High Tech	Drinks	Neutro	Astronauta			Negócios	Quente	Barro	
	Céu	Star Wars	Simples	Capsula	Trabalho	Storm Tropper	Tron		Sóbrio			Trabalho	Playground	Outono	
	Relaxante	Túnel			Coluna	Planeta	Masculino					Escritório	Fitness	Sóbrio	Natureza

															
SCI-FI	23%	19%	5%	16%	11%	46%	11%	0%	26%	2%	13%	0%	6%	4%	0%
NATURE	42%	71%	5%	22%	9%	32%	9%	7%	8%	7%	0%	4%	64%	52%	45%
COMFORT	35%	8%	11%	24%	6%	13%	20%	36%	26%	32%	13%	13%	22%	0%	26%
HOMEWORK	0%	2%	78%	38%	74%	9%	59%	57%	41%	59%	74%	83%	8%	44%	29%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

RAMIFICAÇÃO

EFICAZ

STUDIO

SOCIAL

Ana Rôlo_20152021 | Margarida Mendes_20152019 | Maria Bateira_20152026
MESTRADO DESIGN DO PRODUTO_ FA-UL_17 NOV 15

AMPLO

URBANO

REQUINTADO

CONFORTÁVEL

Ana Rôlo_20152021 | Margarida Mendes_20152019 | Maria Bateira_20152026
MESTRADO DESIGN DO PRODUTO_ FA-UL_17 NOV 15

FRIO

AMPLO

RIGIDO

ARTIFICIAL

Ana Rôlo_20152021 | Margarida Mendes_20152019 | Maria Bateira_20152026
MESTRADO DESIGN DO PRODUTO_ FA-UL_17 NOV 15

FLUIDEZ

RAMIFICADO

NATUREZA

AMPLO

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TRANSPARENTE

ÁGUA

COMPACTO

LUMINOSO

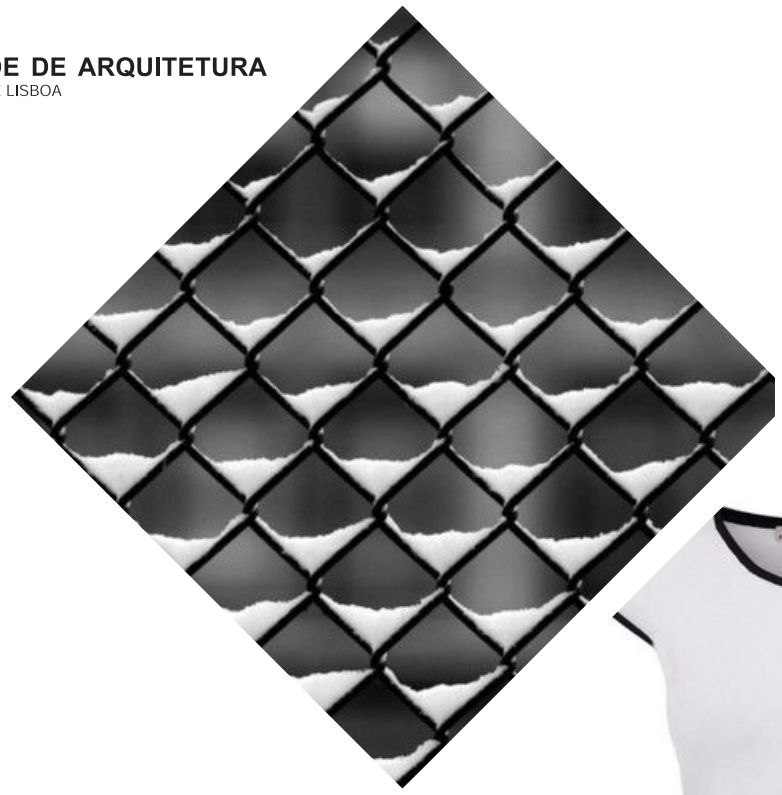
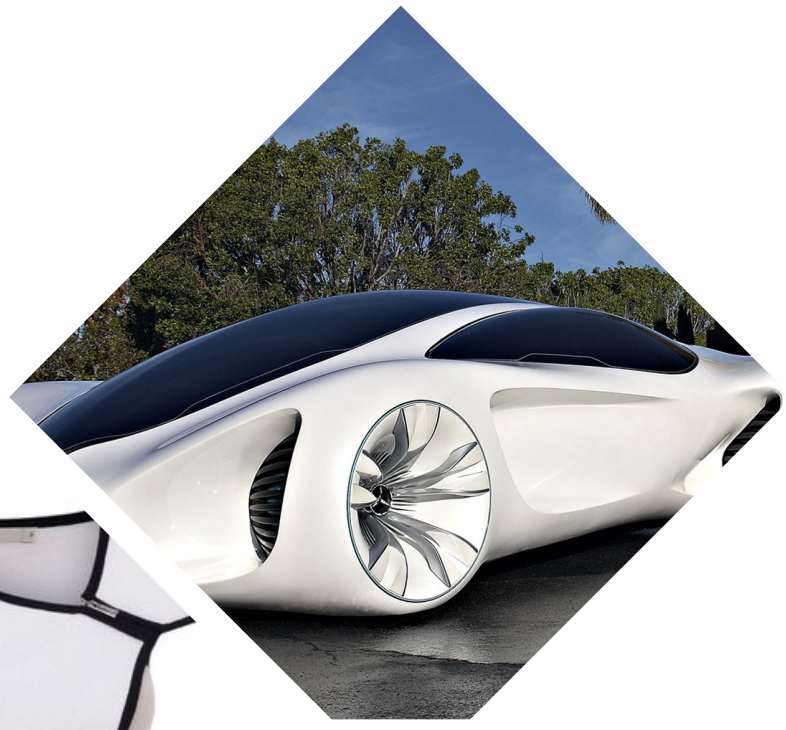
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UNIVERSIDADE DE LISBOA



Filipa Fonseca | Joana Garrinhas
João Agostinho | Rodrigo Batista

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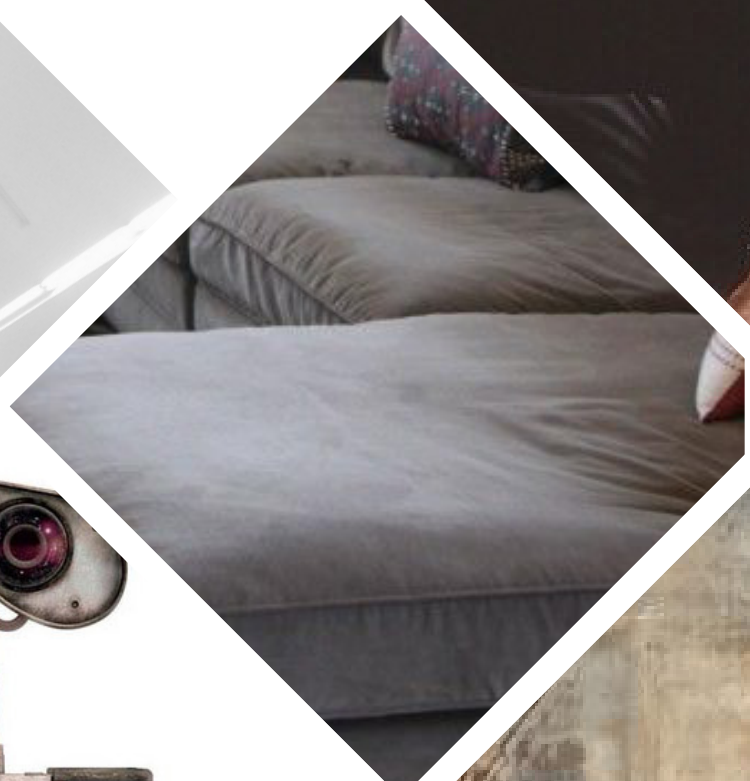






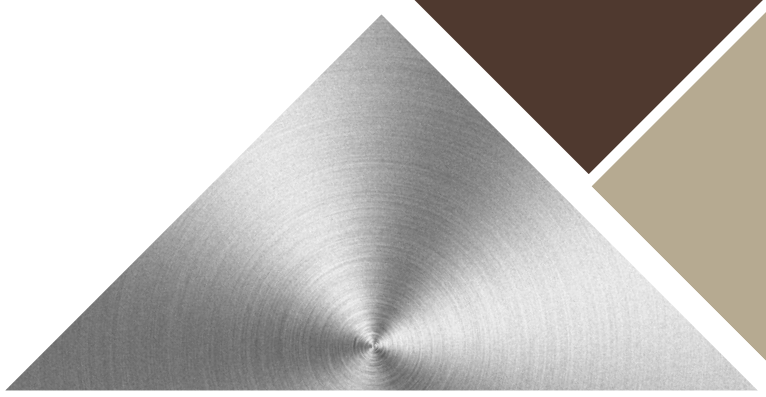














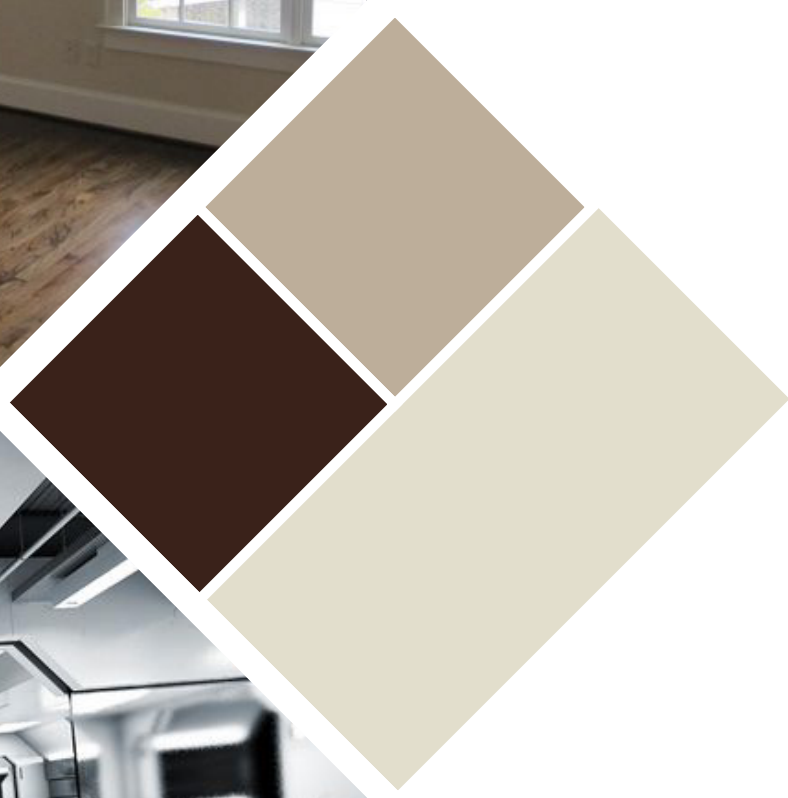
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João Agostinho | Rodrigo Batista

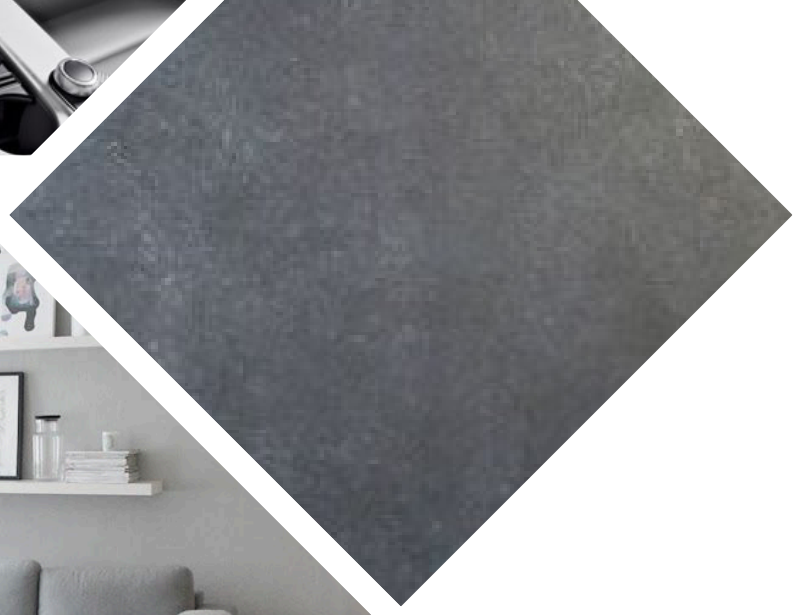
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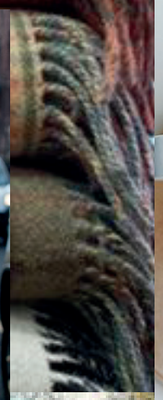




