What does it mean to be a Naturalist in the Human and Social Sciences? - A Comment on Andler's: *Is Naturalism the Unsurpassable Philosophy for the Sciences of Man in the 21st Century?*

In his paper *Is Naturalism the Unsurpassable Philosophy for the Sciences of Man in the 21st Century?* Daniel Andler puts forth a position in the sciences of Man he begins calling *liberalized naturalism.* In the course of the paper's development, Andler's own brand of liberalized naturalism is further clarified as *minimal naturalism*. Further on, he characterizes *minimal naturalism* as *methodological naturalism with philosophically wide open eyes*. This is the complex term he ends up selecting as the designator of the position he wants to mark out. What is then *methodological naturalism with philosophically wide open eyes*?

Andler presents us his position in terms of a contrast with three other positions, namely, the positions he calls fully naturalistic, partly naturalistic and anti-naturalistic. He tells us then that what distinguishes these positions in the sciences of Man is a question of method – the fully naturalistic position wants to reconcile the formal with the causal approaches to the subject of study, the partly naturalistic position ascribes a privileged status to the causal approach and the anti-naturalistic position ascribes a privileged status to the formal approach. Methodological naturalism with philosophically wide open eyes is then characterized by Andler as a position that deems the unilateral success of any of these three positions to be highly unlikely and that therefore calls for a combination of all of them in order to obtain results that might contribute to strengthen the research program of ontological naturalism. The term *ontological naturalism* is, in turn, defined as expressing a form of commitment towards the naturalist stance, namely, full acceptance. Finally, the naturalist stance is defined both in terms of the injunction *Take natural science with the utmost seriousness* and in terms of the commitment to some form of reduction of the realm of the non-natural into the realm of the natural.

Now, I suppose that, in the context of this colloquium, the question I am required to answer is the following: do I agree with Andler's brand of 'liberalized naturalism'? Well, it is difficult to give a 'yes' or 'no' answer right away. Some ground needs to be clarified first. Thus, I will postpone my answer to the closing part of my comment.

In a first approach to Andler's paper, I identify two major difficulties.

In the first place, it is difficult for me to me see how blending naturalistic with anti-naturalistic views on the sciences of Man, as Andler encourages us to do, might contribute to define a philosophically coherent or stable position. This might not be a problem if, in a sort of Chomskyan way, Andler were just putting forth a pragmatic approach to the field of research refusing to take sides in the dispute between philosophical naturalism and non-naturalism in the sciences of Man; but his version of 'liberalized naturalism', no matter how liberal, is supposed to be a form of philosophical naturalism, namely, a form which implies full acceptance of the naturalist stance, and not a form of suspension of philosophical belief. I find this perplexing.

Secondly, it is not clear at all to me that the strengthening of the research program of ontological naturalism in the sciences of Man, as defined by Andler, might possibly be achieved; thus, it is difficult for me to see how could one possibly contribute to such a strengthening. Let me belabour this point a little bit, as I think it is the most relevant.

As I mentioned above, liberalized naturalists of the form Andler specifies, are required to strengthen the research program of ontological naturalism.This research program is, in turn, characterized by its full acceptance of the naturalist stance. The acceptance of this stance is, in turn, characterized by the fulfilment of the following two requirements: complying with the injunction *Take natural science with the utmost seriousness;* and commitment to some form of reduction of the realm of the non-natural into the realm of the natural. I have troubles with the fulfilment of any of these requirements.

Here is what I find troubling with the fulfilment of the first requirement. The formulation of the above mentioned injunction seems to me to imply that there is or that there should be a single field of research called 'natural science', the method of which is or should be unified and transparent. But I am not sure that there is or that there should

be a method of natural science over and above the methods of the different natural sciences.

