

The Epistemological Side of Ontology

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Abstract

Is it possible to draw a border line between ontology and epistemology? A positive answer to this question looks attractive, mainly because it reflects convictions deeply entrenched in our common sense view of the world. However, anyone wishing to clarify the distinction between the ontological and the epistemological dimensions meets problems. This is due to the fact that the separation between factual and conceptual is not clean, but rather fuzzy. It is certainly correct to state that science means to offer correct information about the world, but the extent to which it succeeds in accomplishing this task is always questionable. We cannot claim that the picture provided by today science - our current scientific image of the world - is absolutely correct, because the history of science itself shows us that any such statement is likely to be rejected by future generations. While it may be recognized that science purports to offer a correct description of the real world, the past experience should also prompt us to accept its claims *sub condicione*, and to view them as merely provisional.

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Introduction

Can we draw a border line between ontology and epistemology? A positive answer to this question looks attractive, mainly because it reflects convictions deeply entrenched in our common sense view of the world. However, anyone wishing to clarify the distinction between the ontological and the epistemological dimensions meets problems. This is due to the fact that the separation between factual and conceptual is not clean, but rather fuzzy.¹ As long as humans are concerned, the world is characterized by a sort of ontological opacity which makes the construction of any absolute ontology very difficult. Our ontology is characterized by the fact that the things of nature are seen by us in terms of a conceptual apparatus that is inevitably influenced by mind-involving elements.² All this has important consequences on both the question of scientific realism and the realism/anti-realism debate.

¹ The reference work in this case still is Quine's classical paper "Two Dogmas of Empiricism", in W.V.O. Quine (1980), pp. 20-46. For a more recent perspective see J. McDowell (1994).

² A view of this kind is endorsed in N. Rescher (1992).

Social and Linguistic criteria of identification

Theoretically, we may admit that a distinction can be drawn between the natural world on the one hand, and the social-linguistic world on the other. However, according to many authors, it should not be difficult to understand that we began to identify ourselves and the objects that surround us only when the social-linguistic world *emerged from* the natural one, and this in turn means that our criteria of identification are essentially social and linguistic. Leaving aside any kind of Platonism, and recognizing that the concept of “truth” is essentially tied to human interests, we need an intersubjective criterion giving rise to the notion of a world which is both objective and mind-independent. In other words, as John Dewey wrote, the distinction subject/object is not to be found *in* nature: it arises when men have such an intersubjective criterion, i.e., within a social world which is created by men themselves.³ But it is important to note at the onset that these remarks do not entail the total identification of the aforementioned two worlds. The conclusion is that, of the natural world as such, little can be said. We can admit that a border line between ontology and epistemology really exists but, as long as we are concerned, such a distinction looks less definable today than it was usually thought to be.

There are two reasons which explain why things are so. On the one hand conceptualization gives us access to the world, while, on the other, it is the most important feature of our *cultural* evolution.⁴ This does not mean to diminish the importance of natural evolution, which is specifically geared to the natural world and, after all, precedes our cultural development from the chronological viewpoint. However, it is cultural evolution that distinguishes us from all other living beings. While the idealistic thesis according to which the mind produces natural reality looks hardly tenable, it is reasonable to claim instead that we perceive this same reality by having recourse to the filter of a conceptual apparatus whose presence is, in turn, connected to the development of language and social organization.

All this, once again, prevents a clear distinction between ontology and epistemology. For example, it might be stated that ontology’s task is to discover what kinds of entities make up the world (“what there is”, in Quine’s terms), while epistemology’s job is to ascertain what are the principles by which we get to know reality. It is obvious, however, that if our conceptual apparatus is at work even when we try to pave our way towards an unconceptualized reality, our access to it entails anyhow the involvement of the mind.

³ See especially J. Dewey (1994). Davidson exploits Dewey’s insight in D. Davidson (1990).

⁴ The distinction biological/cultural evolution is constantly present in pragmatist authors like James, Peirce, and Dewey. For a contemporary assessment see N. Rescher (1990).