Filipa Fonseca | Joana Garrinhas
João Agostinho | Rodrigo Batista







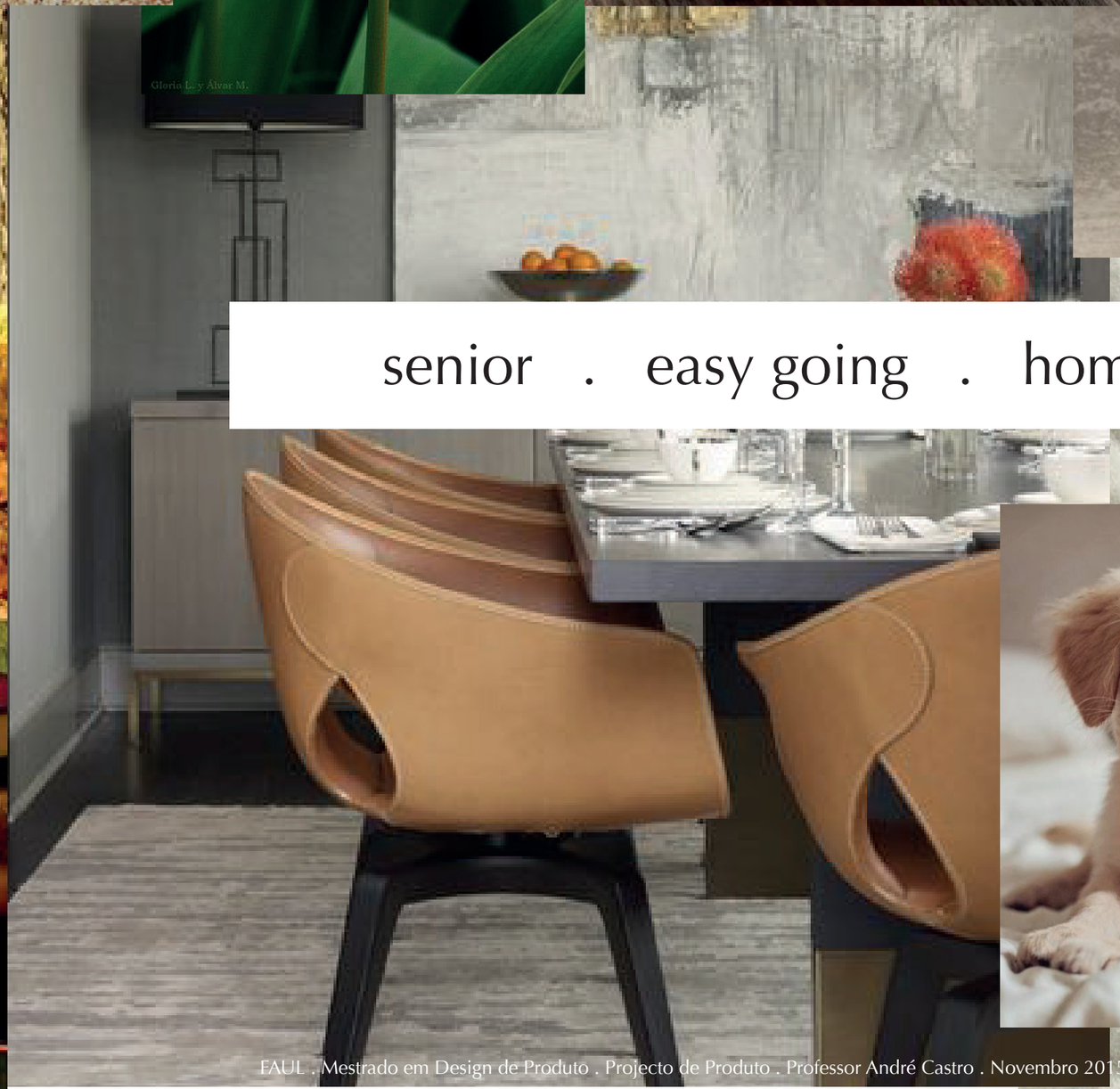














senior . easy going . home . comfort













minimalist . business . exclusive . sober

















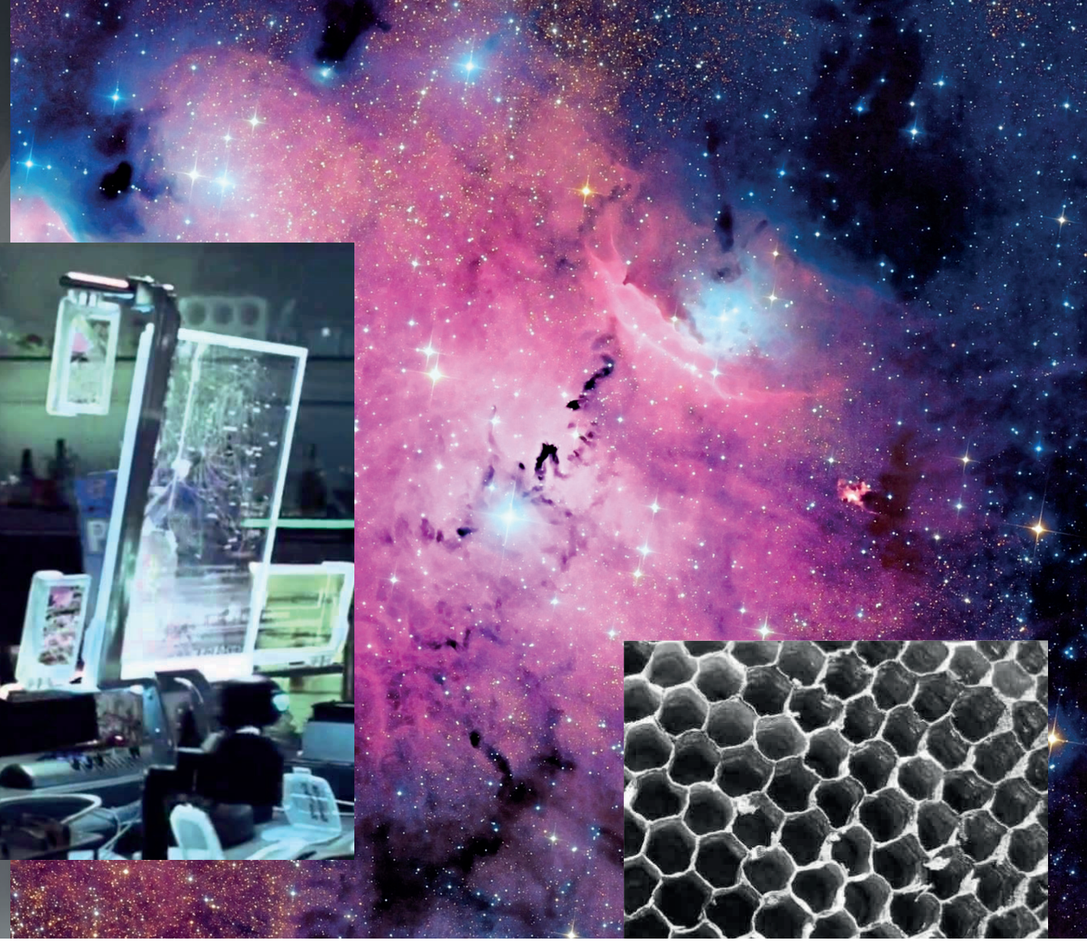
business youth . masculine . private









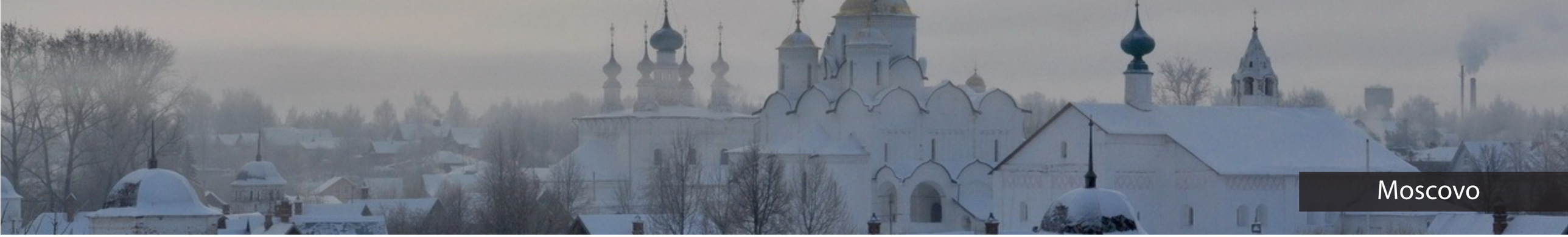


future . high-tech . galaxy








Moscovo


The New York Times
No. 54,227
r McCain, Self-Confidence
On Ethics Poses Its Own Risk











Quadro Inspiracional
1.2. Airline

Singapura

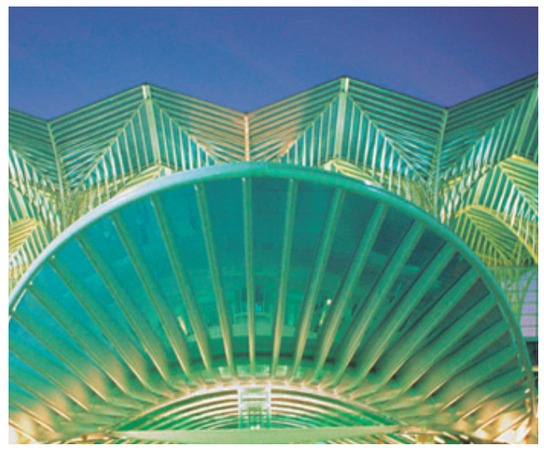




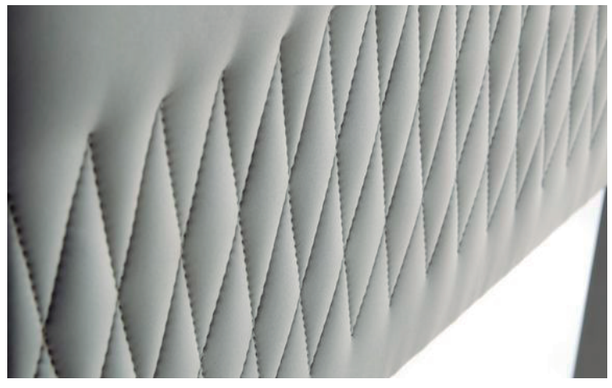




Desconforto









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Maria Guerreiro 20152022 | Joana Terceiro 20152024 | Rodrigo Lopes 2015



Quadro Inspiracional

1.5. Airline

São Paulo









Tecnologia









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Quadro Inspiracional

1.1. Airline

















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Quadro Inspiracional

1.3. Airline















Tecnologia





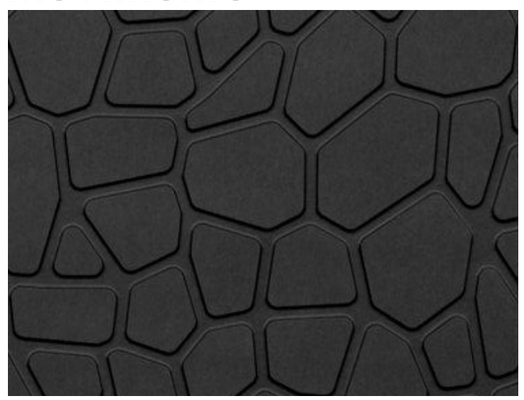


Grandiosidade
Poder





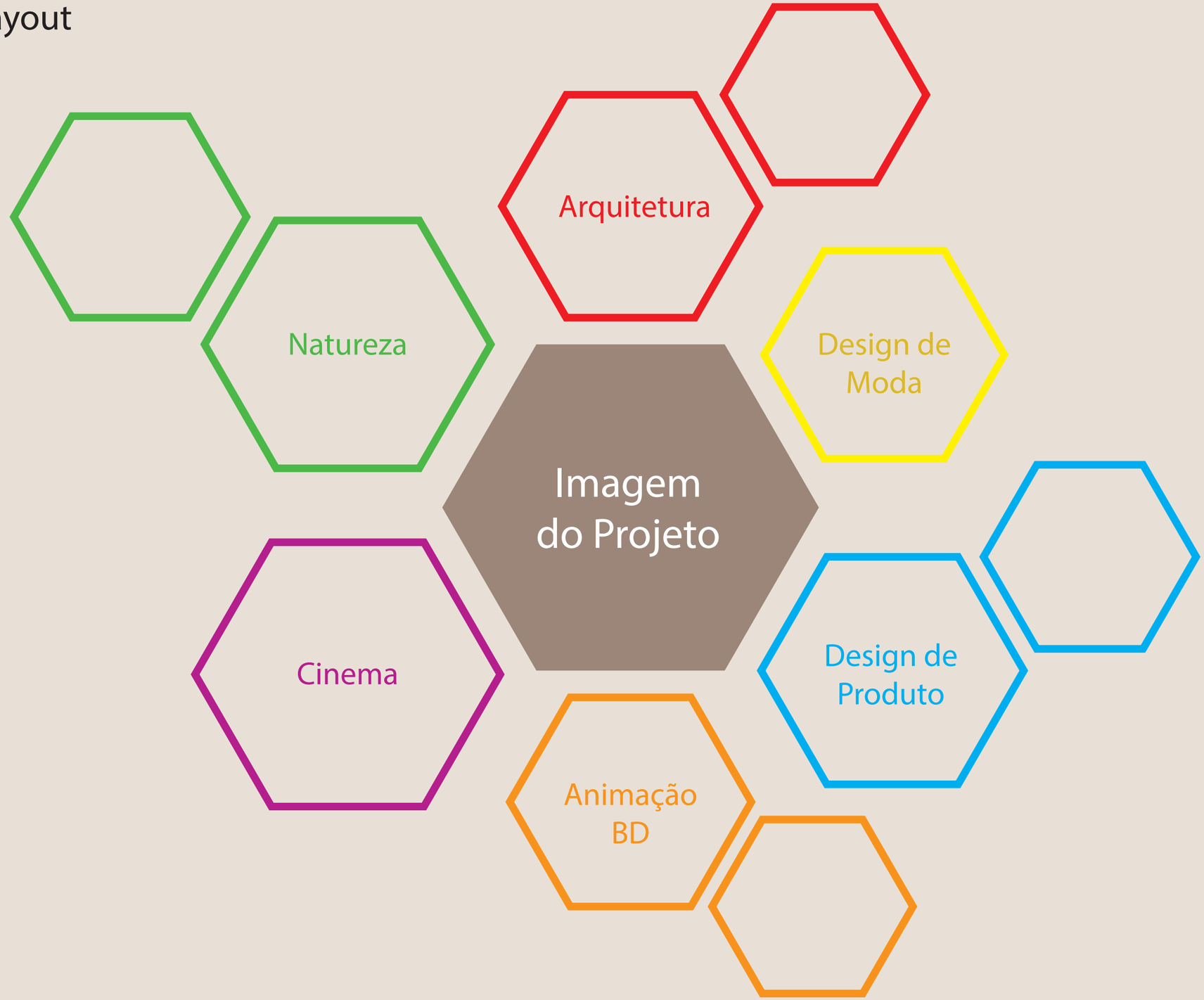
Movimento



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Quadro inspiracional

1.0- Airlines | Matriz | Layout



Palavras-chave

Alexandra Silva nº 20152022
Letícia Lourenço nº 20152030
Maria Geraldes nº 20152023

Quadro inspiracional
1.1- Airlines



Minimal
Nave espacial
Espaçoso
Orgânico
Conforto
Futurista
Simples
Eficiência

Alexandra Silva nº 20152022
Letícia Lourenço nº 20152030
Maria Geraldes nº 20152023

Exercício II Quadro inspiracional

Design de Produto
Mestrado em Produto | 1º ano | 1º semestre

Docente André Castro
Faculdade de Arquitetura-ULisboa

Novembro 2015
Ano letivo 2015\2016

Quadro inspiracional

1.2- Airlines



Limpeza
Luminosidade
Espaçoso
Luxo
Descontração
Conforto
Futurista

Alexandra Silva nº 20152022
Letícia Lourenço nº 20152030
Maria Geraldes nº 20152023

Exercício II Quadro inspiracional

Design de Produto
Mestrado em Produto | 1º ano | 1º semestre

Docente André Castro
Faculdade de Arquitetura-ULisboa

Novembro 2015
Ano letivo 2015\2016

Quadro inspiracional

1.3- Airlines



Tradicional
Luminosidade
Conforto
Positivo
Hospitaleiro
Retro

Alexandra Silva nº 20152022
Letícia Lourenço nº 20152030
Maria Geraldes nº 20152023

Exercício II Quadro inspiracional

Design de Produto
Mestrado em Produto | 1º ano | 1º semestre

Docente André Castro
Faculdade de Arquitetura-ULisboa

Novembro 2015
Ano letivo 2015\2016

Quadro inspiracional

1.4- Airlines



Limpeza
Paz
Conforto
Organização
Macio
Individualismo
Eficiência

Alexandra Silva nº 20152022
Letícia Lourenço nº 20152030
Maria Geraldes nº 20152023

