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# TWO FORMS OF NON-REDUCTIVE NATURALISM

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## *abstract*

*The debate on naturalism in the last years has developed around two main interconnected issues: the possibility of naturalizing the items of the manifest image of the world and the prospects of non-reductive naturalism. In this article, I will be concentrated on the second issue, by looking at two important proposals for a non-reductive naturalism: Hilary Putnam's liberal naturalism and Lynne Baker's near-naturalism.*

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## *keywords*

*Naturalism, liberal naturalism, scientific naturalism, Lynne Baker, Hilary Putnam*

### 1. Naturalisms

Most philosophical labels are time-independent designators. During their respective times, Fichte and Hegel were considered idealists, Marx and Nietzsche atheists, Aquinas and Leibniz realists; and they are still considered as such. This is because the labels “Idealism”, “Atheism”, and “Realism” have not changed their meanings over time (or, if they have, only in minor respects). With the term “Naturalism”, instead, the situation is quite different. In a very general sense, this term means that nothing can be accepted in one’s philosophy that is beyond nature. Yet, the meaning of this definition is not a time-independent one. For example, Heraclitus, Jean Buridan, Francis Bacon, Giordano Bruno and Goethe can all be considered naturalist philosophers if we look at the cultural contexts of their respective times. Though, today no philosopher defending their views would be considered part of the naturalistic crew.

This happens because the meaning of the term “naturalism” is conceptually dependent on the meaning of “natural” and, indirectly, “nature” (from which the former derives); in turn, the meanings of these terms have changed dramatically over time. Giordano Bruno, for example, can be considered a naturalist as long as one looks to the Renaissance view of nature – which attributed a crucial role to vitalistic forces and secret non-causal correspondences among things –, but certainly today nobody could present views similar to Bruno’s without being considered a supernaturalist (and a bizarre one, for that matter). Consequently, in the course of history different naturalisms have been developed, depending on the views of nature that each period has held. Thus, in discussing the nature of contemporary naturalism, one has to consider which is the conception of nature that the philosophers who label themselves naturalists are referring to. Still, the answer to this question is not univocal.

Most contemporary naturalists – the “strict naturalists” – take the term “nature” as referring only to the subject matter of the natural sciences, if not to the subject matter of physics alone<sup>1</sup>. But according to other naturalist philosophers – the “liberal naturalists” – while the subject matter of the natural sciences is certainly a fundamental component of the concept of nature, it does not exhaust it. This is because a “second nature” (to use the Aristotelian term revived by John McDowell [1994]) also exists, which is distinct from the nature that is investigated by the natural sciences.

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1 See Papineau 1993 and 2007; Ritchie 2009; Baker 2013, part I.

“Second nature” stands for the world of culture, into which we enter by way of education, and this is a world that is still “natural”, even if it cannot be accounted for by the natural sciences.

In the first place, therefore, liberal and strict naturalists differ over their respective metaphysical views as to what nature is – that is, whether nature coincides with, or is broader than, the subject matter of the natural sciences. This metaphysical difference generates three other differences, respectively at the epistemological, the semantic, and the metaphilosophical level. More specifically, the strict naturalists accept: (i) an *ontological tenet* according to which reality (that is, nature) consists of nothing but the entities to which successful explanations of the natural sciences commit us; (ii) an *epistemological tenet* according to which scientific inquiry is our only genuine source of knowledge or understanding; all other alleged forms of knowledge (e.g. *a priori* knowledge) or understanding are either illegitimate or reducible in principle to scientific knowledge; (iii) a *semantic tenet* according to which no truth-apt factual judgments exist that do not regard scientifically accepted entities, and are irreducible to judgments regarding such entities; (iv) a *metaphilosophical tenet*, according to which philosophy must be continuous with science as to its contents, methods, and purposes<sup>2</sup>.

The main problem that strict naturalism faces has been called the “placement problem” (Price 2004) or the “location problem” (Jackson 1998, pp. 1-5). It concerns the items that are part of the common-sense view of the world (which the liberal naturalists connect with our “second nature”), but at least at their face value do not belong to the scientific view of the world – that is, are not part of “first nature”. Examples of this category are moral features, free will, normativity, consciousness, and intentional properties. According to the strict naturalists, either these features are in principle reducible to the features accepted by natural science, and are thus investigable with the scientific means, or they are just fictions, in which case no judgment concerning them can be objective.

