

How to Be a Naturalist

Contact Information:

Marc Alspector-Kelly
Department of Philosophy
Western Michigan University
Kalamazoo, Michigan
USA 49008-3899
malspect@wmich.edu
616-387-6516 (office)

How to Be a Naturalist

Abstract

The naturalist repudiates philosophical doctrine that purports to transcend empirical science. According to a recent critique, however, naturalism itself—insofar as it provides the justification for pursuit of various naturalization projects—is just such a doctrine. This is so because such projects require appeal to an exclusionary clause according to which science is in some way complete, which clause inevitably transcends established scientific doctrine. Naturalism is therefore self-undermining.

I distinguish three varieties of naturalism (ontological, methodological, and conceptual) and argue that the critique is decisive against each. But I also identify a fourth, minimal variety of naturalism—“opportunistic” naturalism—that is immune to the critique. The motivation for naturalization projects under opportunistic naturalism is more empirically grounded and tentative than it is under the other varieties of naturalism, and therefore more in keeping with the character of scientific inquiry itself.

How To Be A Naturalist

I. The Critique

In this essay I respond to a recent critique of naturalism.¹ I will in fact initially endorse it: naturalism, as typically characterized in way of providing a basis for “naturalization” projects, is incoherent. The appropriate response is not, however, to renounce naturalism but instead to reconfigure it. Doing so results in a much leaner form of naturalism than the critique’s target, one which provides a different understanding of naturalization projects.

Naturalization projects attempt to reconcile a *prima facie* non-natural domain of discourse that is too important to dismiss as valueless superstition—morality, mathematics, modality, etc.—with a commitment to the scientific worldview. That worldview is understood to include, not what science now says there is, but rather what an idealized, completed science would say there is. Naturalists also assume, however, that the current worldview is sufficiently akin to the completed one that we can be reasonably confident that it will not include, for example, *sui generis* moral properties.

The most successful such project would demonstrate that the *prima facie* unnaturalness of the domain of discourse is only superficial by providing a naturalistic

¹ See especially Moser and Yandell 2000, although variations on the critical theme presented here can be found in the work of a number of naturalism’s opponents.

reduction of it. Failing that, the naturalist might attempt to show that the target is ontically grounded in the natural order in some other way than by being reducible to it. Failing that, the naturalist might just concede that the conflict is irresolvable and construe the discourse as either fictional or not truth-apt at all, but redeem it nonetheless by suggesting that it is governed by other worthy, if non-alethic, norms.²

More than mere endorsement of established natural scientific doctrine is involved in a scientific worldview that conflicts with the *prima facie* claims of the domain slated for naturalization. One would, for example, search physics text and journal in vain for commentary on the existence or otherwise of *sui generis* moral properties. And one would find the other natural sciences to be similarly reticent. Nor could one derive such a commentary from established doctrine of the various natural sciences taken together; certainly no-one has ever attempted such a derivation. The naturalist might assume that science “tells us” that ethical properties, abstract entities and the rest do not exist, but in itself it does nothing of the sort.

Nor could it. If the domain in question that is *prima facie* independent of the natural order investigated by the sciences really is so independent, then scientific methodology, appropriate for the investigation of the natural order alone, is in no position to deliver a verdict concerning non-natural states of affairs, for which a distinct, non-empirical methodology would presumably be in order.

So the natural sciences alone cannot provide a ground for naturalization programs. If the domain is, as it seems, independent of the natural order, that very fact ensures that no opinion concerning it can issue from scientific doctrine, and therefore no motive for naturalization. The naturalist must therefore appeal further to an *exclusionary clause* to

² This option is, for example, taken up by error-theoretic approaches in ethics; see Mackie 1977.

the effect that the natural order is complete, that nothing more exists than is countenanced by the (idealized) natural sciences. Only if such a clause is endorsed will the *prima facie* non-naturalism of the target domain threaten its legitimacy, from which threat it will be rescued by the naturalization project.

But the scope of such an exclusionary clause guarantees that it cannot itself constitute information that science provides. Empirical science cannot survey candidate ontologies and methodologies appropriate to them, empirical or otherwise, and determine that only those entities it countenances do in fact exist. Were the naturalist to suggest that it can, the non-naturalist can always appeal to her favorite non-natural domain—to which the naturalist accords some respect, after all, since that is why she pursues a naturalist project rather than just dismissing it—as demonstrating that there is a domain of inquiry beyond scientific evaluation. The non-naturalness of a domain guarantees, not just that science cannot inform us about states of affairs within it, but also that it cannot inform us about whether there are states of affairs within it to be informed about.