There are, of course, some general standards concerning, for instance, severity of testing, or impartiality in dealing with the evidence, or definition of constraints on what may count as good evidence which are common to all natural sciences. But these seem to me to be fairly general standards. Their generality seems to me to be so extreme that I do not find it at all self-evident that many anthropologists, historians or linguists that consider themselves to be siding with interpretivism rather than with scientific explanation might not accept these general methodological standards as their own. As a matter of fact, lots of them do. However, if, in order to exclude them from the set we want to define, we try to make the methodological characterization of general natural science more specific, we will be bound to realize that natural sciences are less unified than we tended to think. We will be bound to realize, for instance, that some perfectly acceptable natural sciences such as, e.g., geology, do not live up to the standards of what is usually considered to be the role model of natural sciences, namely, physics.

Once we realize and accept that such a state of affairs is the case, it will be highly problematic to justify a discrimination against some exceptions but not against others. And if we do not discriminate against any of the natural scientific exceptions, we will have a hard time justifying our discrimination against those non-natural sciences that abide by the very general methodological scientific standards mentioned above but do not partake of some of the more specific methodological principles followed by physicists. This, I think, is a point Jerry Fodor made a long time ago.

Let me now deal with the second requirement. The commitment to ontological reduction seems to me to imply that it always makes sense to try, at least, to reduce the entities and properties the sciences of Man talk about to entities and properties natural sciences talk about. However, as it stands, this thesis seems to me not to be quite true. Let me introduce my point through the consideration of the following standard example.

Consider a prediction provided by standard economic theory according to which, in a normal market economy, lowering interest rates, under some relevant conditions appropriately specifiable, boosts private investment and thus facilitates economic

growth. Let us assume, for the sake of the argument, that predictions such as this one tend to turn out true more often than not and that we feel confident to provide an explanation for the surge of economic growth in terms of the lowering of the interest rates (*ceteris paribus,* of course). How are we to countenance a serious reduction of the entities referred to in an explanation belonging to this mode of discourse to natural scientific entities under some suitable definition of what these are?

The obvious route is to bring back the terms occurring in the above mentioned explanation to very complex descriptions of the underlying natural facts. Needless to say, underlying any economic facts there are millions of human beings relating to each other in certain ways. These relations are in turn somehow managed by their brains; these brains are in turn continuously in the business of processing electro-chemically complex visual or auditory stimuli; these stimuli must somehow be able to carry messages such as the one that interest rates were lowered by the central bank; such a processing is somehow instrumental in making these brains reaching a stage that may count as a decision to invest; these cerebrally characterized investment decisions are, in turn, somehow transduced into electrochemical impulses that make the bodies associated with these brains communicate in highly elaborate ways with their own banks by phone, e-mail or whatever other way; such communications originate in turn the deployment of millions and millions of other transactions, and so on and so forth. Questions of practical feasibility apart, I suppose that it should in principle be possible to fully describe events such as the 'lowering of the interest rates' or the 'upsurge in private investment' in terms similar to these.

Now, if the naturalist's aim were simply to reject the idea that there might be some supernatural entities governing the whole economic process, highlighting in this way the underlying psychobiophysical complexity hidden behind the entities and properties talked about in economics might indeed be an useful and illuminating reductive strategy. But I take it that, understood in this way, the naturalistic reduction we might achieve is of the not particularly informative or trivial kind Andler refers to in his paper. This then seems to mean that the idea associated with the ontological reduction aimed at in the strengthening of the program of ontological naturalism should be understood in some stronger and less trivial sense. What might this sense be?

I take it that, in order to be philosophically and epistemologically meaningful, any sort of reduction worth undertaking has to satisfy the *desideratum* of being inducive of explanatory progress. And here is where I think the problem lies. For even if we suppose that we might be able, *per impossibile*, to achieve a full description of the above mentioned processes which would refer only to some sort of fully naturalized entities and their properties, such a description would presumably leave us completely in the dark about the question of why the entire economic system behaves in the way it does. As a matter of fact, it seems to me that most of the information contained in such a overwhelmingly complex description would be explanatorily useless. At the same time, it also seems to me that a lot of useful and potentially explanatory information provided by unreduced disciplines such as, e.g., history, social psychology or anthropology would be completely left out of the picture. If I am right on this account, then it seems to follow that it is not the case that it always makes sense to try, at least, to reduce the entities and properties the sciences of Man talk about to entities and properties natural sciences talk about.