Liberal naturalism liberalizes the tenets of strict naturalism, by accepting: (i) a *liberalized ontological tenet*, according to which there may be entities that are both irreducible to, and ontologically independent of, entities whose nature and behavior are not explainable by science but are not supernatural either; (ii) a *liberalized epistemological tenet*, according to which legitimate forms of understanding (such as conceptual analysis, imaginative speculation or

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2 Differently from what I did in De Caro & Voltolini 2010 and De Caro 2010, in the list of the commitments of contemporary naturalism here I also mention a semantic tenet of liberal naturalism. I think this is especially important for understanding the originality of Putnam's view.

introspection) exist that are neither reducible to scientific understanding nor incompatible with it; (iii) a *liberalized semantic tenet* according to which there are truth-apt factual judgments that do not concern scientifically accepted entities or properties and are irreducible to judgments regarding such entities or properties; (iv) a *liberalized metaphysical tenet*, according to which there are issues in dealing with which philosophy is not continuous with science as to its content, method and purpose.

The main difficulty that liberal naturalism encounters may be labelled the “reconciliation problem”. How can the common sense image and the scientific image be on a par with each other, i.e. without one being conceptually prior on the other? What kind of relation is there between the scientific descriptions of the world and those referring to our second-nature features? Is that a relation of supervenience (and in case, of which kind?), asupervenience, grounding, incommensurability, or what? In the next paragraph of this article I will discuss a prototypical form of liberal naturalism, proposed by Hilary Putnam in the last years. In the last paragraph I will instead discuss a different proposal that, *stricto sensu*, is not a form of liberal naturalism but has many similarities with it: Lynne Baker’s *near-naturalism*.

## 2. Putnam’s Liberal Naturalism

The *cliché* according to which Putnam is guilty of changing his mind too often is unfair for at least two reasons. One is that, in itself, there is nothing wrong – no guilt! – in changing one’s own mind (unless the change is due to bad reasons or bad faith, which certainly is not the case for Putnam).

Another reason, more relevant here, is that there are many important issues about which Putnam has *not* changed his mind for many years. The fact/value dichotomy, conceptual pluralism and conceptual relativity, the externalist theory of meaning, a cognitivist and realist view of ethics, and the denial of Metaphysical realism are only some of these issues. Another, very important thesis about which Putnam has not changed his mind, with the exception of few very early publications, is that science is a fundamental source of knowledge but not the only source of knowledge. To paraphrase an excellent non-professional philosopher, for Putnam there are more things in heaven and earth than are dreamt of in our science; but still nothing can be truthfully said that would contradict science.

These views sound very much like liberal naturalism<sup>3</sup>. But this is no coincidence, of course, since Putnam – with McDowell and P.F. Strawson – is one of the founding fathers of that philosophical movement (whose grandfather is John Dewey). Let us now look in turn at the four tenets of liberal naturalism and see how Putnam has accounted for them.

<sup>3</sup> For Putnam’s latest views on these issues see his (2012c, forthcoming a, and forthcoming b).

Let us begin with the liberalized ontological tenet. According to this tenet, besides the entities assumed by the natural sciences, we should also admit the existence of other entities whose reality is presupposed either by the social sciences and/or by our non-scientific practices, and that (without being supernatural) are both irreducible to and ontologically independent of the entities whose nature and behavior are explainable by the natural sciences. According to a common strictly monistic view – advocated, among many, by Quine – the world is composed by exactly one domain of individuals (ontology) and one domain of properties attributed to those individuals (ideology) and science alone has the ability to determine what these domains are. This view characterizes strict naturalism, and Putnam strongly refuses it. However, differently from the antinaturalist thinkers, who typically defend one or the other among the antirealistic views of science (such as conventionalism, instrumentalism, or relativism), Putnam is a stern realist about science – *i.e.*, he believes that scientific theories can be (and often are) true or approximately true and that scientific terms refer to real entities also when those are unobservable. In this perspective, Putnam (1975, 2012b) has developed the famous “no-miracles argument”, which advocates scientific realism by appealing to an inference to the best explanation. The core of that argument is that realism recommends itself insofar as it offers a much more convincing account of the great success of modern science than antirealism does – since for the latter view the success of science is nothing less than an unexplainable miracle. But, even though he is a scientific realist, Putnam refuses the strict naturalists’ monistic view for two main reasons. First, because of the phenomenon he calls “conceptual relativity”, which means that some theories can be cognitively equivalent even if *prima facie* they appear incompatible. (Less equivocally, this phenomenon could be labelled “descriptive equivalence”, since the other expression may suggest a connection with relativism and antirealism which is entirely inappropriate). As Putnam convincingly argues, in some scientific fields, such as mathematical physics, this phenomenon is ubiquitous.