For the naturalist to appeal to an exclusionary clause in way of warranting naturalization projects is therefore to transform empirically evaluable scientific doctrine into transcendent metaphysics. And the naturalist does this, ironically, in the very name of empirical science, supposedly out of respect for its susceptibility to empirical test. This is, needless to say, the last thing the naturalist should be doing. In grounding her naturalization project in a scientific worldview the naturalist violates her own scruples.

II. Methodological Naturalism

The “ontological” naturalism considered so far is often contrasted with “methodological” naturalism, according to which scientific methodology is the only legitimate mode of inquiry. Perhaps methodological naturalism can provide a ground for naturalization projects that avoids the problem facing ontological naturalism. If, for example, scientific methodology is indeed the only legitimate mode of inquiry, and we want to legitimize ethical discourse, then we have a motive to naturalize ethics in way of bringing it within the purview of scientific investigation. This does not seem, on its face at any rate, to assume an exhaustive scientific worldview.

Unfortunately the methodological naturalist runs into a difficulty that either parallels or reduces to that facing the ontological naturalist. For the methodological naturalist also needs an exclusionary clause to the effect that scientific methodology is exhaustive of all legitimate methodology. But, for reasons that parallel the ontological case, science itself is in no position to deliver such a clause. If the naturalist insists that it can, then the non-naturalist is once again free to appeal to her favorite non-natural domain as demonstrating that there are methods beyond the ken of empirical science.

The naturalist might at this point insist that there can be no other legitimate methods than the scientific because nothing exists beyond the natural order for those methods to investigate. But that would be to ground methodological naturalism in ontological naturalism and so bring us back to the problem facing the ontological naturalist.

III. Conceptual Naturalism

Naturalization projects are sometimes motivated by a distinct epistemological concern from that which moves the methodological naturalist. Attempts at the nominalization of mathematics have, for example, long been motivated by the apparent fact that abstract entities lack participation in the spatio-temporal causal order, thereby preventing our knowledge of them.³

There are two related problems with this motivation for nominalism and other naturalization projects. First, the argument assumes some version of the causal theory of knowledge, a theory that is not without its problems,⁴ and hardly universally adopted. The non-naturalist is therefore free to counter that she advocates another account entirely, one that allows for knowledge without causal interaction. Second, even on the assumption that causal interaction of some sort is required for knowledge, the argument assumes that the interaction must be physical. The non-naturalist is therefore again free to counter that she countenances non-physical causal relations that permit knowledge within the disputed domain.

Accounts of justification and knowledge that require physical causal relations are themselves naturalizations, in particular, naturalizations of epistemic concepts. When the naturalist appeals to such accounts, she therefore assumes the legitimacy, and successful completion of, one naturalization project in the course of arguing that other such projects are required. The non-naturalist will obviously find this less than convincing. The naturalist once again appeals to an exclusionary clause—this time, to the effect that the only knowledge there is is generated by physical causal interactions—that will be self-undermining for reasons that parallel the ontological and methodological cases. The non-

³ See, for example, Benacerraf 1983.

⁴ See Dretske and Eng 1984 for discussion of problems facing causal theories of knowledge.

naturalist is, as before, free to point to her favorite non-natural domain as providing decisive counterexamples to the naturalization of epistemic concepts. And appeal at this point to an exclusive scientific worldview would again carry us back to the original problem with ontological naturalism.

IV. Opportunistic Naturalism

A pattern has emerged. The naturalist appeals to some sort of exclusionary clause in way of arguing that a naturalization project for some domain of discourse is required. The non-naturalist then points out that any argument for the exclusionary clause itself necessarily violates the naturalist's own scruples. She then points to our apparent knowledge concerning the very domain at issue as demonstrating that the exclusionary clause is false.

The naturalist obviously has to stop appealing to exclusionary clauses. There is, fortunately, a strand of naturalism that does not appeal to any such clause which I will call, for reasons that will soon be apparent, opportunistic naturalism. Opportunistic naturalism is distinct from conceptual naturalism, although they are rarely if ever distinguished. Nor are either clearly distinguished from methodological naturalism, although the latter is logically distinct from both. All three originate in W. V. Quine's works,⁵ and all three fall under the general rubric of naturalized epistemology. But they are significantly different from one another.

