

World Without Design: The Ontological Consequences of Naturalism, by Michael C. Rea. Oxford: Clarendon Press, 2002. Pp. 256. H/b £37.50.

Michael Rea's book aims to weaken the grip that he thinks naturalism has on the philosophical profession. In pursuit of this aim, he argues for a series of theses that may strike some readers as incredible: that naturalism must be viewed as a 'research program' (p. 73), rather than as a substantive philosophical thesis; that naturalism 'cannot be adopted on the basis of evidence' (pp. 6–7); that naturalists cannot be justified in accepting either realism about material objects, or realism about other minds, or materialism (p. 8), these commitments constituting a powerful pragmatic case against being a naturalist; that these commitments can be avoided through the adoption of a supernaturalist research programme that 'legitimizes belief in *some* sort of supernatural being' (pp. 213–14); that 'except in the case of objects that are the products of design, proper functions are not empirically detectable' (p. 111); and that Plantinga's evolutionary argument against naturalism not merely succeeds, but can also be extended to tell against intuitionism (pp. 182–99).

But don't be deterred. The book is engaging, sophisticated, resourceful, and good-natured. I recommend it highly as a challenging and provocative discussion of some of the fundamental metaphysical and epistemological issues that draw people into philosophy in the first place. Its arguments would have benefited from a more rigorous presentation; but pages full of numbered propositions are uninviting, and perhaps Rea made the right call in preferring informality. I shall discuss Rea's case for three of his theses: that naturalism must be viewed as a 'research programme'; that naturalism 'cannot be adopted on the basis of evidence'; and that naturalists cannot be justified in accepting realism about material objects.

Rea construes naturalism, not as a thesis, but as 'a research program' (p. 73), where by 'research program' he means, roughly, a particular set of methodological dispositions, that is, dispositions to 'trust certain ways of acquiring information with respect to various topics and to distrust others' (p. 2). Specifically, he construes a naturalist as someone whose methodological dispositions amount to treating 'the methods of science and those alone as basic sources of evidence' (p. 67). And he does so because it is the most charitable way to specify the heart and soul of naturalism given that, as he argues in chapter three, 'naturalism ... cannot be formulated as a substantive philosophical thesis' (p. 52).

Two comments. First, Rea's claim that naturalism cannot be formulated as a philosophical thesis is less shocking than initially appears. If you want to

endorse one of the many theses sometimes called ‘naturalism’ (for example, that all events are governed by impersonal laws, that every empirical phenomenon is, or supervenes upon, some phenomenon treated in some branch of science, or that there is no way of certifying the methods of science prior to employing those methods), then nothing in Rea’s chapter three even purports to show that you cannot coherently do so. What it does aim to show is that you cannot properly treat any of these claims as an articulation of *naturalism*.

Why not? Rea’s answer is that to treat any of these claims as articulating a thesis of naturalism would conflict with the intuitive core of naturalism, which is *attitudinal*: ‘Naturalism is motivated by a high regard for scientific method,’ says Rea (p. 52); and ‘naturalists respect the natural sciences as absolutely authoritative with respect to what there is’ (p. 55). But—and here is my second comment—the resulting argument for construing naturalism as a set of methodological dispositions isn’t entirely convincing. For one thing, it appears to beg the question. Rea argues that naturalism must be a set of methodological dispositions because it cannot be a thesis, and he argues it cannot be a thesis because being a naturalist is (at least) the having of a high regard for scientific method. But a high regard for scientific method sounds like a set of methodological dispositions. Apparently, then, Rea rejects the construal of naturalism as a thesis from the very beginning.

Another trouble is that it is doubtful that ‘naturalism’ even names a single thing with a heart and soul to be characterized in the first place. Admittedly, we should probably presume that any term in ordinary language is univocal, absent evidence to the contrary; but I doubt such a presumption is legitimate for terms in contemporary philosophical discourse, where stipulative redefinition of pre-existing terms is so common. And even if a presumption of univocality holds also for philosophical terminology, it could only be very weak; and the conspicuous lack of agreement on the definition of ‘naturalism,’ which Rea himself emphasizes, provides evidence that in this case the presumption is false.