To take an example from a paper with the title “Bosonization as Duality” that appeared in *Nuclear Physics B* some years ago, there are quantum mechanical schemes some of whose representations depict the particles in a system as bosons while others depict them as fermions. As their use of the term “representations” indicates, real live physicists – not philosophers with any particular philosophical axe to grind – do not

regard this as a case of ignorance. In their view, the “bosons” and “fermions” are simply artifacts of the representation used. But the system is mind-independently real, for all that, and each of its states is a mind independently real condition, that can be represented in each of these different ways. And that is exactly the conclusion I advocate [...]. [These] descriptions are both answerable to the very same aspect of reality, [...] they are “equivalent descriptions” (Putnam 2012a, pp. 63-64).

The second reason why Putnam refuses the old monistic view about ontology is more interesting for our purposes. It consists in the fact that, in his view, the ontology of the world cannot be limited to the entities and the properties described by natural science.

I do indeed deny that the world can be completely described in the language game of theoretical physics; not because there are regions in which physics is false, but because, to use Aristotelian language, the world has many levels of form, and there is no realistic possibility of reducing them all to the level of fundamental physics (Putnam 2012a, p. 65).

One of Putnam’s favorite examples is that, depending on our interests, we can correctly and usefully describe a chair in the alternative languages of carpentry, furniture design, geometry, or etiquette. Each of these descriptions is useful in its own way, without being reducible to any of the others. There is no a fundamental theory of what being a chair is, so to speak. And this is valid with regard to a vast amount of entities (possibly all of them, with the exception of the entities of microphysics), since they can be described in different ways not just because of conceptual relativity, but also because things have different properties that belong to different ontological regions, to use Husserl’s term.

In this pluralistic light, the old ontological project of providing a general inventory of the universe, which would supposedly encompass the references of all possible objective statements – a project of which strict naturalism is the last expression – has made us wandering in Cloud Cuckoo Land for too long (Putnam 2004, p. 85). And this means that Ontology with a capital “o” is a dead project. But another form of ontology (one with a lower-case initial) is still possible, *i.e.*, the search for the entities our best theories and practices commit us to. But this cannot be carried out if one is driven by an ideological bias that there is one, and only one, true theory of the world. Nor can it be carried out without noticing that reality has different levels. And it is a pragmatic question which level is relevant to a particular

discursive practice.

However, the fact that reality is articulated in different levels raises a question about the relationship running between them. About this relationship, Putnam is straightforward: different levels of reality are linked by a relationship of supervenience (sometimes local, sometimes global) from the most basic to the less basic. In this sense, it is useful to mention a discussion between Putnam and Stephen White. White (2008) defends the idea that the “agential perspective” and the “objective perspective” are categorically different and, in fact, incommensurable, so that between them there is a relation of “asupervenience” (neither supervenience nor non-supervenience). To this Putnam replies,

I do think that all of our capacities, including “agential” ones (a category which, as Stephen White correctly argues, includes our perceptual capacities), supervene on the states of the physical universe, including, in a great many cases, past as well as present ones [...]. I am a naturalist – a non-reductive naturalist – and I don’t see how any naturalist can deny global supervenience of human psychological states and capacities. (And appealing to the murky doctrine of “incommensurability” is no help). But there is no one simple answer to the question of whether our agential capacities are *locally* supervenient (supervenient on just the relevant brain-states) or *globally* supervenient on factors external to the brain, and even to the organism, because *it depends on which agential capacities one is talking about*, even if we restrict the issue to perceptual capacities (Putnam 2008, p. 29).

These ontological claims have of course important epistemological implications. In this respect Putnam holds what I have called a “liberalized epistemological” view, claiming that many cognitively non-equivalent and mutually irreducible conceptual schemes have to be used to account for the different levels of reality. And this means that, *pace* Quine, there is no such a thing as a “first-grade conceptual system” (*i.e.*, the natural sciences, if not physics alone), which is in charge of describing reality, while all the other conceptual systems are either reducible in principle to it or completely flawed. According to Putnam, we legitimately “employ many different kinds of discourses, discourses subject to different standards and possessing different sorts of applications” (2004, p. 22).