'Scheme' or 'Schemes'?

At this point an important problem must be faced. Since the rejection of any scheme/content distinction looks hardly tenable,⁵ the question arises whether it is more appropriate to speak of "scheme" (singular) or of "schemes" (plural). This is not a rhetorical question, as it might seem at first sight. What lies behind it is, rather, the question of ontological pluralism, which is in turn connected to the existence of possible alternative ways of conceptualizing the world.

The importance of such a question was clearly understood by William James. At the beginning of the past century, in fact, he wrote that:

It is possible to imagine alternative universes to the one we know, in which the most various grades and types of union should be embodied [...] we can imagine a world of things and of kinds in which the causal interactions with which we are so familiar should not exist.⁶

James went on saying:

The "absolutely" true, meaning what no farther experience will ever alter, is that ideal vanishing-point towards which we imagine that all our temporary truths will some day converge [...] meanwhile we have to live to-day by what truth we can get to-day, and be ready to-morrow to call it falsehood.⁷

The conclusion is that the great scientific and metaphysical theories of the past were adequate for centuries but, since human experience has boiled over those limits, we now call these theories only relatively true. Those limits were in fact casual, and "might have been transcended by past theorists just as they are by present thinkers".⁸

James was not the first to note that our world view can never be absolute, and that intelligent creatures whose experiential modes are substantially different from our own are bound to conceptualize reality in a rather diverse way. James, however, provided us with a clear picture which anticipates the contemporary debate on conceptual schemes. He claimed in this respect that:

In practical talk, a man's common sense means his good judgement, his freedom from excentricity [...] In philosophy it means something entirely different, it means his use of certain intellectual forms or categories of thought. Were we lobsters, or bees, it might be that our organization would have led to our using quite different modes from these of apprehending our experiences. *It might* be too (we can not dogmatically deny this)

⁵ See especially D. Davidson (1985), and R. Rorty (1982). We cannot take this problem into account here for reasons of space. For a recent criticism of Davidson's and Rorty's positions see S. Haack (1993).

⁶ W. James (1907), pp.156-157.

⁷ Ibid., pp. 222-223.

⁸ Ibid.

that such categories, unimaginable by us to-day, would have proved on the whole as serviceable for handling our experiences mentally as those which we actually use.⁹

Someone might object that these are only mental experiments, whose importance cannot be overevaluated. However, mental experiments play a key role in both philosophy and science. No doubt they are merely hypothetical devices, but they also allow us to enter the dimension of *possibility*. By resorting to them, we are able to imagine how the world could have been in the past, could be today, or could turn out to be in the future. This is a specific characteristic of our relationship with the world, which is strictly connected to the cultural type of evolution mentioned above. Rationality is, thus, largely a matter of *idealization*. Although our natural origins and evolutionary heritage must be duly deemed important, we must give way as well to the recognition that there is indeed something that makes us unique. Only human beings are able to take idealities into account and to somehow detach themselves from the actual world. Rationality may also be seen as the expression of mankind's capacity to see not only how things actually *are*, but also how they might have been and how they could turn out to be if we were to take some courses of action rather than others: the concept of possibility plays indeed a key role. It should eventually be noted that the dimension of possibility plays quite an important role even in the scientific domain, since scientific theories concern possible rather than actual reality. Newton's theory of universal gravitation takes into account the ideal mass in ideal space, and its status of scientific theory is granted by the fact that it holds for *any* mass.

In short, *possibilia* are a key component of our social-linguistic world, i.e., of the specifically human way of dealing with reality. Possible worlds and possible individuals are actual or potential products of our conceptual apparatus, and any strategy meant at eliminating them appears doomed for failure. The dimension of the possibility, besides being strictly tied to hypothetical reasoning, plays a fundamental role in our comprehension of both the natural and social-linguistic worlds. But it should also be clear that the dimension of possibility must anyhow make reference to some kind of agent, and the agent itself is thus an inevitable point of departure. We are compelled to adopt such a stance, because this is the only way opened to us for gaining access to the world. No one denies that it would be good to transcend our conceptual machinery in order to glimpse at how the world really is, independently of any view we can hold about it. This, however, cannot be done because of the very way we are made. Unlike some forms of classical idealism, we can recognize the presence of things that are real in the sense of being mind-independent but, on the other hand, a specification is needed to the effect that human beings have access to those things only via their conceptual apparatus.