Exercício II Quadro inspiracional

Design de Produto
Mestrado em Produto | 1º ano | 1º semestre

Docente André Castro
Faculdade de Arquitetura-ULisboa

Novembro 2015
Ano letivo 2015\2016

Quadro inspiracional

1.5- Airlines



Escuridão
Simetria
Individualismo
Borracha
Silêncio
Fechado

Alexandra Silva nº 20152022
Letícia Lourenço nº 20152030
Maria Geraldes nº 20152023

Exercício II Quadro inspiracional

Design de Produto
Mestrado em Produto | 1º ano | 1º semestre

Docente André Castro
Faculdade de Arquitetura-ULisboa

Novembro 2015
Ano letivo 2015\2016

3 Experimental Study #2 – Box of Favorite things

	Theme	Favourite Thing	Nr.	Key Words	Nr.
José Rui Marcelino NEW - 20 years	Transportation	Embraer EJETS Cabin Priestman Goode	1	Funcional	1
	Transportation			High-tech	1
	Transportation			Sophisticated	1
	Automotive	La Ferrari Ferrari Design Studio	1	Emotion	1
	Automotive			Performance	1
	Automotive			Sculture	1
	Product	Chair X Ross Lovergrove	1	Organic	1
	Product			Materials	1
	Product			Technological	1
	Product			Elegance	1
	Fashion	NIKE X	1	Materials	1
	Fashion			Technological	1
	Fashion			Layers	1
	Fashion			Color	1
	Architecture	Performing Arts Centers Dubai Zaha Hadid	1	Fluid	1
	Architecture			Transparent	1
	Architecture			Emotion	1
	Movies	Star Wars George Lucas	1	UrbanFuture	1
	Movies			Vehicle	1
	Movies			Entertainment	1
	Animation / Comics	Bilal		Color	1
	Animation / Comics			Light	
	Animation / Comics			Sensual	1
	Animation / Comics			RetroFuture	1
	Art	Henry Moore	1	Lightness	1
	Art			Fluid	1
	Art			Sensual	1
	Nature	Amazónia	1	Exotic	1
	Nature			Texture	1
	Nature			Relaxing	1
	Future	Ilha flutuante	1	Technological	1
	Future			Sustainable	1
	Future			Efficient	1
José Rui Marcelino OLD - 20 years	Transportation	Concorde	1	Speed	1
	Transportation			Optimistic	1
	Transportation			Technological	1
	Automotive	La Ferrari Ferrari Design Studio	1	Bold	1
	Automotive			Futuristic	1
	Automotive			Arquitectonic	1
	Product	Braun - shaver Dieter Rams	1	Rational	1
	Product			Minimal	1
	Product			Bauhaus	1
	Fashion	Watch Longines	1	Sophisticated	1
	Fashion			Technological	1
	Fashion			Sober	1
	Architecture	Alvorada Palace Oscar Niemeyer	1	Bold	1
	Architecture			Utopian	1
	Architecture			Nature	1
	Movies	Blade Runner Syd Mead	1	Futuristic	1
	Movies			Technological	1
	Movies			Asian	1
	Animation / Comics	Bilal		Futuristic	1
	Animation / Comics			Universe	1
	Animation / Comics			LSD	1
	Art		1	Warm	1
	Art			Color	1
	Art			Light	1
	Nature	Chita	1	Speed	1
	Nature			Elegance	1
	Nature			Efficient	1
	Future	xxxx	1	Technological	1
	Future			Limitless	1
	Future			Dark	1

André Castro - 15 years	Transportation	Boeing 7E7 Boeing	1	Organic	1
	Transportation			Monumental	1
	Transportation			Innovative Layout	1
	Automotive	Lamborghini Miura Gandini	1	Elegance	1
	Automotive			Antropomorphic	1
	Automotive			Innovative Layout	1
	Product	Egg and Tulip chair Eero Saarinen	1	Organic	1
	Product			Feminine	1
	Product			Iconic	1
	Fashion	Barefoot shoes Vibran	1	Bionic	1
	Fashion			Performance	1
	Fashion			Technological	
	Fashion			Materials	1
	Architecture	Alamillo Bridge Santiago Calatrava	1	Elegance	1
	Architecture			Antropomorphic	1
	Architecture			FormFollowsPerformance	1
	Movies	Star Wars George Lucas	1	Futuristic	1
	Movies			Iconic	1
	Movies			Entertaining	1
	Animation / Comics	Conan Future Boy Hayao Miyazaki	1	TechnologyVsNature	1
	Animation / Comics			Distopyan	1
	Animation / Comics			Aviation	1
	Art	Blade Runner Concept Art Syd Mead	1	RetroFuture	1
	Art			Color	1
	Art			Light	1
	Art			Lifestyle	1
	Nature	Girassol Sequência de Fibonnacci	1	NaturalSelection	1
	Nature			NatureCode	1
	Nature			UniversalAesthetic	1
	Future	Roborace Daniel Simon	1	Bionic	1
	Future			Digital	1
	Future			Generative	1
Elizabeth Remelgado - 11 years	Transportation	BMW Design works Metro	1	Home	1
	Transportation			Cosy	1
	Transportation			Nature	1
	Automotive	Fiat 500	1	Cute	1
	Automotive			Feminine	1
	Automotive			Bright	1
	Product	Antibody Patricia Urquiola	1	Nature	1
	Product			Feminine	1
	Product			Funcional	1
	Fashion	Issey Miyake	1	Dynamic	1
	Fashion			Assimetric	1
	Fashion			Sober	1
	Architecture	Falling Water Frank Lloyd Wright	1	Cosy	1
	Architecture			Modernism	1
	Architecture			Organic	1
	Architecture			Rational	1
	Movies	Minority Report Steven Spielberg	1	Interactive	1
	Movies			Transparent	1
	Movies			Technological	1
	Animation / Comics	Wall-E Pixar Animation	1	Futuristic	1
	Animation / Comics			Space	1
	Animation / Comics			Technological	1
	Art	She Changes Janet Echelman	1	Dynamic	1
	Art			Ligthness	1
	Art			Transparent	1
	Nature	Acer seed	1	Transparent	1
	Nature			Movement	1
	Nature			FormFollowsFunction	1
	Future	Autonomous Future Ryan Hagemann	1	Mobility	1
	Future			Autonomous	1
	Future			Ecological	1

Gonçalo Justino - 8 years	Transportation	Oblivion Daniel Simon	1	Bionic	1
	Transportation			Autonomous	1
	Transportation			ScienceFiction	1
	Automotive	Citroen GT Takumi Yamamoto	1	Iconic	1
	Automotive			Supersonic	1
	Automotive			Wow	1
	Product	Dieter Rams		Funcional	1
	Product			Minimal	1
	Product			Beautiful	1
	Fashion	United Nude	1	Inovative	1
	Fashion			Technological	1
	Fashion			Affordable	1
	Architecture	Jacque Fresco	1	Sustainable	1
	Architecture			Visionary	1
	Architecture			Holistic	1
	Architecture			Cybernetic	
	Movies	2001: a space odyssey Stanley Kubrick	1	AI	1
	Movies			UbiquitousComputing	1
	Movies			InvisibleInterface	1
	Animation / Comics	Ghost in a a shell Masamune Shirow	1	Futuristic	1
	Animation / Comics			Brutal	1
	Animation / Comics			HMI	1
	Art	Roy Lichenstein	1	ComicstoArt	1
	Art			Intense	1
	Art			Critique	1
	Nature	Florestas Submersas Takashi Amano	1	Perfection	1
	Nature			ManMade	1
	Nature			Beauty	1
	Future	BMW next 100 Karim Habid	1	Efficient	1
	Future			Autonomous	1
	Future			SmartMaterials	1
Luís Silva - 10 years	Transportation	Biomega Marc Newson	1	Technological	1
	Transportation			Disruptive	1
	Automotive	Renault Concept	1	Innovative	1
	Automotive			Texturized	1
	Product	Panton Chair Verner Panton	1	Timeless	1
	Product			Ergonomic	1
	Fashion	Nike Zvezdochka Marc Newson	1	Versatile	1
	Fashion			Different	1
	Architecture	Abu Dhabi Performing Arts Center Zaha Hadid	1	Organic	1
	Architecture			Plasticity	1
	Movies	Oblivion	1	Futuristic	1
	Movies			Out-of-the-box	1
	Animation / Comics	Despicable Me Illumination Entertainment	1	Expression	1
	Animation / Comics			Detailed	1
	Art	Sagrada Família Gaudi	1	Powerful	1
	Art			Detailed	1
	Nature	Jellyfish	1	Lightness	1
	Nature			Awesome	1
	Future	Seascraper Vincent Callebaut	1	Explorer	1
	Future			Sustainable	1
	Future			BlueGreen	1

Ricardo Oliveira - 8 years	Transportation	Lockheed SR-71 Blackbird	1	Organic	1
	Transportation			Futuristic	1
	Transportation			Aggressive	1
	Automotive	Corvette Stingray	1	Retro	1
	Automotive			Appealing	1
	Automotive			Organic	1
	Product	Dieter Rams		Minimal	1
	Product			Funcional	1
	Product			Timeless	1
	Fashion	Tron Michel Wilkinso	1	Complex	1
	Fashion			Futuristic	1
	Fashion			Light	1
	Architecture	Sydney Opera House Jorn Utzon	1	Organic	1
	Architecture			Patterned	1
	Architecture			Disguised	1
	Movies	Star wars George Lucas	1	Multicultural	1
	Movies			Utopian	1
	Movies			Generational	1
	Animation / Comics	Marvel comics	1	Dynamic	1
	Animation / Comics			Influential	1
	Animation / Comics			Sci-Fi	1
	Art	Mucha	1	Complexity	1
	Art			Organic	1
	Art			Detailed	1
	Nature	Shark	1	Efficient	1
	Nature			Edgy	1
	Nature			Imposing	1
	Future	Space X Daniel Simon	1	Cold	1
	Future			Minimal	1
	Future			Design	1
Catarina Ferreira - 0 years	Transportation	Fixed Gear bike	1	Simplicity	1
	Transportation			Funcional	1
	Transportation			Minimal	1
	Automotive	Mini Alec Issigonis	1	Iconic	1
	Automotive			Small	1
	Product	Jarra Alvar Aalto	1	Transparent	1
	Product			Nature	1
	Product			Fluid	1
	Fashion	Tailleur Coco Chanel	1	Stylish	1
	Fashion			Timeless	1
	Fashion			Black&White	1
	Architecture	Barcelona Paviglion Mies Van der Rohe	1	Transparent	1
	Architecture			Rational	1
	Architecture			Honest	1
	Movies	Inception Christopher Nolan	1	Inception	1
	Movies			Futuristic	1
	Movies			Labirynth	1
	Animation / Comics	Up Pixar	1	Dream	1
	Animation / Comics			Storytelling	1
	Art	Bicycle wheel Marcel Duchamp	1	Ready-made	1
	Art			Concept	1
	Art			Analogy	1
	Nature	Hortência	1	Azores	1
	Future	2001: a space odyssey Stanley Kubrick	1	LightSpeed	1
	Future			Space	1

Joana Monteiro - 8 years	Transportation	Airbus A380 1st class Marc Newson	1	Geometry	1
	Transportation			Materials	1
	Transportation			Detailed	1
	Automotive	Ford 021C Concept car Marc Newson	1	Conceptual	1
	Automotive			Simple	1
	Automotive			Materials	1
	Automotive			Friendly	1
	Product	Dieter Rams		Honest	1
	Product			Timeless	1
	Product			Geometry	1
	Product			Materials	1
	Fashion	Marimekko	1	Color	1
	Fashion			Patterned	1
	Fashion			Contrasting	1
	Architecture	Zaha Hadid	1	Modular	1
	Architecture			Dynamic	1
	Architecture			Futuristic	1
	Architecture			Nature	1
	Movies	ET Steven Spielberg	1	Fictional	1
	Movies			Fantastical	1
	Movies			Adventure	1
	Animation / Comics	Calvin and Hobbes Bill Watterson	1	Wit	1
	Animation / Comics			Satirical	1
	Art	Sagmeister / Walsh	1	Ilusion	1
	Art			Provocative	1
	Art			Black&White	1
	Art			Feminine	1
	Art			Graphical	1
	Nature	Cato	1	Fractal	1
	Nature			Geometry	1
	Nature			Patterned	1
	Nature			Rhythmic	1
	Future	2001: a space odyssey Stanley Kubrick	1	Humanization	1
	Future			Cross-platform	1
	Future			UIX	1
Manuel Damião - 0 years	Transportation	Wooden Boat George Crouch	1	Fluid	1
	Transportation			Sharp	1
	Transportation			Soft	1
	Automotive	Jaguar Matthew Beaven	1	Engaged	1
	Automotive			Robust	1
	Automotive			Dynamic	1
	Product	Tonet Chair Whitcomb L. Judson	1	Simple	1
	Product			Optimized	1
	Product			Ligthness	1
	Fashion	Chuteiras Nike	1	Integrated	1
	Fashion			Performance	1
	Fashion			Absent	1
	Architecture	Menara Airport E2A Architecture	1	Detailed	1
	Architecture			Geometric	1
	Architecture			Structural	1
	Movies	007 Skyfall Sam Mendes / Dennis Grassner	1	Accurate	1
	Movies			Atitute	1
	Movies			Heritage	1
	Movies			BrandeDNA	1
	Animation / Comics	Calvin and Hobbes Bill Watterson	1	Irreverence	1
	Animation / Comics			Wit	1
	Animation / Comics			Character	1
	Art	Paul Cezanne	1	Broad	1
	Art			Pure	1
	Art			Bulky	1
	Nature	Cogumelo	1	FineDetail	1
	Nature			Protective	1
	Nature			Fragile	1
	Future	Phytech	1	Survival	1
	Future			Essential	1
	Future			Monitoring	1