Putnam also endorses the “liberalized semantic tenet”, in a very radical way. Not only he does say there are true judgments that do not concern scientifically accepted entities or properties, but he also adds that some of these judgments are objective even without describing anything; that is,

there can be “objectivity without objects” (Putnam 2004, pp. 77-78), as in the case of ethical and mathematical judgments. For example, no *special* moral entities (such as free-floating values) exist that make our moral judgments true or false. This does not amount to saying that there are no *non-special* moral entities, since these certainly exist, and are the agents. Still when we say that someone is good, there is no ontologically autonomous “goodness” to which we refer.

Finally, as to his metaphilosophy, Putnam strongly refuses Quine’s view of philosophy as a branch of science. According to Putnam, there certainly are legitimate philosophical issues that are not scientific in character and cannot be treated by using the methods of the natural sciences. To mention some of these issues: the ontological status of possible worlds, the conditions of a just war, the skeptical challenge to the existence of the external world, the ontological proof of God’s existence, the conceptual link between free will and moral responsibility – and the list of specifically philosophical issues could go on for very long.

Putnam himself states this point with great clarity when he claims that philosophy has two faces: the *Theoretical face* which aims at clarifying “what we think we know and work out how it all ‘hangs’ together”, as Wilfrid Sellars [1962, p. 37] famously put it in, and the *Moral face* (which “interrogates our lives and our cultures as they have been up to now, and which challenges us to reform both”)<sup>4</sup>. It is clear that the moral face of philosophy does not depend on science as its primary source of inspiration, and even less as its foundation. This, however, does not mean that what it is said at the moral level can be incompatible with what science says about the world. If a defense of racism, for example, can certainly be criticized from a moral point of view, it is just refuted by the strong scientific evidence that human races do not exist.

Summarizing, as to his ontological, epistemological, semantical and metaphilosophical views, Putnam is undoubtedly a liberal naturalist.

### 3. Baker’s Quasi-naturalism

A very useful distinction made by Lynne Baker in her important book, *Naturalism and the First-person Perspective* (2013), is that between the diverse forms of scientific naturalism, which depend on how its advocates respond to some crucial open issues. In particular, some of them (such as Philip Pettit) claim, and others (such as Hilary Kornblith and Philip Kitcher) deny, that all the sciences are reducible to microphysics. And some (the “disenchanted naturalists”, such as Alex Rosenberg) maintain that the so-called “fundamental questions of life”

<sup>4</sup> Putnam 2010, p. 93. On this issue, see also De Caro & Macarthur 2004 and 2012.



disintegrate once they are framed within the scientific worldview, while others (the “optimistic naturalists”, such as Philip Kitcher and Daniel Dennett) think that such questions are legitimate and can be understood (if not answered) with scientifically kosher conceptual tools. However, all advocates of scientific naturalism encounter serious difficulties when they try to naturalize – either by reduction or elimination – the most relevant features of the common-sense view of the world. In this regard, Huw Price has talked of a “Placement Problem”: “If all reality is ultimately natural reality, how are we to ‘place’ moral facts, mathematical facts, meaning facts, and so on? How are to locate topics of these kinds within a naturalistic framework, thus conceived?” (Price 2004, p. 74). A different route has been taken by influential philosophers such as P.F. Strawson, John McDowell, Jennifer Hornsby, Barry Stroud, and (as we have seen) Hilary Putnam, who have proposed different versions of a more liberal naturalism<sup>5</sup>. These authors aim at accounting for the common-sense features of the world at face value, without being at odds with the scientific view of the world.

Baker locates her view in the periphery of the liberal naturalism – a view with which she sympathizes, with an important distinction, as we will see. She explicitly sides with the liberal naturalists in claiming that what escapes naturalization is not necessarily ontologically unacceptable. When a phenomenon that is central in our lives appears impossible from the point of view of a particular philosophical conception, this is a kind of *reductio* for that conception: “We should not embrace a metaphysics that makes mundane but significant phenomena unintelligible” (Baker 2013, p. 73). Among the significant and arguably irreducible phenomena one cannot dispense with, there is a very important one that according to Baker has been unjustly neglected by both scientific and liberal naturalists: the first-person perspective of the world. According to her, genuinely first-person aspects of reality exist and they cannot be explained nor explained away by science. This, however, is not because science adopts a third-person perspective, as is commonly thought, but rather because “the so-called third-person perspective is centerless; it is [Thomas Nagel’s] ‘view from nowhere’” (Baker 2013, p. xix).