Rea holds, strikingly, that ‘there is no basis for saying that [naturalism] is the sort of program that everybody ... ought to adopt’ (p. 7). And he does so because he claims that research programmes in general, whether naturalist or not, ‘cannot be adopted on the basis of evidence’ (pp. 6–7). Now this last claim is striking because it suggests that Rea will defend a sophisticated version of the popular notion that a commitment to science is really just a secular faith, no better off epistemically than any standard religion. So what does Rea say to support it? The gist emerges clearly enough from the following remarks:

[T]he reason why research programs cannot be adopted on the basis of evidence is that evidence can only be recognized as such from within a research program ... We cannot say that [a research program] is supported by evidence that is somehow generated and recognizable as such independently of the program. (p. 6)

Since a research programme is the *totality* of one’s methodological dispositions, Rea clearly has a point: we could not justify *all* of our methodological

dispositions simultaneously, since doing so without circularity would require activating some methodological disposition that we were not trying to justify, and by assumption there is no such disposition. But this is just the familiar point—often stressed by naturalists—that one cannot simultaneously replace all the planks of Neurath’s raft. Rea, however, infers a distinctive conclusion from this familiar point:

So when it comes to rejecting one program in favor of another, the decision to adopt the favored program must be made on pragmatic grounds, broadly speaking, rather than evidential grounds. (p. 6)

But this striking conclusion does not seem to follow, for even though we cannot justify a whole research programme, we might still be able to argue that one research programme should (evidentially) be favored over another.

Rea’s conclusion recalls Kuhn’s incommensurability thesis that no dispute between rival paradigms can ever be resolved rationally because integral to each paradigm is a unique set of standards for evaluating hypotheses, while no supra-paradigmatic standards exist to which paradigm-independent appeal might be made. Now the best response to Kuhn’s thesis is that although rival paradigms might not incorporate *exactly* the same standards for evaluating hypotheses, there might well be, and usually will be, sufficient standards *common* to both paradigms to make possible an argument for one paradigm over the other that is acceptable to advocates of both paradigms. Likewise, I suggest, in the case of rival research programmes in Rea’s sense. Allow that two research programmes do not incorporate exactly the same methodological dispositions, and that there is no methodological vantage point independent of a research programme; but insist that two distinct research programmes might *share* sufficiently many methodological dispositions for advocates of both programmes to reach rational consensus about those methodological dispositions that are not shared. Such a possibility shows that the decision to reject one research programme in favor of another need not be made on merely pragmatic grounds, despite the absence of an Archimedean point from which to justify research programmes.

Let me illustrate with a pertinent example. The *naturalist’s* methodological dispositions are precisely those characteristic of science; by contrast, the *supernaturalist’s* methodological dispositions might include those of science plus a disposition to treat *religious experience* as a basic source of evidence (p. 68). Accordingly, the naturalist and the supernaturalist share many methodological dispositions. Appeal to these shared dispositions could rationally lead one or the other to modify his research programme. One such shared disposition might be (i) to treat the overall coherence of one’s theoretical and methodological positions as required for their truth, and (ii) to respond to the discovery of incoherence by making the most conservative modification possible that still removes it. Moreover, there might be ways to evaluate the coherence of supernaturalism, with its treatment of religious experience as a basic source of evidence, that supernaturalists could employ: the deliverances of religious

experience could be scrutinized for *internal* coherence, that is, coherence with one another; the deliverances of religious experience could be scrutinized for *external* coherence, that is, coherence with the deliverances of other sources of evidence accepted as such by naturalists and supernaturalists alike; and religious experience could be assessed for the likelihood of our discovering a plausible account of its origins and reliability. Now if the treatment of religious experience as a basic source of evidence turned out to generate incoherence in supernaturalism, then the most conservative way to remove the incoherence would surely be to retreat to naturalism. Thus, given one of their own methodological dispositions, supernaturalists could have epistemic reason to adopt naturalism despite the impossibility of justifying a whole research programme all at once.

Rea's most provocative claim, however, is that naturalists are not justified in accepting realism about material objects (for example, pp. 8, 78), and Rea clearly regards this as his main (albeit only pragmatic) objection to being a naturalist. His argument for it, though elaborate, can be summarized without excessive caricature (I hope) as follows:

A material substance, such as a dog, if it exists, has persistence conditions: it possesses certain properties—*essential* properties—that it cannot survive without. And if a material substance is to exist mind-independently, as robust realism about material objects requires, then its possession of essential properties must be mind-independent too. Suppose now that naturalists are to be *justified* in holding that some material substance exists. Then, since the existence of a material substance requires that it possess mind-independent essential properties, reflective naturalists who are fully alert to their situation must also be justified in holding that the material substance in question possesses mind-independent essential properties. However, naturalists cannot justify any attribution of mind-independent essential properties to any material substance. For naturalists are disposed to treat the methods of science and those alone as basic sources of evidence. These methods include only observation plus theoretical inferences from premisses supported by observation; but observation, which is only ever of what is *actually* the case, can therefore only justify the belief that a material substance *does* possess, never that it *must* possess, a given property; and it is hard to see how attributions of mind-independent essential properties could be supported on the ground that they provide the best explanation of any class of observable phenomena. But since naturalists cannot justify the attribution of mind-independent essential properties to any material substance, it follows that naturalists cannot justify their belief in the existence of any mind-independent material substance; which is to say that naturalists, precisely because of their defining methodological commitments, cannot justify realism about material objects.