Joana Braga - 8 years	Transportation	VW Transportes	1	Timeless	1
	Transportation			Multifuncional	1
	Transportation			Lifestyle	1
	Automotive	BMW Gina Chris Bangle	1	Daring	1
	Automotive			Innovative	1
	Automotive			Morphing	1
	Product	Mesa Zaha Hadid	1	Unique	1
	Product			Organic	1
	Product			Funcional	1
	Fashion	Boho Etnic	1	Ethnic	1
	Fashion			Confortable	1
	Fashion			Multicultural	1
	Architecture	Ricardo Bofill	1	Meticulous	1
	Architecture			Sensory	1
	Architecture			Modular	1
	Cinema	Avatar James Cameron	1	Utopian	1
	Cinema			Inspiring	1
	Cinema			Sci-Fi	1
	Animation / Comics	Digimons	1	Automation	1
	Animation / Comics			Fantastic	1
	Animation / Comics			Dynamic	1
	Art	Escher	1	Notable	1
	Art			Complex	1
	Art			Perfection	1
	Nature	Penas	1	Fractal	1
	Nature			Evolutive	1
	Nature			Sublime	1
	Future	IDEO	1	Management	1
	Future			Sharing	1
	Future			Sustainable	1
João Teixeira -4 months	Transportation	F-22 Lockheed Martin	1	JetEngine	1
	Transportation			Stealth	1
	Automotive	Mini Alec Issigonis	1	Utilitarian	1
	Automotive			FormFollowsFunction	1
	Product	Dieter Rams	1	Minimal	1
	Product			Timeless	1
	Fashion	Fifthh Element Jean Paul Gaultier	1		1
	Fashion			StyleMix	1
	Architecture	Falling Water Frank Lloyd Wright	1	Minimal	1
	Architecture			NatureIntegration	1
	Movies	Blade Runner Syd Mead	1	Cyberpunk	1
	Movies			Dystopian	1
	Animation / Comics	Ghost in a a shell Masamune Shirow	1	MechanicalComplexity	1
	Animation / Comics			Cyborg	1
	Art	Concept art Giger	1	Surrealistic	1
	Art			Psique	1
	Nature	Estrutura osso	1	Structural	1
	Nature			NaturalSelection	1
	Future	Ghost in a a shell Masamune Shirow	1	OldvsNew	1
	Future			Dystopian	1

Isabel Alves - 8 months	Transportation	Cacé Racer	1	Lifestyle	1
	Transportation			Minimal	1
	Transportation			Detailed	1
	Automotive	Jeep Wrangler	1	Lifestyle	1
	Automotive			Modular	1
	Automotive			Flexible	1
	Product	Herman Miller	1	Textured	1
	Product			BoneStructure	1
	Product			Organic	1
	Fashion	Sport fashion	1	Textured	1
	Fashion			Color&Material	1
	Fashion			Confortable	1
	Architecture	Eames House	1	Imaterial	1
	Architecture			Interaction	1
	Architecture			Dichotomy	1
	Movies	The Island Michael Bay	1	Artifical	1
	Movies			Replication	1
	Movies			EmpathyvsAversion	1
	Animation / Comics	Wall-E Pixar Animation	1	Autonomation	1
	Animation / Comics			Clean	1
	Animation / Comics			Apocalyptic	1
	Art	Dança / Performance	1	Expressive	1
	Art			Criative	1
	Art			Disciplined	1
	Art			Composition	1
	Nature	Formiga / libélula	1	Persistent	1
	Nature			Organized	1
	Nature			Bionic	1
	Future	Floating Island Jacque Fresco	1	Modular	1
	Future			Nomad	1
	Future			SelfSufficient	1
José Vicente -8 years	Transportation	Mota Daniel Simon	1	Aerodynamic	1
	Transportation			Simple	1
	Transportation			Robust	1
	Automotive	Up Concept VolksWagen	1	Simple	1
	Automotive			Straight&Curved	1
	Automotive			CreasedSurface	1
	Product	Seven, Swan, Egg Chairs Arne Jacobsen	1	Organic	1
	Product			Ergonomic	1
	Product			Confortable	1
	Fashion	Star Trek	1	Simple	1
	Fashion			Organized	1
	Fashion			Distinctive	1
	Architecture	TWA Terminal JFK Eero Saarinen	1	Organic	1
	Architecture			Refined	1
	Architecture			Optimistic	1
	Movies	Star wars George Lucas	1	Space	1
	Movies			Adventure	1
	Movies			Technological	1
	Animation / Comics	Castel in the Sky Hayai Miyasaki	1	Aviation	1
	Animation / Comics			Organic	1
	Animation / Comics			Technological	1
	Art	Barbara Hepworth	1	Organic	1
	Art			White	1
	Art			Shadow	1
	Nature	Nautilus Shell	1	Inspiring	1
	Nature			Beauty	1
	Nature			Geometry	1
	Future	Star Wars Concept Art	1	Harmony	1
	Future			Sustainable	1
	Future			Elegant	1

4 Experimental Study #3 – Visual Language of Almadesign

A linguagem visual da Almadesign

Este questionário está inserido numa investigação sobre a "Linguagem Visual" da empresa Almadesign. A "Linguagem Visual" é definida, no contexto da investigação, como um sistema de comunicação composto pelas formas, cores e materiais projectados pelos Designers e pela interpretação que deles fazemos como Utilizadores finais, associando-lhes diferentes significados: conceitos, símbolos, valores, etc. Gostaríamos de avaliar qual a sua percepção sobre a "Linguagem Visual" da empresa, pelo que solicitamos que preencha este questionário muito simples, que tomará cerca de 5 min do seu tempo. Agradecemos a sua valiosa participação!

*Required

1. **Email address** *

_____

2. **Identificação da sua empresa:**

_____

3. **Área profissional:** *
   Mark only one oval.

   - ◯ Engenharia
   - ◯ Design
   - ◯ Marketing
   - ◯ Gestão
   - ◯ Prototipagem
   - ◯ Other: _____

4. **Anos de experiência:** *
   Mark only one oval.

   - ◯ 0 -5
   - ◯ 5 -10
   - ◯ 10 - 15
   - ◯ 15 - 20
   - ◯ + de 20

5. **Tipo de colaboração com a Almadesign (escolha a que considera mais relevante):** *
   Mark only one oval.

   - ◯ Parceiro projectos I&D
   - ◯ Cliente
   - ◯ Fornecedor
   - ◯ Other: _____

Projecto "WINNER FACELIFT"



6. **Sabemos que o Mundo não é a preto e branco. No entanto, pedimos-lhe o favor de escolher apenas 1 adjectivo em cada par descrito abaixo. A escolha deverá reflectir a sua opinião sobre a "Linguagem Visual" do projecto.** *

Mark only one oval.

- ◯ Convencional
- ◯ Inovador

7. *

Mark only one oval.

- ◯ Minimal
- ◯ Complexo

8. *

Mark only one oval.

- ◯ Racional
- ◯ Emocional

9. *

Mark only one oval.

- ◯ Sofisticado
- ◯ Standardizado

10. *

Mark only one oval.

- ◯ Futurista
- ◯ Tradicional



11. *
Mark only one oval.
- ◯ Estático
- ◯ Dinâmico

12. *
Mark only one oval.
- ◯ Amigável
- ◯ Agressivo

13. *
Mark only one oval.
- ◯ Maciço
- ◯ Fluído

14. *
Mark only one oval.
- ◯ Geométrico
- ◯ Orgânico

15. *
Mark only one oval.
- ◯ Masculino
- ◯ Feminino



16. *
Mark only one oval.

- ◯ Artificial
- ◯ Natural

17. *
Mark only one oval.

- ◯ Sólido
- ◯ Transparente

18. *
Mark only one oval.

- ◯ Leve
- ◯ Robusto

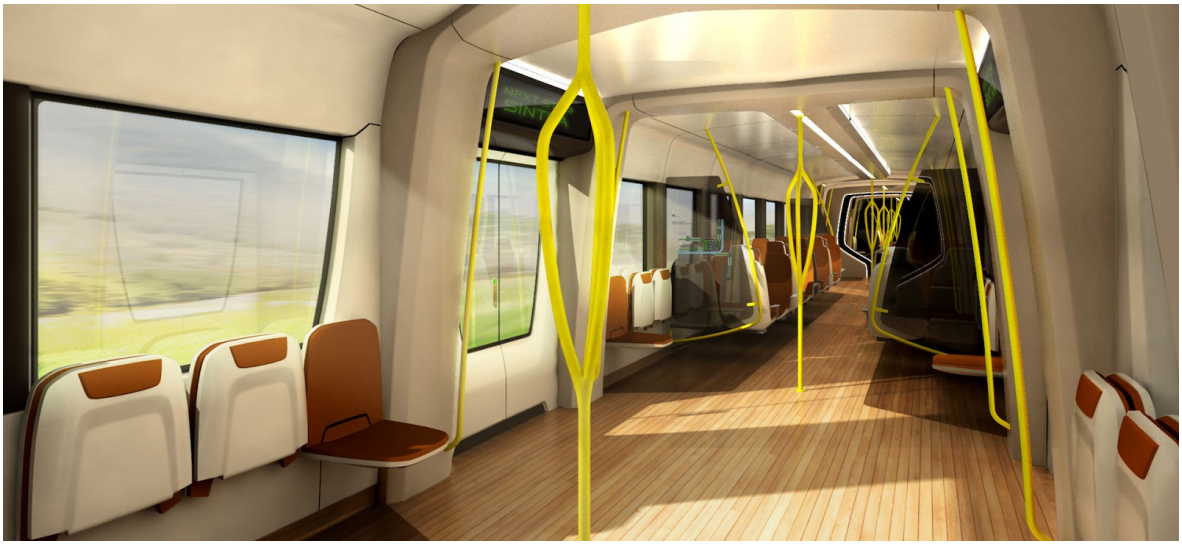
19. *
Mark only one oval.

- ◯ Urbano
- ◯ Acolhedor

20. *
Mark only one oval.

- ◯ Quente
- ◯ Frio

Projecto "INTRAIN"



21. **Tal como no projecto anterior, pedimos-lhe o favor de escolher apenas 1 adjectivo em cada par descrito abaixo. A escolha deverá reflectir a sua opinião sobre a "Linguagem Visual" do projecto.** *

Mark only one oval.

- ◯ Convencional
- ◯ Inovador

22. *

Mark only one oval.

- ◯ Minimal
- ◯ Complexo

23. *

Mark only one oval.

- ◯ Racional
- ◯ Emocional

24. *

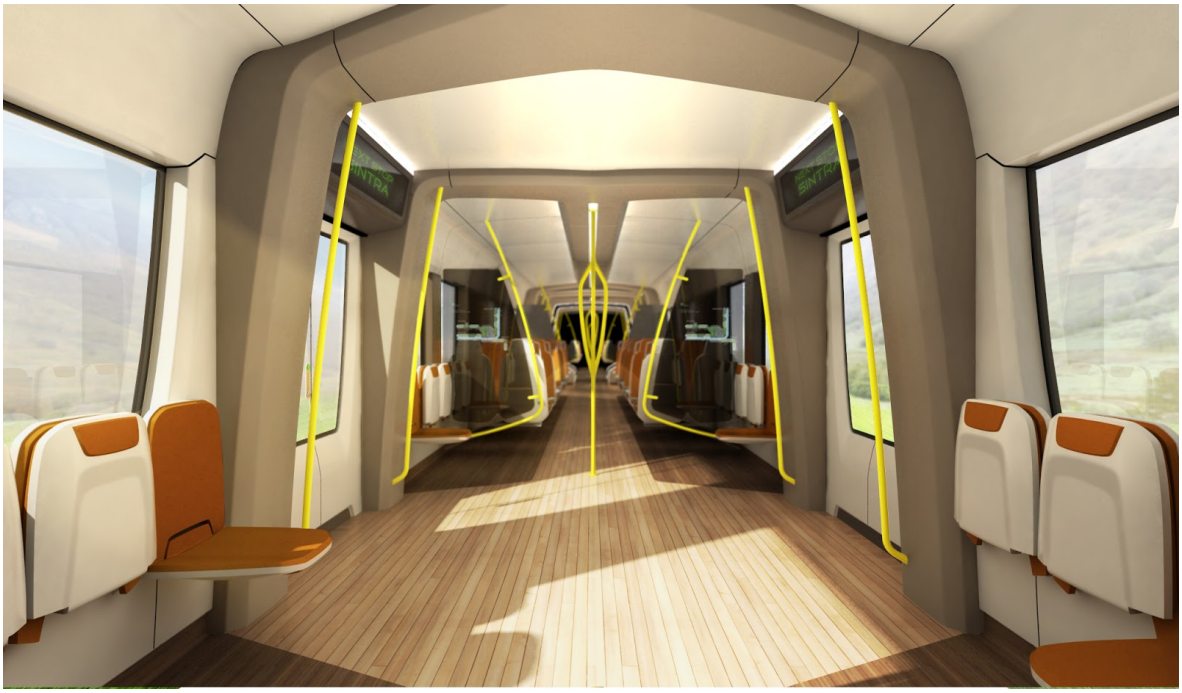
Mark only one oval.

- ◯ Sofisticado
- ◯ Standardizado

25. *

Mark only one oval.

- ◯ Futurista
- ◯ Tradicional



26. *
Mark only one oval.

- ◯ Estático
- ◯ Dinâmico

27. *
Mark only one oval.

- ◯ Amigável
- ◯ Agressivo

28. *
Mark only one oval.

- ◯ Maciço
- ◯ Fluído

29. *
Mark only one oval.

- ◯ Geométrico
- ◯ Orgânico

30. *
Mark only one oval.

- ◯ Masculino
- ◯ Feminino



31. *
Mark only one oval.
- Artificial
- Natural

32. *
Mark only one oval.
- Sólido
- Transparente

33. *
Mark only one oval.
- Leve
- Robusto

34. *
Mark only one oval.
- Urbano
- Acolhedor

35. *
Mark only one oval.
- Quente
- Frio

Projecto "LIFE"



36. **Este é o último projecto. Por favor escolha apenas 1 adjectivo em cada par descrito abaixo. A escolha deverá reflectir a sua opinião sobre a "Linguagem Visual" do projecto.** *

Mark only one oval.

- ◯ Convencional
- ◯ Inovador

37. *

Mark only one oval.

- ◯ Minimal
- ◯ Complexo

38. *

Mark only one oval.

- ◯ Racional
- ◯ Emocional

39. *

Mark only one oval.

- ◯ Sofisticado
- ◯ Standardizado

40. *

Mark only one oval.

- ◯ Futurista
- ◯ Tradicional



41. *
Mark only one oval.

- ◯ Estático
- ◯ Dinâmico

42. *
Mark only one oval.

- ◯ Amigável
- ◯ Agressivo

43. *
Mark only one oval.

- ◯ Maciço
- ◯ Fluído

44. *
Mark only one oval.

- ◯ Geométrico
- ◯ Orgânico

45. *
Mark only one oval.

- ◯ Leve
- ◯ Robusto



46. *
Mark only one oval.

- Artificial
- Natural

47. *
Mark only one oval.

- Sólido
- Transparente

48. *
Mark only one oval.

- Urbano
- Acolhedor

49. *
Mark only one oval.

- Quente
- Frio

50. *
Mark only one oval.

- Masculino
- Feminino

51. **Participou em algum dos projectos mencionados neste questionário?** *
Mark only one oval.

- Sim
- Não *Skip to question 53.*

52. **Em qual dos projectos participou?**
Tick all that apply.

- [ ] Projecto "WINNER FACELIFT"
- [ ] Projecto "INTRAIN"
- [ ] Projecto "LIFE"

53. **Tipo de colaboração no projecto:** *
Mark only one oval.