In this respect Baker makes an important distinction between “rudimentary first-person perspective” and “robust first-person perspective” (a distinction that is very promising, it could be argued, since it appears confirmed by massive evidence coming out of cognitive science). The rudimentary first-person perspective is a dispositional property that does not require

5 For a general presentation of the issue, see De Caro & Macarthur 2010 and De Caro & Voltolini 2010.

language, allows phenomenal consciousness, and makes it possible for an organism to interact, consciously and intentionally, with the environment. The robust first-person perspective, which subsumes the rudimentary one, is the capacity that every person endowed with a language has of thinking of herself as the object of her own thought. This capacity is a dispositional property, which is expressed with I\* thoughts – *i.e.*, “every thought, utterance, or action that exhibits self-consciousness” (Baker 2013, p. xx), such as ‘I hope that I\* will be able to write a fair review of Lynne Baker’s book’. According to Baker, the robust first-person perspective is an emergent property that may globally supervene on the physical properties of the world, but can neither be explained by science nor explained away; consequently, the account of reality advocated by scientific naturalism, which is wholly impersonal, must be false. Having a robust first-person perspective is indispensable for self-evaluation, self-understanding, moral responsibility, agency, practical reasoning, and deliberation; and, of course, it is a necessary condition of self-consciousness. On the last issue, Baker strongly disagrees with most philosophers of mind – including Ned Block and David Chalmers – who do not find it scientifically or metaphysically puzzling.

Baker also defends a detailed non-Cartesian account of the first-person perspective, intended as an irreducible but not supernatural feature of reality. Her defense is based on two “unpopular views” (Baker 2013, p. 220), ontological emergence and downward causation. Against the mainstream, she argues that higher-level properties do not locally supervene on lower-level properties but are constituted by them – in the technical sense of “constitution” that Baker has explored at length in her past work. Still, she notices, property-constitution is compatible with global supervenience (and this may make her views less alarming for some philosophers).

Finally, Baker advocates “near-naturalism”, a view that in her opinion can adequately account for the first-person perspective. Adapting Dan Dennett’s famous phrase, one could say that for Baker near naturalism can give what is worth wanting in naturalism without committing us to the ineffective reduction and elimination strategies of the common-sense features of the world. In fact, on the one side near-naturalism “does not take science to be the exclusive arbiter of reality” (Baker 2013, p. 208); on other side, it is not committed to supernaturalism. Therefore, Baker seems to have a point when she claims that near-naturalism is palatable for liberal naturalists. But one thing should be noted: the suffix “near” in the expression signals the fact that this view is neutral regarding the possible existence of supernatural entities. Even naturalists of a liberal tendency (but not all of them: see for example Robert Audi 2000) would probably disagree with such neutrality;

yet this does not change the fact that they could be happy with the positive part of Baker's conception.

I said above that Baker's view could be located in the periphery of liberal naturalism. Indeed, even if regarding its positive stances, this view could certainly be considered a form of liberal naturalism, it does not incorporate a refusal of supernaturalism, as the standard liberal naturalist views do. This is because, as we have seen, Baker is in fact neutral as to the issue if one should also accept supernatural entities in our ontology: her near-naturalism is thus compatible with both liberal naturalism and supernaturalism.

Most, if not all, liberal naturalists would disagree with this part of Baker's view, considering it too liberal – or, which is the same, not naturalistic enough. However, these philosophers would split as to the reason for disagreeing with Baker. Some, as Putnam, would accept her idea of giving a metaphysical interpretation of anti-reductive naturalism, but would refuse to broaden this view to the point of incorporating entities that would not obey the laws of nature. Other philosophers, such as John McDowell, Akeel Bilgrami, David Macarthur, and Stephen White tend instead to be quietists regarding metaphysical issues, such as the relation between physical and personal entities, whereas Baker aims at working out the framework of a unified metaphysical view of the world, which could encompass both scientific and common sense entities.

Lynne Baker's partial opening towards the possibility of supernaturalism would then be refused both by metaphysically oriented liberal naturalists and by quietist liberal naturalists. And it is indeed an open question whether liberal naturalists should prefer a quietist or a metaphysical approach – and certainly one that will be debated for many years.

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