⁹ Ibid., p. 171.

Starting from such premises, it is reasonable to claim that (1) analytic and synthetic cannot be clearly separated, and (2) no neatly determinable distinction can be drawn between science and metaphysics. As Quine stated in the 1950s,

The totality of our so-called knowledge or beliefs, from the most casual matters of geography and history to the profoundest laws of atomic physics or even of pure mathematics and logic, is a man-made fabric which impinges on experience only along the edges. Or, to change the figure, total science is like a field of force whose boundary conditions are experience [...] Revision even of the logical law of the excluded middle has been proposed as a means of simplifying quantum mechanics; and what difference is there in principle between such a shift and the shift whereby Kepler superseded Ptolemy, or Einstein Newton, or Darwin Aristotle?¹⁰

A follower of scientism might at this point be tempted to state the unconditioned superiority of the scientific world view over the image of the world that Wilfrid Sellars used to define the 'manifest image', i.e. the commonsense image which is shared - in its large features - by all men qua men.¹¹ But is it really plausible to claim that science deserves the primary role in assessing any kind of conceptual scheme? What guarantees can science provide in this regard? And, above all, *which* science are we talking about in this context? No doubt the real world contains those entities which would be posited by an 'ideally complete' science such as the one envisioned by Charles S. Peirce. But this ideal completeness is not available, and we are therefore compelled to work with what we have at our disposal now. This takes us back to the *current* scientific world-view, that is to say, the one provided by today science. We must face, in sum, a notion of truth which is essentially 'relative' and bound to evolve with the passing of time.

In other words, the presence of a sort of Peircean ideal community of scientific researchers who are supposedly able to attain the 'real truth' about the world is not an option, but an indispensable condition for the truthfulness of our generalizations about reality. Peirce, in fact, made clear that the key characteristic of truth is stability, and that a true belief must at least be fated to be underwritten by the operation of scientific method.¹² Of course we cannot rule out the possibility that such an ideal community will exist in the future, but history of science should at least prompt us to be pessimistic in this regard. Ideal science, even when its realization is referred to the future, looks more a philosophical utopia than a feasible accomplishment (even though, as is well known, utopias are indeed useful when they are viewed as essentially 'regulative' ideas). The strong realistic thesis that science faithfully describes the real world turns out to be, thus, just a matter of intent.

¹⁰ W.V.O. Quine (1980), pp. 42-43.

¹¹ See W. Sellars (1963).

¹² For a good analysis of this point see N. Rescher (1978).

The fact is that scientific world views continuously evolve, which means that the scientific enterprise has an essentially *historical* character. As Werner Heisenberg pointed out, science always is the result of the encounter between the natural world on the one side, and human conceptions, practical interests and needs on the other.¹³ The appeal to mental experiments is useful not only in daily life, but in the scientific domain too, because in this case science itself makes us understand that it permits us to know the world from a particular perspective, that is in turn geared to the specific relationships we entertain with the environment which surrounds us. John Dewey used the term *transaction* to denote this encounter, where the respective contributions of the observer and of the observed reality cannot be rigidly distinguished.¹⁴

This means that our science is essentially relational, and not absolute. The information with which it provides us is appropriate, but from *our* point of view. The Jamesian point that it is possible to imagine alternative universes to the one we know, and that intelligent creatures whose experiential modes are substantially different from our own are bound to interpret reality in a diverse way, must be taken seriously. In other words, we should recognize that the natural environment in which we live (and of which we are a substantial part) has an essential bearing on conceptualization, including the scientific one. Science provides reliable information on the world, but this information is always relative to a particular framework, and it is a mistake to think that the limits of our cognitive capacities only have an aprioristic character. We are mainly bound by *empirical* limits, due to the fact that we inquire into nature by means of an apparatus which answers certain stimuli, but not others. However, nothing in our actual science leads us to rule out the hypothesis that, in other natural environments, the development of science might have taken quite a different course.¹⁵ In order to give plausibility to this hypothesis, we must only admit the existence of worlds whose natural environment is substantially diverse from our own, and certainly this is not mere science fiction.