- ◯ Parceiro de projectos I&D
- ◯ Cliente
- ◯ Fornecedor
- ◯ Other: _____

54. **Muito obrigado pela sua valiosa participação! Para terminar, propomos um último desafio: se a Almadesign fosse uma Marca automóvel, qual seria, na sua opinião?** *

_____

55. **Porquê?**

_____

_____

_____

_____

_____

A copy of your responses will be emailed to the address that you provided

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5 Case Studies #1, #2, #3

CASE STUDY IDENTIFICATION	
Project name	WINNER Facelift
Market segment	Automotive
Client	CAETANOBUS
Designers	JRM, AC, RO, MD, GJ, ER, CF
Partner companies	
Start Date	1st Jan 2011
Completion Date	31st July 2011
Awards	

CATEGORIES FOR ANALYSIS		PROJECT PHASES			
		IDEA GENERATION	DEVELOPMENT	EXECUTION	COMMUNICATION
CONTEXT	INTERNAL (Resources, Methodologies)				
	EXTERNAL (Cultural, Economic, Legal, Market, Tech)				
SYNTAX	PRACTICAL FUNCTIONS (Performance, Technology, Production)				
	LANGUAGE FUNCTIONS (Form elements, Design principles, CMF)				
SEMANTICS	SYMBOLIC FUNCTIONS (Symbols, Icons, Indexs)				
	SYMBOLIC FUNCTIONS (Conotation, Denotation)				

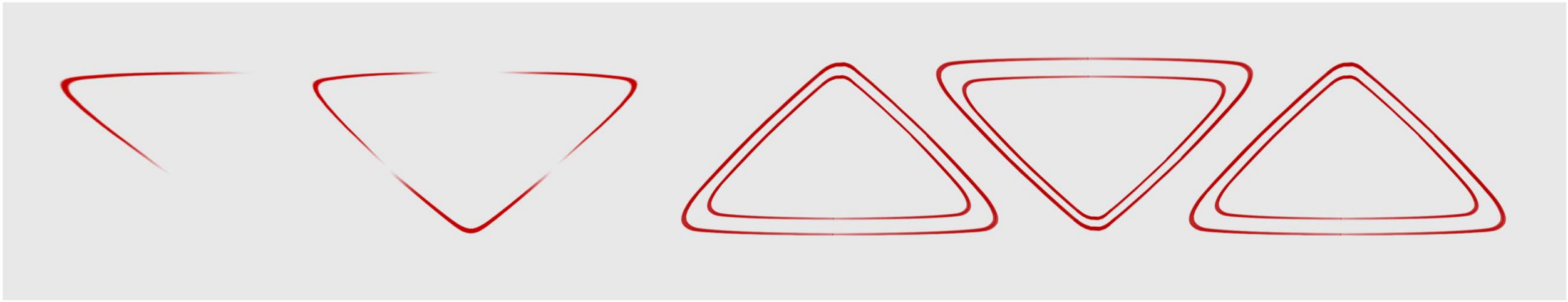
CASE STUDY IDENTIFICATION

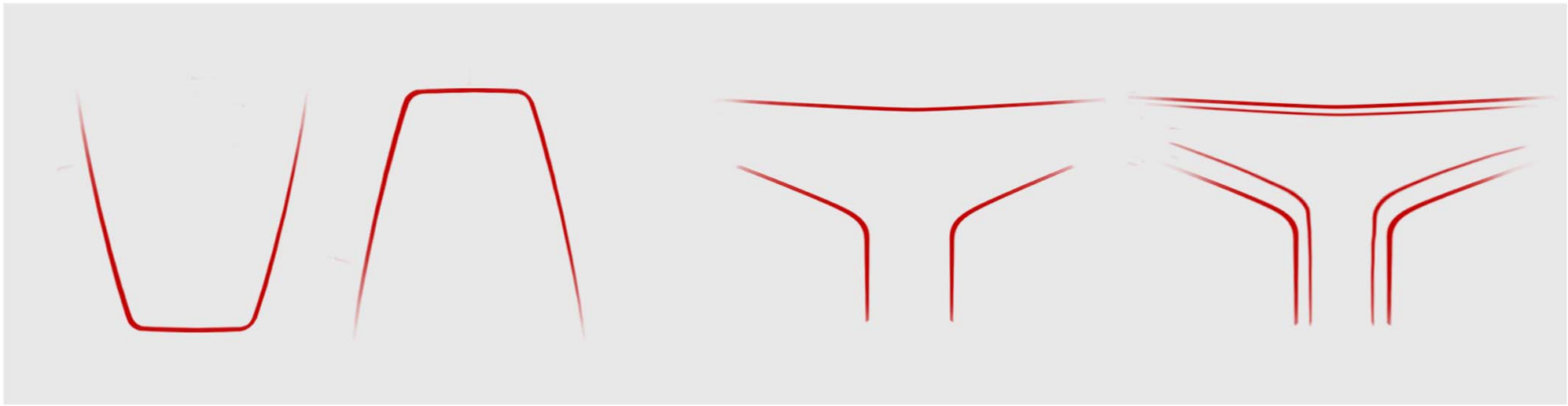
Project name	LIFE
Market segment	Aviation
Client	LIFE Consortium
Designers	JRM, AC, GJ, ER, CF, RO, JM, CF
Partner companies	Couro Azul, INEGI, SETSA, Amorim Cork Composites, Almadesign, Embraer
Start Date	1st July 2019
Completion Date	31st July 2011
Awards	Crystal Cabin Award 2012