As a matter of fact, we can identify a pattern here which is actually more general than the problem of reducing the sciences of Man to the natural sciences. Consider for instance the case of evolutionary biology. John Maynard Smith and Richard Dawkins, two hard-nosed naturalists in any decent account of the term, have both defended a view of their subject according to which the right direction to follow in bringing back the central concepts of evolutionary and developmental biology to some other concepts simultaneously more basic and more explanatory is the direction of abstract information theory not the direction of physics or microphysics. Dawkins talks of genes being ‘long strings of pure digital information’ and Maynard Smith talks of genes being ‘symbols’ and stresses the fact that the use of informational terms in biology is not metaphorical but literal, in that it implies intentionality, the property nineteenth century philosophers identified as being the mark of the mental.

Of course, we know that Dawkins’s view of the genes as items of digital information encapsulated in wetware or Maynard Smith’s view of natural selection as a provider of biological intentionality into living structures in no way conflict with the thesis of the causal closure of the physical realm. But this is not my point. My point is simply that just as the direction of explanatorily illuminating intra-natural reductions is not

determined beforehand by a previously given hierarchy of levels of natural scientificity starting in Microphysics, an explanatorily illuminating reduction of a human or social science does not have to be undertaken in the direction of some natural science or other. Conversely, I see no *a priori* reason why a reduction in the direction of some natural science or other, even if possible, would have to be explanatorily illuminating.

Now, Andler's non-triviality condition and his criticism of free-floating naturalism express concerns similar to those I have just mentioned. And these concerns seem to underly also the injunction with which Andler's terminates his final characterization of minimal naturalism, namely, the injunction "refrain from any commitment, explicit or implicit, regarding the outcome of the inquiry". But then it is hard to see how being so radically non-committal regarding the outcome of the enterprise of ontological reduction is actually compatible with the injunction that the results of your inquiry should contribute to strengthen the research program of ontological naturalism. How can you contribute to strengthen a research program by refraining from committing yourself to one of the two basic tenets in terms of which this research program is defined? Andler himself detects a threat of 'pragmatic incoherence' here, but he claims that his final formulation of minimal naturalism solves it. I do not see how. The dialectic of his position may be in line with Sartre's pronouncement in the *Critique de la Raison Dialéctique*, but less dialectical minds will probably find difficult coming to terms with it.

Given the criticisms I voiced above, where do I stand then in the dispute that revolves around philosophical naturalism and the sciences of Man? From what I argued above, it seems to follow that, according to my standpoint, if there is something specific characterizing a naturalistic view of the sciences of Man, that is neither the idea that the sciences of Man should ape the specific methods of any particular natural science nor the idea that the entities and properties they talk about should be ontologically reducible to entities and properties some natural science or other talks about. So, where, if anywhere, lies the specificity of a naturalist approach to these sciences?

My answer to this question is the following: the right way to construe the naturalism versus interpretivism debate in the sciences of Man is in terms of a methodological disagreement. And this disagreement concerns the concept of explanation each of the

perspectives endorses. What distinguishes naturalists in this dispute is the fact that they consider *causal explanation* to be the right sort of explanation they should strive to provide in their work. Interpretivists, on the other hand, associate explanation with rational reconstruction, understanding, role identification, and the establishment of synthetic *a priori* principles that are supposed to be constitutive of the domain of the human sciences. This standpoint, by the way, is not new. Besides earlier formulations, it has been revived recently by, e.g., Daniel Steel.

Finally, let me now return to my original question. It should be clear by now that I sympathize with Andler's attempt to avoid committing himself to ontological naturalism. It is also clear that I disagree with the way he characterizes the general features of the theoretical landscape against the background of which the naturalism dispute in the sciences of Man takes place. Given that characterization, his own version of liberalized naturalism sounds too close to being contradictory. However, against the background of my own characterization of the relevant theoretical landscape, the position summarized in his final definition loses its paradoxical aspect. As a matter of fact, it appears quite sensible and justified. It appears moreover as a naturalist recipe for guiding actual research I certainly agree with.

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