Rea's imaginative reasoning here might be questioned at a couple of points. First, what reason is there, beyond an appeal to intuition or common sense, for accepting Rea's premiss that material substances mind-independently have

persistence conditions in his sense? Why can't naturalists just deny it, saying instead that while it is fully objective whether a material substance of a given kind exists, whether that very substance counts as persisting is determined by the conventional or instinctive responses of human cognizers? Secondly, Rea's argument seems to require a *closure principle*, something to the effect that if you're justified in believing p , and in believing that p implies q , then you must be justified (via some independent route) in believing q ; but is some closure principle that meets his needs true?

Rather than pursue these questions, let me instead explore the scope for *outsmarting* Rea's argument, that is, for cheerfully accepting the apparently unacceptable consequence to which, he argues, naturalism leads. This would amount to conceding that in fact there are no material substances, *given* that claiming their existence commits you to mind-independent essential properties. How high a price for naturalists to pay would this concession be? Perhaps not high at all—or so I will suggest. (For further optimism about the prospects for doing without substances, see John O'Leary-Hawthorne and Andrew Cortens, 'Towards Ontological Nihilism', *Philosophical Studies*, 79, 1995, pp. 143–65.)

On its face, admittedly, a commitment to the non-existence of material substances sounds extremely implausible. And it certainly *is* extremely implausible if the alternative view envisaged is that regions of space usually thought to contain dogs or other material substances are just *empty*. But naturalists are not committed to that alternative. For disbelief in material substances can be combined with continued belief in property-instances, that is, instantiations of properties in regions of spacetime, or in time-slices of material substances (for example, dog-stages). Thus, for example, even if naturalists, compelled to disbelieve in dogs, cannot hold that any dog persists from t_1 to t_n , they can still hold that doghood is instantiated in a certain region at t_1 , and again at t_2 , and again at t_3 , and so forth, where 'doghood' is so understood as to avoid commitment to persistence. So naturalists can allow that a certain spacetime region usually thought to contain a dog or other material substance really does contain *something*; they merely insist that this something is a sequence of property instances, or of doggy time-slices, rather than a persisting material substance as understood by Rea.

And this insistence is not obviously false. To see this, consider how you might persuade naturalists that in repudiating material substances (while retaining property instances or time-slices) they had made an obvious mistake. You could hardly appeal to the evidence of their senses, since they could plausibly reply that their substance-free account of the world accounts for all the appearances: after all, the sensory appearance of a world with dogs might be exactly the same as that of a world without dogs but with appropriate sequences of doghood-instantiations or of doggy time-slices. And you could hardly complain that their obvious mistake was to omit all mention of mind-independent essential properties, since this omission is hardly an *obvious* mis-

take, and from a naturalist perspective it is no mistake at all.

But even if a naturalist repudiation of material substances involves no obvious mistake, does it not still entail—implausibly—that ordinary folk are in error when they apply material-substance concepts (or terms) to the world? Not necessarily. For the folk’s application of material-substance concepts to the world could perhaps be interpreted, or reinterpreted, in *projectivist* fashion. That is, we could claim that the folk are disposed, by instinct or convention, definitely to apply a given material-substance concept to a region of spacetime if a sequence of property instances or of time-slices there meets certain conditions (for example, if the property instances or time-slices in the sequence are appropriately related to one another); and also disposed definitely not to apply the same material-substance concept to a region of spacetime if a sequence of property instances or of time slices meets certain other conditions. However, because there could be actual or possible sequences of property instances or of time-slices that meet neither set of conditions, and hence that trigger neither disposition, applications of material-substance concepts would have assertibility conditions but not truth conditions (like such utterances as ‘Have a nice day!’). Of course, I give here only the crudest sketch of a view, and it might be that any attempt to formulate it properly yields incoherence. But if a projectivist (re-)interpretation of the folk’s application of material-substance concepts to the world can be satisfactorily developed along anything like these lines, then the folk need be guilty of no error in applying material-substance concepts. Indeed, naturalists can apply such concepts too, despite their denial of the existence of material substances. (Thanks to Peter Markie, Matt McGrath, Alan Sidelle, and especially Michael Rea for helpful comments on earlier drafts.)

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