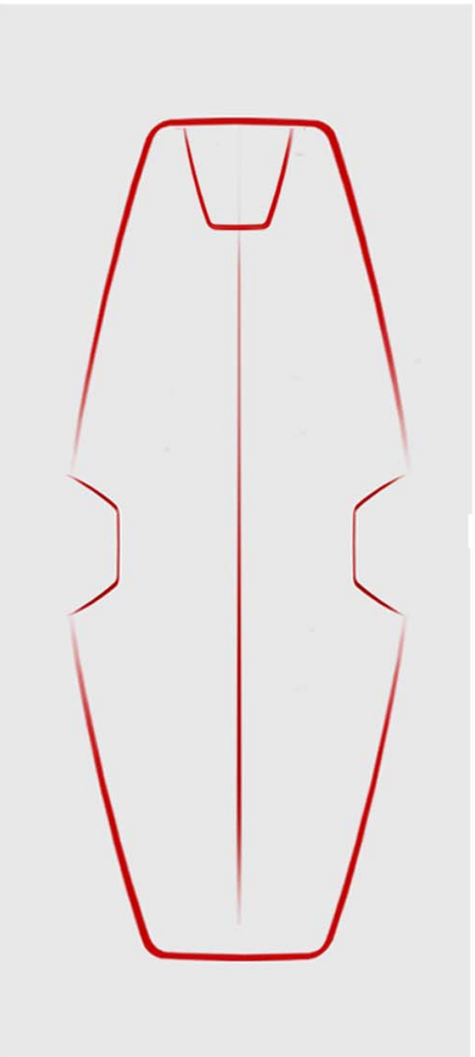


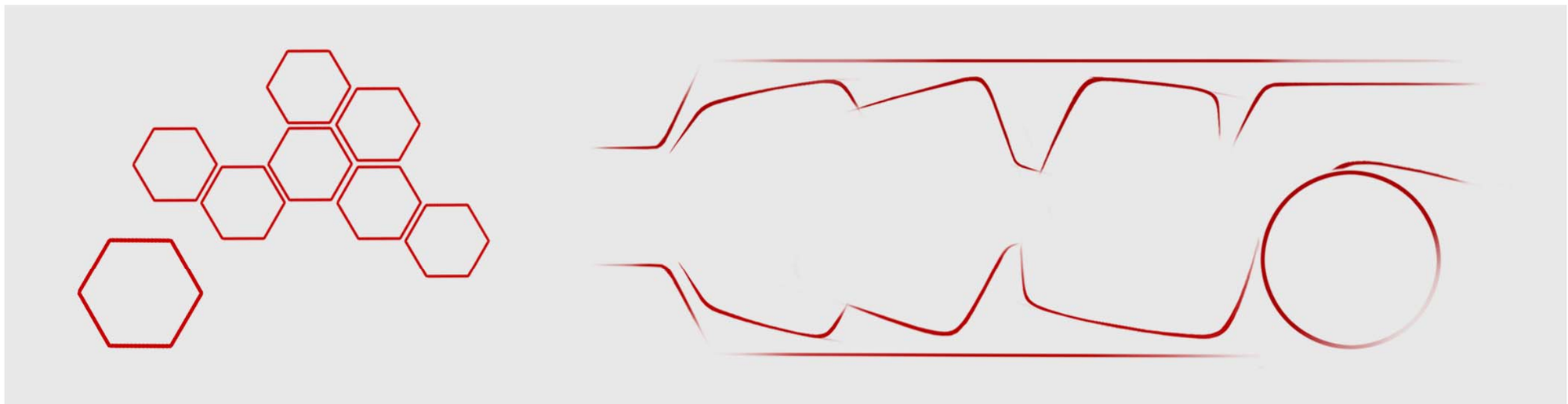


CATEGORIES FOR ANALYSIS		PROJECT PHASES			
		IDEA GENERATION (BRIEF, RESEARCH, CONCEPT)	DEVELOPMENT (CONCEPT DEVELOPMENT, CONCEPT ENGINEERING)	EXECUTION (PROTOTYPE; PRODUCTION)	COMMUNICATION (PROMOTION; MARKET FOLLOW-UP)
CONTEXT	INTERNAL (Resources, Methodologies)	RESOURCES: Approved Budget for Consortium R&D Project Application under the FP7 Portuguese Framework.; Team of 6 designers + 2 project managers; MEETINGS: Visits to partners, namely EMBRAER SA in Brazil, Couro Azul in Alcanena, SETsa in Leiria, INEGI in Porto, ACC in Lisbon and Porto. RESEARCH: research in the State-of the Art regarding executive aircraft cabins, materials and processes, project description, Market and trend analysis; Existing products benchmark and characterization; Target User analysis; Materials, technologies and LCA research; Definition of new opportunities for the use of materials; SPECIFICATION: From an initial brainstorm, development of a specification document voted between the consortium CONCEPT: Design team developed brainstorming sessions and sketching sessions; Moodboards were developed for 2 different themes; ilustrations of 2 concepts with different aesthetical and functional approaches were proposed; METHODOLOGIES: project planning including WP, Deliverables and Milestones; ilustration and 3D surface study models using Rhino Software;	RESOURCES: Team of 6 designers + 2 project managers; METHODOLOGIES: Selected concept was developed using 3D software tools (Rhino software); physical model in foam was built to help define 3D geometry; iterations with Engineering teams; 3D cad models were developed until the final layout and geometry were freezed; CAD renderings and technical drawings were developed to support prototyping; Next there were rendings to define CMF, a processe which was very detailed and in which more than 20 different configurations were tried; finally, 3 options were chosen to present to the rest of the partners and the final one was decided for the mock-up prototype;	RESOURCES: Team of 4 designers + 2 project managers; METHODOLOGIES: Prototype build in one of the partners, visits to the partner in a regular basis; 4 months of weekly meetings for prototype build follow-up; Management of 3D models for prototypng and different versions to adapt to the technologies used; producion of parts in different suppliers and articulation for assembly in site; Technologies included machined parts from CORK agglomerate, ABS plastic, PU Foams, spacer fabric, cork composite panels, aluminium strutcutres, SLS rapid prototyping, laser engraved acrylic, leather and cork trimming and upholstery, optic fibre, etc	Several participations in Trade Fairs, including with the full-scale prototype in Paris and Leiria; Production of 2 project Brochures, website, 2 presentation VIDEOS; photographic session; more than 50 articles for the press; 3 Industrial design models were registred; The logotype is Nature inspired, it represents the movement of a oak seed when falls down from the tree. This seed was used such a story telling element of the first video.
	EXTERNAL (Cultural, Economic, Legal, Market, Tech)	ECONOMIC: 2008 finantial crisis; automotive industry is reducing production, new projects get canceled; Portugal on the brief of bankrupcy; industrial companies need FP7 projects to keep on working; Brazilian economy is growing enormously at a rate of about 5% a year; MARKET: Embraer launches the Phenom 300 and the Lineage 1000 using international design consultancies such as BMW Designworks and Priestman Goode. These new products turn the company in a world leader in Corporate Aviation. Boeing 787 long haul aircraft flies for the first time during 2009 with a revolutionary cabin interior. Airbus launches project A350. TECH: I-PAD is released in 2010; Google self-driving car starts in 2009. Research on passengers and on users was supported by Embraer market research teams; LED become a comodity; CULTURAL: Sci-fi movie AVATAR in 3D, with nature vs technology and virtual reality play a major role in	TECH: LED lighting becoming a comodity; transparency controled glass; sensors for activation of functions; electro welding textiles, memory foam, natural aplications of materials such as cork composites, rubber cork, cork granulates, cork with underlayers, natural leather, were all researched and later some of the solutions used; Rapid prototyping tools were heavely used; machining parts and machining cork mateirals was a first to some of the companies; the use of SLS prototype was also needed in order to be able to produce some of the parts; strucutral analysis was performed to account for the weight and support of the floating seat concepts; LED light strips were used for the cabin interior lighting; LEGAL: Legal constraints in the aviation industry and very strict; FAR and EASA rules were considered in the initial development stages; they were later not considered for the development of prototype parts; being a "demonstrator prototype" just as it happens in an automotive "show car", the main focus was not complying with airworthiness, but on presenting an innovative approach towards executve jet cabin interiors; In the prototype building the studio wanted to use sensoring and real-time response to movement on the ceiling light as well as having a screen interface for each passenger; these solutions were not fully functional but were able to be shown in the mock-up as demonstrators;		
SYNTAX	PRACTICAL FUNCTIONS	Differentiation for technological innovation and design of materials in relation to competition; Improved passenger comfort (physical, visual, sound, touch); Modularity / flexibility of systems; Reduction of weight: with consequent reduction of polluting emissions of the aircraft. Regarding the partners of the project, a focus on machining parts, mould making and composite structures using different kinds of materials were developed; Cork machining and production of cork core composite structures; Concept 1 was influenced on luxury brands and automotive projects; Concept 2 was heavenly influenced on SCI-FI movies, such as Avatar, portraying nature elements, floating shapes, several light and color effects, technology understated; Transparent touch screens, projections / OLED technologies, ceiling with active lighting sensible to touch were all pursued as they were emerging technologies at the time of the project;	From the initial specification, items were voted for development in the full scale prototype; seats were developed via cork machining, assembled an steel "floating" structure; seats were machined and foam padded with leather covers; Side panels were machines in PU and trimmed in leather; ceiling was built using fibre glass reinforced core cork panels with aluminium structure and embedded fibre optics; The "vision" of a motion sensing interactive lighting system (SEED) was presented, although not as a functional prototype; this solution would provide passenger with personalized light intensities and colour - mood light or a spotlight for reading.The SPHERE concept (not fully developed) would create an immersive infotainment system, built from interactive screen surface modules creating a virtual	Solutions were built in the mock-up are oriented towards the use of lighter, comfortable and natural materials; highlights include the innovative design of the windows, based on a conceptual approach using advanced composite materials, allows greater visibility and abundant natural light. Thermal and acoustic comfort was defined by composite sandwich panels (CORECORK®) covered in natural leather (window panes) or CORKLEATHER (side panels). Seats used CORKGEL as seat padding and leather for maximum comfort; the concept of a biometric adaptable geometry was not developed in the mockup; floating on a suspended structure, the concept would have provide spring damping to enhance the passenger comfort by reducing vibration (not full functional). Two sofas create a lounge area for leisure and work; the SPHERE would create a virtual	LIFE project received the most important prize in cabin interiors, the Crystal Cabin Award for Visionary Concepts; more than 50 artciles about the project were published in aviation magazines; A photographic session was prepared and developed by a professional architectural photographer; this would add new light elements and a dramatic feel towards the press images to be published (the sunset concept in the photos); Spin-off projects such as Desair, newFACE and Embraer's library of natural materials could be traced down to project LIFE. National presentation was a huge success with a lot of media coverage (AICEP still uses the image as a portait of the modern aeronautical industry in Portugal in 2017); Internation presentation brought the studio international recognition; TAP retrofit projects were discussed inside the mock-up at the Paris Tradefair show.
	LANGUAGE FUNCTIONS (Form elements, CMF)	Form language was initially influenced by automotive design and hotel luxury interiors due to design consultancies working for Embraer (Phenom and Legacy Jets); The brief was opened regarding CMF, but the use of natural materials and finishes, as well as light weight structures was favoured; Inspiration from luxury products but also from Sci-fi movies and architecture and automotive industry were relevant; materials were researched such as cork composites, natural fibres, LED lights, natural leather, spacer fabric, etc; 2 form language and CMF concepts were presented, based on initial Moodboards; Concept 1: Patterns and nature patterns were used in the ilustrations of the concepts; shape and form follow a logic of fluidity, curved lines and shapes; patterns repeat as if they were fractal, so a kind of nature-tech approach was used; Concept 2: a design language related to automotive industry was applied, in the use of dynamic shapess and soft curves; patterns were not included in the drawings; Regarding form elements, its patterns and repetition we can identify specific elements that are repeated througout the design on the interior, such as the organic shapes, cross section details, hexagonal and triangular shapes, etc;	Concept 1 was chosen to be pursued for development wit a 3D modeling and scale model in foam were started; final form geometry was developed with the help of foam and 3D models; 3D CAD model had several iterations, with specifc curves and cross sections used regurlalry in the differetn mock-up parts; no straight lines are ever used; 3D model had to account for tolerances and different production processes and finishes (e.g. macinhed parts lined with corkleather"; FOr CMF 3 concepts were developed; form a selection, a final moddboard was developed with the list of materials to be used in the mock-up; after this each material had to be gathered in order to check for compatibility in the construction prototyping techniques to be used, colors, textures, perforation, surface finishin etc;	A lot of solutions had to be developed during the prototype build phase in order to materialize the form language envisoned by the designers; light elements were used in the side panels, the sphere geometry and building strategy was developed with engineering partners; aluminium parts were built in order to assemble the dodecahedron and assemble it on site; although not fully developed, this element was a central feature in the mock-up, with a seat with specifc light details on the inside;	
SEMANTICS	SYMBOLIC FUNCTIONS (Attributed by designers),	Definition of 2 concepts / directions for the project: the first direction addressed a rather conservative approach, with a luxury and refinement home / office enviroment (home in the sky); Concept 2 relied in a nature / technological inspiration, focused in Sci-fi influences (Avatar, Minority report, 2001...), comunicating a passeneger centered bio-adaptacble aircraft interiors, combining natural and technological elements; references such as classical design icons - geodesign structures - were used; Concept 2 was an "out-of-the-box" proposal and was chosen by the consortium for developmen; form language uses complex free form curves, assimatrical layout, triangular and hexagonal shapes, natural materials and finishies combined with light effects (colored light, light spots) and transparency elements (such as the screens and sphere modules)	As the second concept was selected for development and prototype building, designers focused on developing parts which would comunicate the futuristic, passneegr centric luxury appeal to the concept; this as made by infusing the design with soft, complex curves, natural finishes and high-tech devices such as the sci-fi looking sphere, transparent screens and "sky" ceiling; this were developed in order to comunicate a futuristic vision of luxury, filled with technology with natural materials and finishes, a way to interpret technology human-focused; the main symbolic element is the sphere is the immersive sphere, were the owner of the aircraft could have is office as well as a relaxing / game / work space, by being totally imersed in screens which allow for the projection of alternate realities (such as images of outside the aircraft and flying effect) or information;	Most of the concpetual and developed 3D geometries, shapes and materials were possible to introduce in the prototype albeit no full functional; nevertheless, the full scale mock-up was able to comunicate high levels of technology seamlessly integrated in a luxury natural material finished cabin interior; the mix of complex, organic curves and with high-tech devices and typical "technonogical" shapes such as the sphere, created the "ilusion"; The sphere became the major icon of the aircraft concept with a lot of people wondering what is was about; on the other side, because of the geodesigc shapes being actually very present in the popular culture and sci-fi imaginarium, most people related to high-tech; being transparent it also gathered a halo of novelty and mystery; the screens and projections (most of them blue in the pictures) also added a look of futurism into the concept, as well as the floating seats with colored light coming from the floor;	The project featured 2 presentations VIDEOS: a teaser, with nature elements and the concept of a "tree of LIFE" and a final presentation VIDEO portraying the vision of the future of travelling and aviation; Project brochures were developed in different phases (teaser and final presentation); project presentation included a full scale 8m long aircraft fuselage with full cabin interior;
	SYMBOLIC FUNCTIONS (perceived by clients)	The sphere became the major icon of the aircraft concept with a lot of people asking / wondering what is was about; because of the geodesigc shapes being actually very present in the popular culture and sci-fi imaginarium, most visitors would related it to a high-tech element; being transparent it also gathered a halo of novelty and mystery; the screens and projections (most of them blue in the pictures) also added a look of futurism into the concept, as well as the floating seats and colored lighting scenarios, including the ceiling with a "night sky" effect;		A great percentage of clients / partners (100%) think the design is: INNOVATIVE, FUTURISTIC, SOPHISTICATED; 90% think the design os COMPLEX, LIGHTWEIGHT, WARM; A big percentage (70% to 90%) also thinks it comunicates: EMOTIONAL, DYNAMIC, FLUID, ORGANIC, FRIENDLY, TRANSPARENT	Form language, a mix of nature inspiration and high-tech, dynamic and precise lines, together with the choice of materials, featured a futuristic vision of aviation; Photo sessions and post-production conveyned a sense of futurism to the project, combined woth the lighting effects (fiber optic "star constelation" ceiling, transparent screens, self iluminating sphere, sunset behind triangular windows, floating seats, colored light from below);





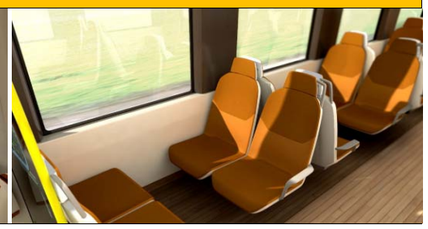




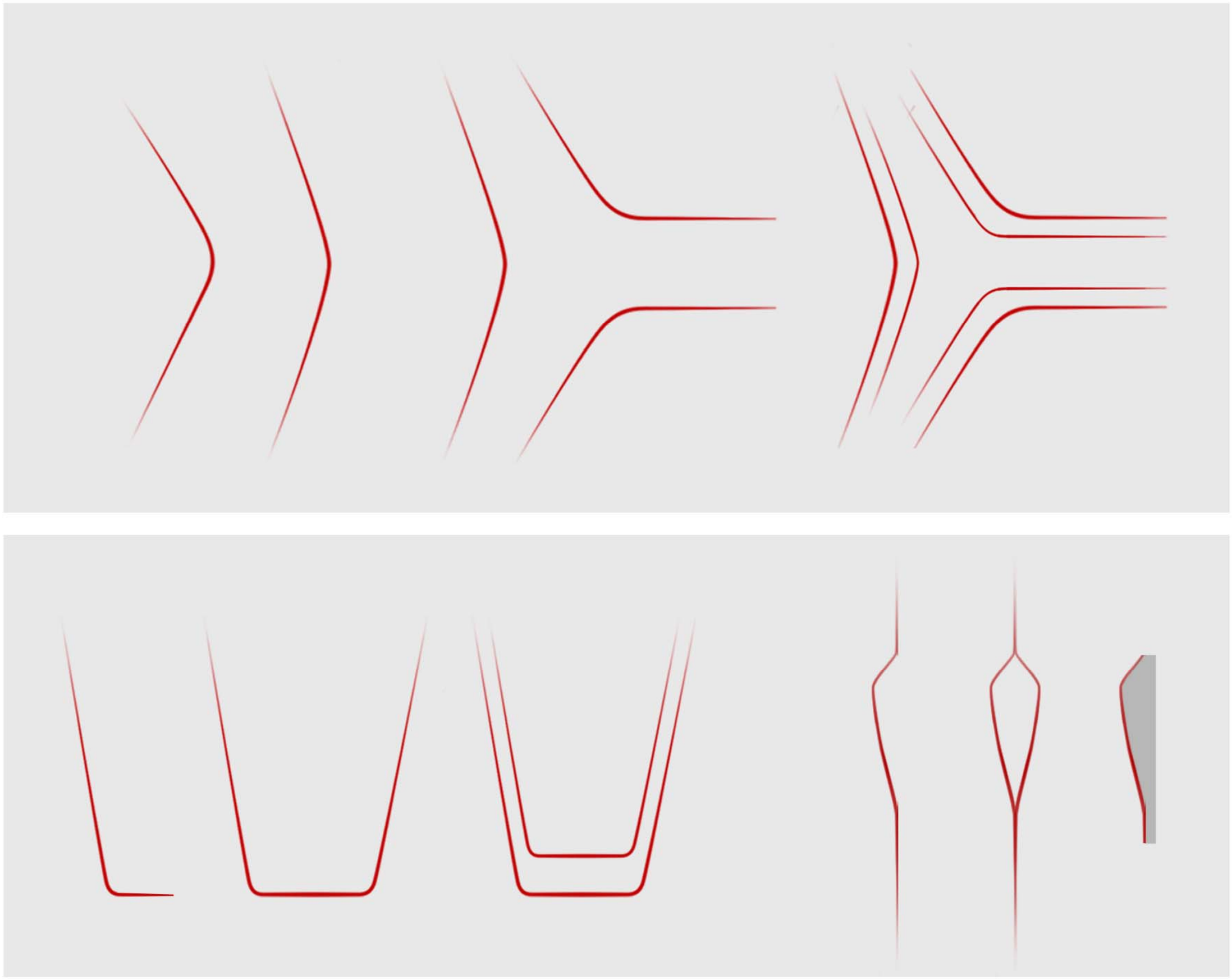
CASE STUDY IDENTIFICATION

Project name	INTRAIN
Market segment	Railway
Client	Consortium INTRAIN
Designers	JRM, AC, ER, MD, RO, GJ, CF
Partner companies	ALMA, AST, INEGI, ISQ, OPTIMAL, SETSA, SPIN WORKS, EMEF
Start Date	1st February 2012
Completion Date	30th January 2015
Awards	Good Design Award - 2015