By saying this, we leave the domain of mental experiments to enter that of hypotheses which are - at least in principle - empirically verifiable. No doubt our science today is the only science we know, but this should not lead us to exclude the possibility that there are other ways of investigating nature. After all, science tells us that there are many aspects of reality that we cannot get in touch with by means of our sensory apparatus (which is the product of a process of evolution which took place in *particular* environmental conditions). Therefore we should not uncritically accept Davidson's statement that 'since there is at most one world, these pluralities are metaphorical or merely imagined'.¹⁶

¹³ W. Heisenberg (1958).

¹⁴ J. Dewey (1994).

¹⁵ Interesting remarks on this topic can be found in N. Rescher (1984).

¹⁶ D. Davidson (1985), p. 187.

Investigating on objective ontology

The question now is the following: are we authorized to claim that any absolutely objective ontology should then be left in the background, because little can be known about it? It should be noted that not only philosophers, but even many professional scientists have often denied the validity of the general picture of the world that the man of the street takes more or less for granted. In our century uncertainty about the content of our theories has grown fast, together with the feeling that there are *alternative* theories that can account equally well for all possible observations. Clearly the threat of relativism arises at this point, even though many authors nowadays no longer take relativism to be a threat, but just a matter of fact.

All this explains why the issue of conceptual schemes is important for both philosophers and scientists. For example, according to Niels Bohr's principle of complementarity we have, on the one side, a sort of Kantian world-in-itself which is both unknowable and undepictable, and on the other side an "us" which, unlike in Kant's picture, is not stable and determined. This means that, in our inquiries about the world, different questions can *all* receive coherent answers, with the disquieting effect that a comprehensive and coherent image of reality cannot be achieved. It is as if, conducting different experiments, we were to change conceptual scheme: the world experienced will in any case be diverse, and there is no way to combine the world of our experience with the various, differing conceptual schemes. The peculiar form of quantum effects entails that ordinary classical ideas about the nature of the physical world are profoundly incorrect, and some contemporary physicists endorse in this respect views which recall William James' characterization of consciousness as a "selecting agency".

Obviously things were different when logical positivism still was the dominant doctrine in the philosophy of science. In that case the main purpose was to individuate the immutable models that lie beyond concrete scientific practice, because it was commonly held by the main representatives of neopositivism that science is objective and progressive in the cumulative sense of the term. It must be stressed, however, that the distance from the neopositivist model does not lead one automatically closer to some kind of methodological anarchism or postmodernism (in Rorty's sense of the term). Some authors, in fact, claim that science can effectively validate a plausible commitment to the actual existence of its theoretical entities. But scientific conceptions can get, at most, a rough consonance between our scientific ideas and reality.¹⁷ And this statement should not sound surprising, if only one recalls what we said before about the difficulty to trace a precise border line between ontology and epistemology.

The general picture that emerges from the preceding remarks is the following. It is certainly correct to state that science means to offer correct information about

¹⁷ Such a stance is defended in N. Rescher (1987).

the world, but the extent to which it succeeds in accomplishing this task is always questionable. We cannot claim that the picture provided by today science - our current scientific image of the world - is absolutely correct, because the history of science itself shows us that any such statement is likely to be rejected by future generations. While it may be recognized that science purports to offer a correct description of the real world, the past experience should also prompt us to accept its claims *sub condicione*, and to view them as merely provisional.

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