CATEGORIES FOR ANALYSIS		PROJECT PHASES			
		IDEA GENERATION (BRIEF, RESEARCH, CONCEPT)	DEVELOPMENT (CONCEPT DEVELOPMENT, CONCEPT ENGINEERING)	EXECUTION (PROTOTYPE; PRODUCTION)	COMMUNICATION (PROMOTION; MARKET FOLLOW-UP)
CONTEXT	INTERNAL (Resources, Methodologies)	RESOURCES: Consortium R&D Project Application under the FP7 Portuguese Framework; 5 designers, 2 project managers; MEETINGS:Visits to partners, namely AST, INEGI, ISQ, OPTIMAL, SETSA, SPIN WORKS, EMEF. RESEARCH: Internal research; Visits to partners, namely EMEF and CP; interviews at CP; visit to carriages in Lisbon and Porto; definition of a base carriage for partners to work on, the CP2000 model; CONCEPT: Design team developed brainstorming sessions and sketching sessions; ilustrations of 4 concepts with different aesthetical and functional approaches; METHODOLOGIES: project planning including WP, Deliverables and Milestones; Market and trend analysis; Existing products benchmark and characterization;	RESOURCES: Team of 4 designers + 1 project manager; METHODOLOGIES: Concept design developed using 3D software tools (Rhino software); several iterations with Engineering teams and partners; 3D CAD models of each part were developed, assembly details developed by engineerng partners; lighting developed with external partner; 2 CMF definitions, moodboards and material boards presented to the consortium; CAD renderings were developed to support prototyping;	RESOURCES: Team of 3 designers + 1 project manager; METHODOLOGIES: Prototype assembled in EMEF with parts produced in different partners using rapid prototyping, machining, composites, etc; Designers accompained prototyping with visits and meetings with the partners; 2D CAD drawings were developed when needed; CMF specification document was developed; designers worked in the articulation of the producion of parts in different places, procureménet of market parts and materials with external partners and articulation for assembly in the mockUp. Prototyped parts were produced at partners facilities; moulds and composite parts for other side panels, seats, etc; screens with infotainement with interface design by Alma; market solutions were chosen for the flooring; lighting was developed together with an external specific partner.	The logotype was developed, is a theme focused on Passenger. Participation in Innotrans2014, Berlim, the biggest Railway trade fair in Europe with a 1/10 scale model; 2 official presentations of the full-scale prototype in Portugal - Lisbon and Leiria. Production of project Brochure, website, 1 presentation VIDEOS; photographic sessions; 12 published articles; 3 Industrial design models were registred.
	EXTERNAL (Cultural, Economic, Legal, Market, Tech)	ECONOMIC: Portugal is under a Troika assistance program (since May 2011); investement is very low; railway rolling stock needs investment after years of public funds focusing in road construction; which has gone to frequentely towards road transport; MARKET: Airbus A350 interiors have been presented as a mock-up / prototype; Priestman Goode project "Moving Plataforms" had an impact on how the railway transport of the future is envisoned; BMW Designworks USA metro interior is a benchmark; Mercedes Benz introduces Aesthetics 125 sculpture as a sign of a new design language; TECH: LED lighting becoming a comodity; Digital signage are usual; sensoring technology is available; CULTURAL: Daniel simon's design for Oblivion is inpirational; inpiration for the "Estoril" line came from SIntra's nature and the coastline; this fed the first sketeches, as well as the inspiration and market research;		Legal constraints in the railway industry are quite restricting regarding fire resistance, smoke toxicity, etc; UIC norms were researched for the seats and carriage interiors; Partner ISQ, with a lot of experience in the development of train interiors was a major source of information to define dimensions, mechanical constraints, etc; For the mock-up, materials and processes were not certified as the main focus was not in complying with every norm but to produce a mock-up which could make a statement in the industry and market as an innovative approach to train interiors; Some examples of requirements of this type are those associated with safety such as: resistance to initiation and propagation of flame, non-formation of droplets, non-emission of toxic and opaque fumes in the event of fire, non-creation of sharp edges in case of extraordinary requests (collisions), among others.- Lifecycle cost, given that it is one of the most important purchasing decision factors, and for which, in addition to the initial cost, RAMS (reliability, availability, maintainability, safety) performance and system weight of interiors. Market influences on the execution were the CMF decisions, specificly nature inspired benchmarks such as BMW Designworks material choice and handrail element design;	
SYNTAX	PRACTICAL FUNCTIONS	The aim of the project is the design of a suburban railway train carriage, focused on the integration of Eco-efficient, User-friendly materials and innovative technologies; A focus on urban train carriages, specifically for Cascais or Sintra was developed; a lot of layout proposals were put through in trying to adapt the train to different passenger peaks; simple cad 3d models and sketches were used to combine several possibilities, with a modular approache, for adaptive seating, acessibility,etc; with a freezed layout, work started on seat design and overall environment design; Different types of seats, ceiling panels, entrance doors, side panels, lighting fixtures, infotainment, handrails, partitions were developed. A specification document was developed, main requirements were: high reliability, easy to maintain, commercial operation to maximize vehicle	Subcontracting partner EMEF teams of refurbishment and maintenance at the Entroncamento factory were added to the project in a late development phase which resulted in some parts having to be modified after the design project due to lack of information about how to assemble them, access them , etc; The design and assembly process has a great impact on the maintenance of the vehicle, with common processes such as the replacement of seat covers among others. Easy access is also paramount for maintenance operations, as they are associated with vehicle immobilization / downtime. The location and arrangement of the seats and the partitions determine the evacuation conditions in case of emergency. The inclusion of intercommunication zones, with broad visibility of the whole unit, provides better conditions of surveillance and deterrence to potential passenger assaults. The materials used must	Solutions built in the mock-up, regarding the partners of the project, were focused on machining parts, mouldmaking and composite strucutres using different kinds of materials were trialed; machined parts, carbon and glass fiber composites were extensively used as well as aluminium and steel structures for the seats; the NATURE concept was chosen for execution; most of the elements were prototyped as mock-ups which can validade the space, design ergonomy, but not legal and maintenability requirements; Sensoring and infotainment for passengers was developed, an LED light system was applied; mockup layou avoided crowding of passengers in the entrances of the vehicle, causing them to move to the points of support in order to free the entrance areas, provided multifunction areas for PRMs and transport of bicycles, wheelchairs and luggage;	INTRAIN project received a GOOD DESIGN AWARD (Chicago Atheneum) and more than 50 articles about the project were published in aviation magazines; A photographic session was prepared and developed by a professional photographer; spin-off projects such as ALFA PENDULAR refurbish can be traced down to INTRAIN project and partners colaborations; National presentation was a huge succes with a lot of media coverage;
	LANGUAGE FUNCTIONS (Form elements, CMF)	4 design concepts with specific Form Languages were developed: CLINIC, SPORT, NATURE and HOME; concepts had different form languages, styling directions and CMF proposals; while some elements were common, such as the minimal square and circle approach (CLINIC), use of tensioned curves combined with straight lines (SPORT) , the subtle mix of soft curves and defined surfaces (NATURE) or minimal form and home CMF choice (HOME). The brief was opened regarding CMF; as the market was for an urban train for the lisbon area; a focus on lighter and eco-efficient materials was given in the initial brief; on the research phase a lot of different references were used, namely inspiration from the railway industry projects, but also form automotive and aeronautical concepts;	NATURE concept was chosen for development; this was clearly focused on a design language which utilized natural shapes and functional analogies with high tech parts and finishes, proposing a unified mode of connecting celling to side panles, tree like elements, with a natural CMF; Moodbaord and material board development defined to options for the NATURE concept: Autumn and Spring; a final direction was decidied upon the showing of renderings for both concepts, developed at the studio;	Form Language was detailed in the prototype and mock-up construction drawings and 3D information for producing parts; a lot of work went into adapting 3D geometry to production technologies; the Autoumn material board was chosen as the reference for all the choices of CMF; each material had to be gathered in order to check for compatibility in the construction prototyping techniques to be used, colors, textures, perforation, surface finishin etc; in the end a good result was achieved with flooring, not so much in the quality of fabrics and in the definitions of paint texture; textures and patterns were not fully developed due to technical limitations in painting and finishing; strucutral analysis was performed to account for the weight and support of the cantilivered seat concepts; LED light strips and aluminium profiles were used for the cabin interior lighting;	
SEMANTICS	SYMBOLIC FUNCTIONS (Attributed by designers),	First inspirational elements were "nautical" and "nature" themes due to the Cascais and Sintra line approach; the motto of organic developement was devised, with a central tree which branched from the ceiling towards the floor, including light, air supple and cabling (leaf analogy); Each of the concepts carried its own Form Language and associations directly linked with the names designers chose for them: CLINIC with a minimal "apple product" like approach; SPORT using dynamic shapes and strong contrasting colors like the ones found in sports equipment or automotive sport interiors; NATURE with a biomimetic analogy in the form, CMF and overall look and feel; HOME due to simples shapes and materials asosciated with home furniture and decoration;	The NATURE concept was chosen for development; a visual analogy from the "leaf" and "tree" can be found by means of the ceiling element which includes light, air and cabling which runs through the carriages and "branches" towards the entrance doors; CMF, specifically the wooden floor and color palete, help to achieve an Autumnal feeling in the cabin, which makes it natural and warm for the passnegers; dynamic shapes of the side panels, windows and ceiling element add an innovative and futuristic look and feel to the prototype;	The developed 3D geometries were able to be implememented in the mock-up even if they were not able to be series produced; CMF specification use a clearly influenced nature inspiration resulting in a natural, warm look and feel;	The project featured 1 VIDEO; 2 brochures were developed in different phases (teaser and final presentation); project presentation included a full 12m long train carriage with exterior vinyl decoration;
	SYMBOLIC FUNCTIONS (perceived by clients)	Choices were made during the concept and development phase by the partners consortium; 4 different concepts were presented: CLINIC, SPORT, NATURE and HOME; the 4 concepts presented different Form Language themes and CMF proposals; partners clearly chose the NATURE concept to develop;		A great percentage of clients / partners (90% to 100%) think the design is: 100% FRIENDLY, NATURAL, WARM; FUTURISTIC, INNOVATIVE, SOPHISTICATED, FLIUD A big percentage (70% to 90%) also thinks it comunicates: DYNAMIC, LIGHTWEIGHT	Form language, a mix of nature inspiration and precise surfacing, with a functional analogy in the ceiling / pillars element, together with the choice of materials (woodfloor, orange colors), featured a friendly, warm and natural look and feel.



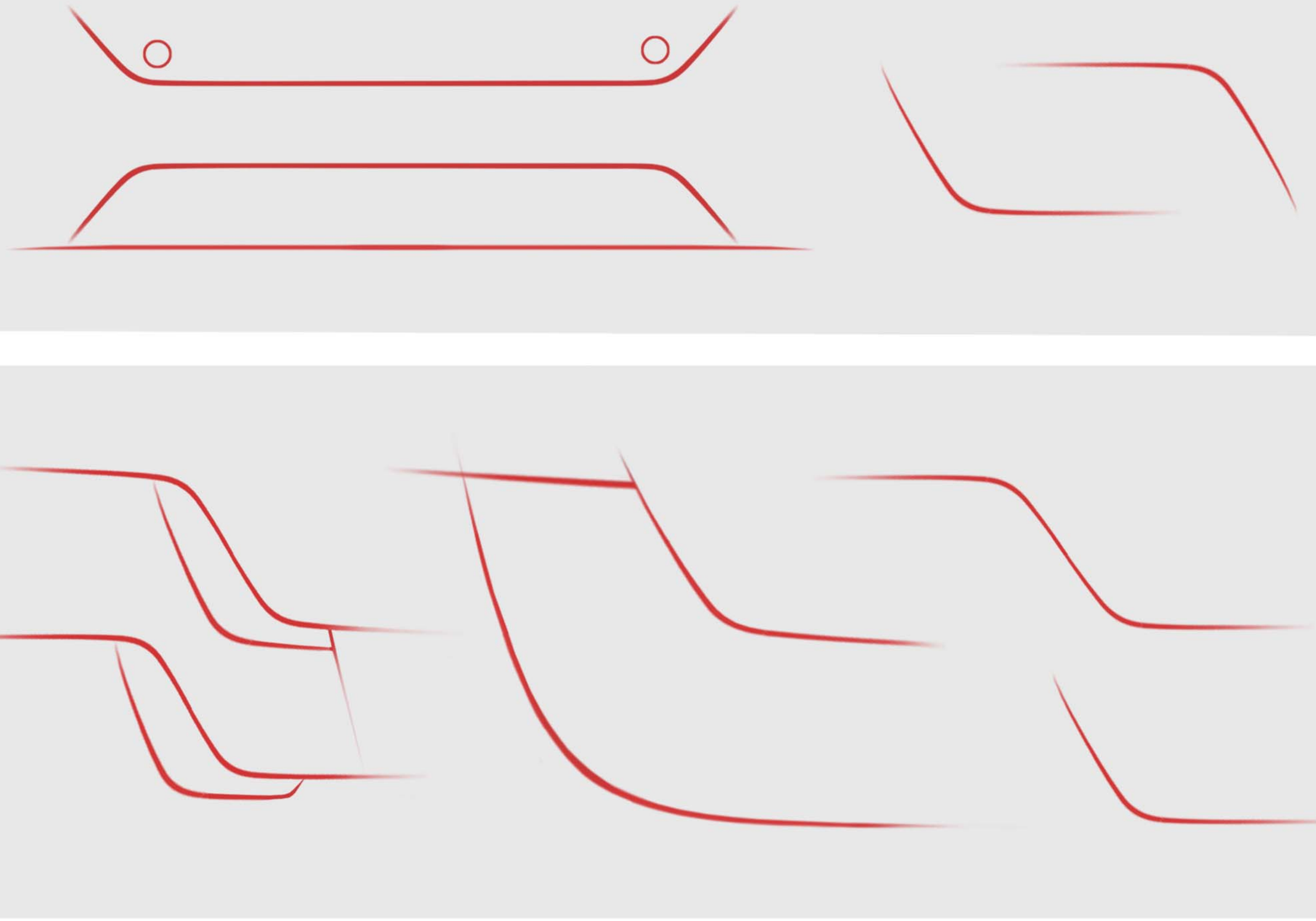
CASE STUDY IDENTIFICATION

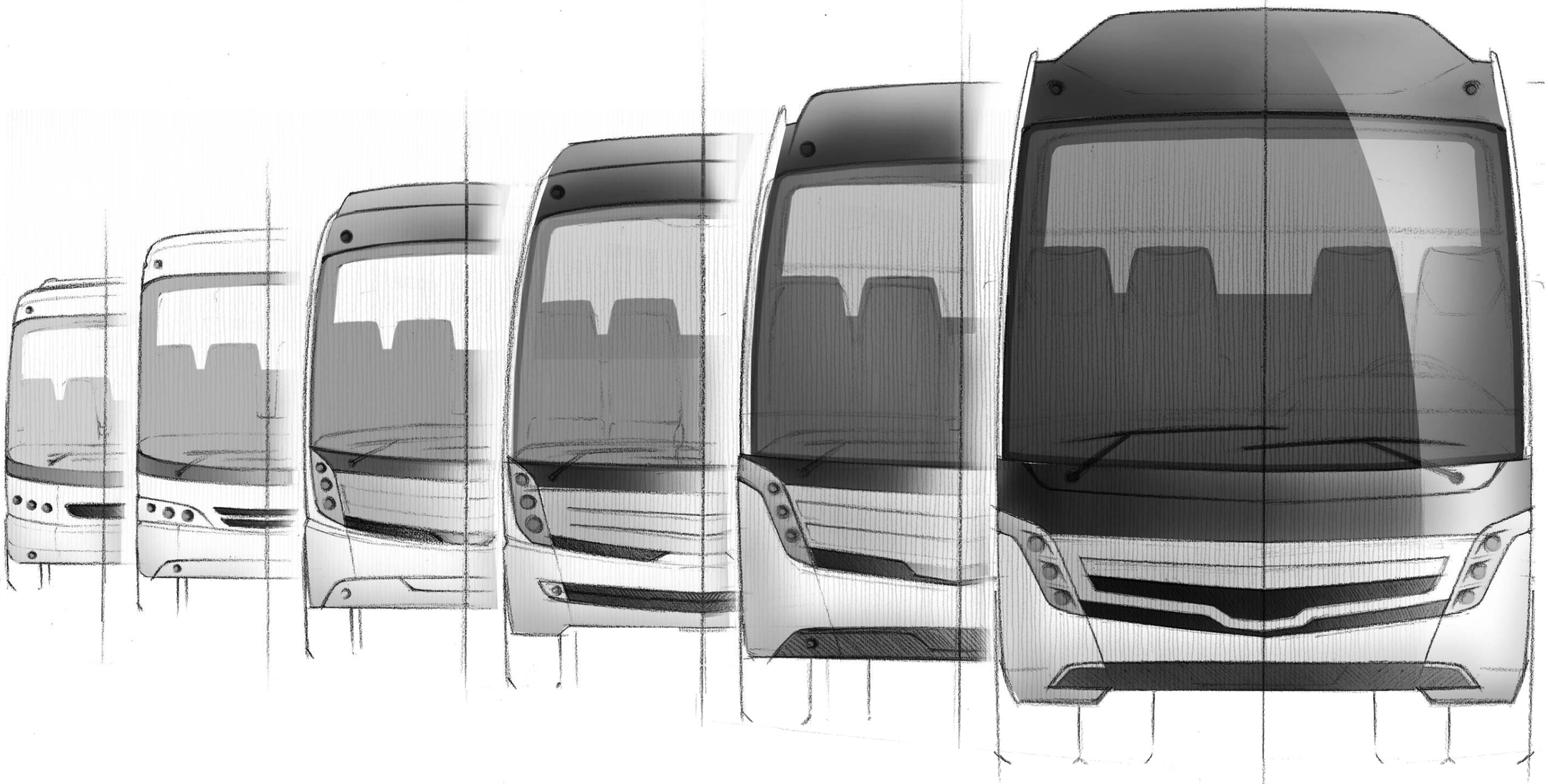
Project name	WINNER Facelift
Market segment	Automotive
Client	CAETANOBUS
Designers	JRM, AC, RO, MD, GJ, ER, CF
Partner companies	
Start Date	1st Jan 2011
Completion Date	31st July 2011
Awards	



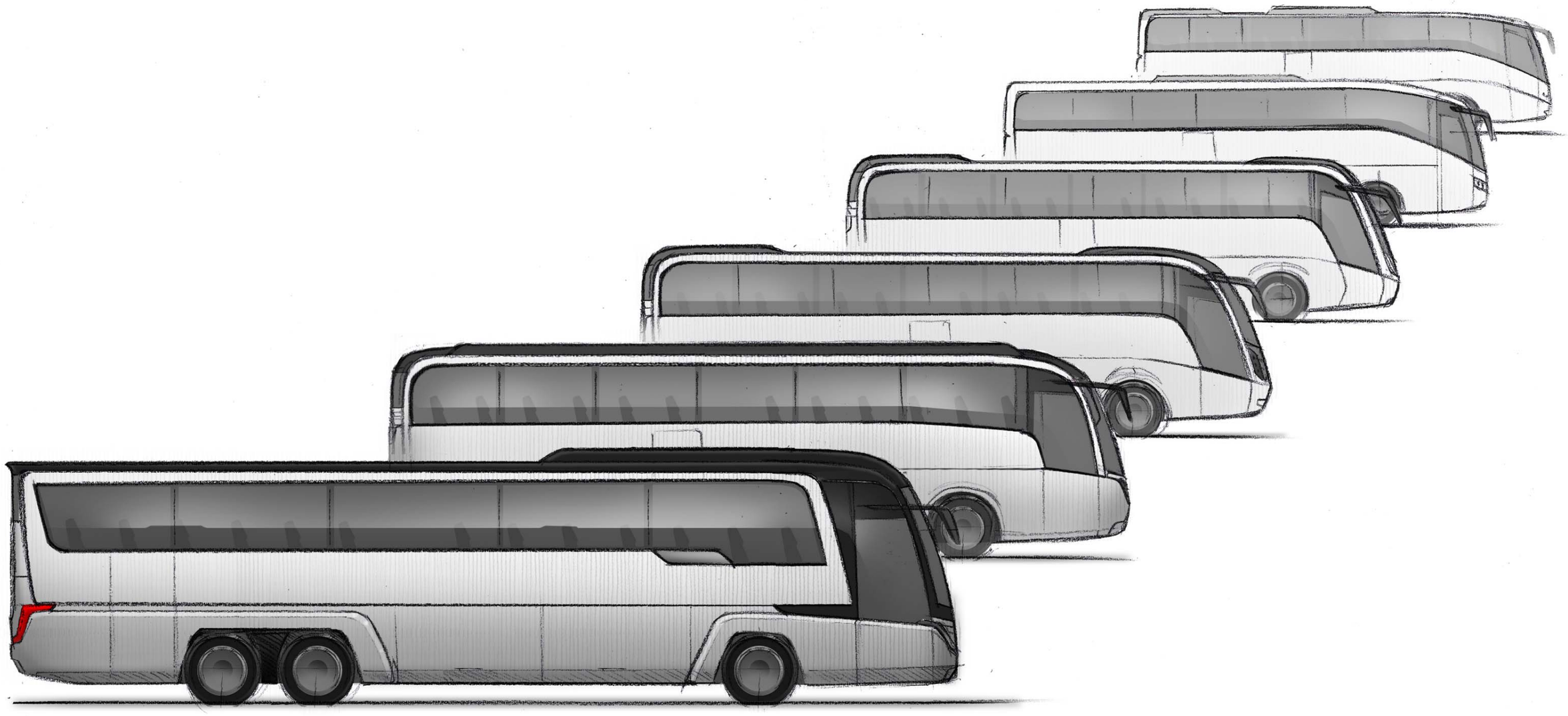


CATEGORIES FOR ANALYSIS		PROJECT PHASES			
		IDEA GENERATION (BRIEF, RESEARCH, CONCEPT)	DEVELOPMENT (CONCEPT DEVELOPMENT, CONCEPT ENGINEERING)	EXECUTION (PROTOTYPE; PRODUCTION)	COMMUNICATION (PROMOTION; MARKET FOLLOW-UP)
CONTEXT	INTERNAL (Resources, Methodologies)	RESOURCES: Approved Budget; Team of 4 designers + 1 project manager; MEETINGS:manufacturing facilities; Engineering and Marketing meetings SPECIFICATION: Development of a specification document with features to include in the new model; RESEARCH: Analysis of bus and automotive industry; CONCEPT: Design team developed brainstorming sessions and sketching sessions; ilustrations of 3 concepts with different aesthetical and fucnctional approaches; METHODOLOGIES: photoshop ilustration and 3D surface study models using Rhino Software; Internal innovation processes?	RESOURCES: Approved Budget; Team of 4 designers + 1 project manager; METHODOLOGIES: Model developed using 3D software tools (Rhino software); sveral iterations with Engineering teams; 3D cad models were developed until the final layout and geometry were freezed; CAD renderings were developed to support prototyping	RESOURCES: Approved Budget; Team of 4 designers + 1 project manager; METHODOLOGIES: Prototype built in Caetanobus using rapid prototyping moudls and fiberglass parts; changes in the prototype before final moulds were prepared; Cutting and definition of fastening and access elements; Final mould in fiberglass takne from the protoype; Testing and validation Production and validation Designers accompained prototyping with visits and meetings in the cliens; documents with changes and improvements;	not applicable?
	EXTERNAL (Cultural, Economic, Legal, Market, Tech)	ECONOMIC: 2012 Portugal assistance program; ununployment rates going uo; Automotive industry reducing production, not investing; TECH: Tesla presents first electrical mass production car; I-Pad is lauuched in 2010; Quadcopters go massive in production; LED market parts are available for headlights; LED lights for the backlights; Daytime running lights were applied; cameras; software version Rhino 5??? LEGAL: Reg. 66 MARKET: benchmark bus: . Irizar, Setra, Vanhool; Mercedes CULTURAL: Prometheus Movie; Cosmic Motors; Oblivion;			
SYNTAX	PRACTICAL FUNCTIONS	New headlights, front grille, bumper; Parts division according to C5; new rearview mirrors; New lateral glazing (simetrical); New door design (straight not curved); new rubber profiles; "B" Pillar in glass and FGRP; New top, ceiling and profiles for water; Simplificed assembly, less parts; Back lights with larger area; pantograph engine door;	Steel structure; Roof profiles in FGRP; LEDs; Daytime running lights; Models and prototyes;	Automatic door 3 part front (2 side rotating + grille pantograph) Assimetrical rearview mirros automatic side doors driver boomerang window and simplified "B" pilar LED rear lights rear grille with larger air outakes fornt and celing side sills for water welded steel strutucre foam isolation side panels in aluminium, FGRP front and rear parts	not applicable?
	LANGUAGE FUNCTIONS (Form elements, CMF)	4 concepts were initially proposed All concepts carried out an evolution of the form language developed in earlier models (Winner I and Winner II) with new side windows and front and rear parts Different colors for 4 concepts, in order to help with the concept differentiation.	the sloping all around the body line, sloping front, boomerang headlights in the front and back; specific details were added such as the definition of a detail grille design; careful care was ginve to the surface cross sections both in the front and back section, where slightly curved surfaces and specifc fillet were used in order to maitain the concet design form elements and retaining the technical feasaility of the parts and respective production methods	Going from concept to development, some design features were changed / adapted due to production contraints such as the availability of market parts (for the headlights) which only allow for a certain headlight diameter, the availability of DRL for the front, the number of parts and part division side windows became simetrical (were assimetrical with Winner Bus) and a slight curve droping eralier was now a part of the DLO which also finishes earlier due to the door changes. Paint scheme adapted to productioncontraints (masking to be avoided; parts with different colocr should be different parts, etc)	not applicable?
SEMANTICS	SYMBOLIC FUNCTIONS (Attributed by designers),	Initial concepts carried out form elements from previous models with small changes; a continuity approach was devised; front concepts had more "horizontal" elements or more diagonal and agreesive ones; Caetano grille had a vertical or horizontal "toth"; Nevertheless all concepts had a "friendly" expressio, (smiling) and all carried a dynamic sloping line in tte side glazing which is clean and minimal;	The chose concept featured an evolution of the vertical front headlights into a "boomerang" shape design element (such as the tail lamps); boomerang shape headlights are metaphors of speed and dynamic movement / flight; the fornt grille maintains big dimensions and carris the "lines" starting form horizintal into dinyamic towards the centr of the front bumper; large grille normally indicate large cars and top of th eline models; at the back the boomerang shape of the backlights was kept, althoug a larger wider look is now present due to technical constriants; the horzintal grille is now bigger and more detailed, wiht a big branded element; horzintal grilles are reminescent of 70's supercars (used them in their engines lids); repeated horizontal lines are metaphors for speed (sreamlining air movements); Wheel arches are recessed and sculated, which add interest to the minimal flat	Because of technical constriants the side os the bus were turned simetrical from the previous models; also, a sloped side curve had to be added to improve passneger visivbility on a "sloping" interior floor; different non simetrical rearview mirror had to be used in the front; this assimetriacl look on the mrrors could evenetually leed to a strange "uncanny" feeling due to its strange assimetry; backlamps being more robust lose some of its elegance form previous models; CMF specification used white, black and red parts; the white overall color, together with "darkened" side glasses, and details in matte black (such as a part of the front bumber or the rear one) makes for a look of black and white wich resembles SCI-FI classics such as Starwars, Stormtroopers (a tendency in the automotive design market)	not applicable?
	SYMBOLIC FUNCTIONS (perceived by clients)	Choices were made during the concept and development phase by the clients CEO, engineering and marketing teams Form elements in line with the previous models was clearly prefered by the client (do not change a "winner team" is very applicable in this case!) MAYA principles appear to work here: most advanced yet acceptable; radical changes in form elements were not well received; Bus gained robustness and complexity but lost elegance and simplicity (minimalism); A great percentage of clients / partners (90% tp 100%) think the design is: DYNAMIC; MINIMAL; FRIENDLY; MASCULINE A big percentage (70% to 90%) also thinks it comunicates: INNOVATIVE; RATIONAL; SOPHISTICATED; FUTURISTIC; FLUID; GEOMETRIC; SOLID; ARTIFICIAL; ROBUST; URBAN			not applicable?







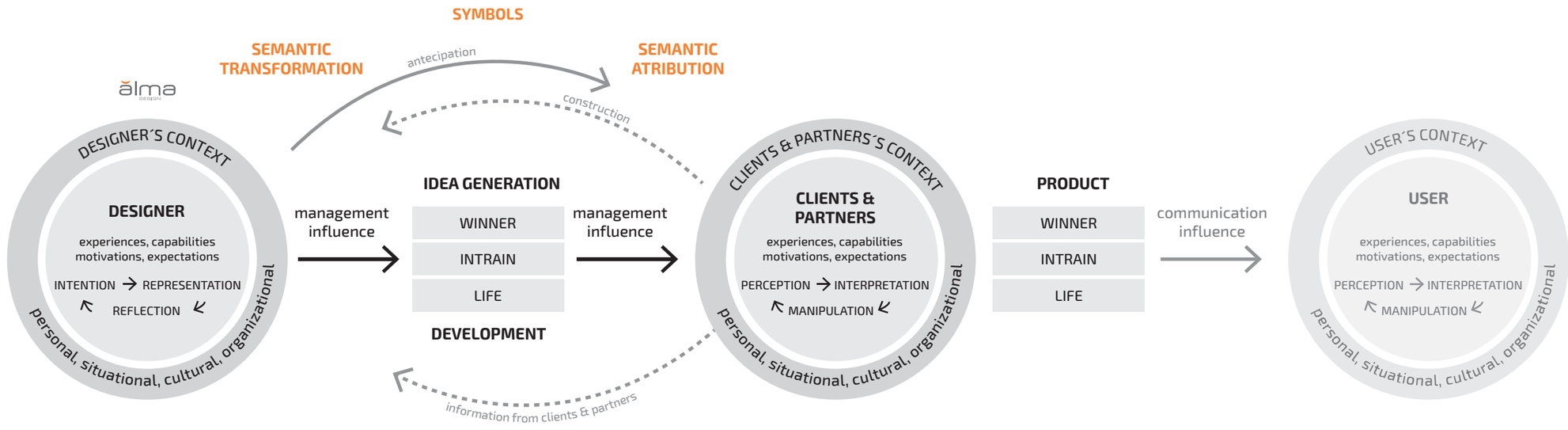


6 Model of the Form Language of Almadesign

THE FORM LANGUAGE OF ALMADESIGN STUDIO

ANDRÉ GALHARDO LOPES DE CASTRO // 2018

FORM LANGUAGE MODEL



FORM LANGUAGE RESULTS

CONTEXT

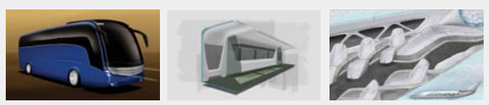
DESIGN HISTORY ART NOUVEAU (1850-1900) // MODERNIST MOVEMENT (1900-1925) // ART DECO/STREAMLINING (1925-1950) // THE JET AGE/ORGANIC DESIGN (1950-1975) // POST MODERNISM/POPULAR CULTURE (1975-2000) // DIGITAL REVOLUTION (2000-2015)

ALMADESIGN HISTORY EARLY YEARS (1997-2001) // GROWING UP (2001-2007) // CROSS-POLLINATION (2007-2012) // KNOWLEDGE TRANSFER (1997-2001)

PROCESS:



IDEA GENERATION



DEVELOPMENT



EXECUTION

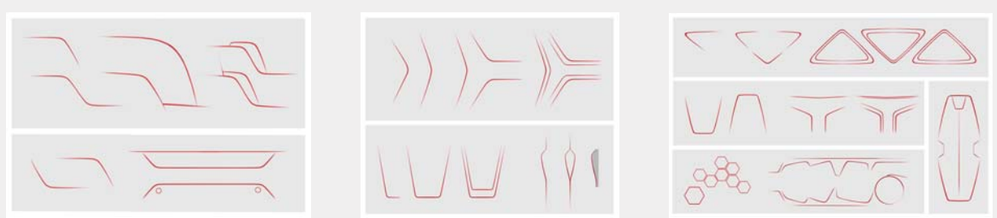


COMMUNICATION



FORM SYNTAX

FORM ELEMENTS



DESIGN PRINCIPLES

SYMMETRY	VARIETY	HARMONY	ANTROPOMORPHISM
REPETITION	PROPORTION	UNITY	NATURE

FORM SEMANTICS

DYNAMIC . MINIMAL . FRIENDLY . MASCULINE

NATURAL . FUTURISTIC . INNOVATIVE . SOPHISTICATED . FLUID . WARM . FRIENDLY

FUTURISTIC . INNOVATIVE . SOPHISTICATED . LIGHTWEIGHT . WARM . COMPLEX