⁵ An obvious source for Quine's advocacy of conceptual and opportunistic naturalism is Quine 1969. His advocacy of methodological naturalism is diffused throughout his work, but see esp. Quine 1955, Quine and Ullian 1970 and Quine 1990.

Quine (1969) advocated what has come to be called the “replacement” thesis, according to which traditional epistemology is to be replaced by descriptive psychology. Few naturalists have followed him in this.⁶ But they do without exception agree that appeal to empirical scientific information is licensed in the course of philosophical inquiry, whether the source of that information be physics, evolutionary biology, neurophysiology, or cognitive psychology, and without that appeal’s having been authorized by a prior philosophical investigation into the credentials of scientific methodology. The assumption that scientific information can be legitimately employed in this way contrasts with the attitude of the first-philosophical epistemologist who takes it to be illegitimate to appeal to scientific information until the credentials of science itself are established.

Suppose that naturalism is construed as involving nothing more than the claim that the information provided by the sciences can and should be exploited in philosophical endeavors. It then involves no such exclusionary clause as is affirmed by the ontological naturalist. Nor should such an opportunistic naturalism be conflated with methodological naturalism. One could consider appeal to empirical information to be legitimate in conducting philosophical inquiry without either thinking that the form that inquiry takes must be modeled on the sciences or that no other form of inquiry than the scientific is possible.

Finally, opportunistic naturalism should not be conflated with conceptual naturalism. The former claims that appeal to scientific information is legitimate in epistemic inquiry, but in itself it implies no particular analysis of knowledge,

⁶ See Kornblith 1997 for discussion of the role of the replacement thesis in the development of naturalized epistemology.

justification, or other epistemic concepts. And the investigation that generates the naturalistically acceptable analysis of epistemic concepts could itself be a result of purely conceptual analysis and confrontation with intuition, and therefore proceed without attention to any scientific information that the opportunistic naturalist considers available.⁷

Opportunistic naturalism thus does not involve any ontological, methodological, or epistemological exclusionary clause. It is therefore not subject to the critique we have been examining.

V. Opportunistic Naturalism and Naturalization Projects

Precisely because it does not involve an exclusionary clause, opportunistic naturalism cannot in itself motivate naturalization projects. But the scientific information to which the opportunistic naturalist insists we have a right can. It makes sense for us to attempt to ensure that whatever else we believe is consonant with what we have learned from the wealth of information available from the sciences about the world and our own selves. Naturalization projects can be construed as attempts to achieve precisely that. The claim in each case is not that there could not be such non-natural entities as appear to be countenanced by the target domain, but that if there are it is difficult to reconcile our knowing about them with what else we know about ourselves.

⁷ Goldman 1986 is an example. While the version of reliabilism delivered in Part 1 is compatible with a naturalistic outlook, the method employed in delivering it is conceptual analysis and confrontation with intuition without any significant appeal to scientific information. It is only in Part 2, in which the analysis of epistemic concepts is applied, that Goldman appeals to empirical results in cognitive science.

Human beings are animals, and like other animals, we have evolved a variety of sensory organs for the reception of information about our environment, information that is electrochemically processed and encoded in the brain. We still have a great deal to learn about how all this works. But we have learned a lot, and information-flow through the sensory receptors remains the only empirically discernable conduit. And, so far as is known at this stage in neurophysiology, there are no mysterious gaps in subsequent neural processing. What science tells us therefore leaves little room for an image of ourselves as in possession of a faculty that somehow receives information concerning a domain of non-empirical entities through a channel that bypasses the sensory receptors.

The appropriate naturalistic attitude toward posits beyond the reach of empirical scientific investigation is, therefore, *agnosticism*. Perhaps such things exist, perhaps not. But, given the sources of information available to us according to our emerging scientific self-image, we cannot come by information on the matter either way.

We are, however, unlikely to rest with an agnostic attitude when it comes to domains of discourse in which we have some investment. Realism concerning moral properties, for example, is motivated by our persistent conviction that moral evaluation is objective in such a way as to transcend mere preference. The positing of moral properties alongside natural ones is the obvious way to recover that objectivity, on the model of the objectivity of judgments about trees as grounded in the independent existence of trees and our detection of them. But unlike our detection of trees, it is difficult to see how a story about our “detection” of moral properties is supposed to go.⁸ So we embark on a

⁸ The differences between moral and natural properties that make the former “queer” are exploited, for example, by Mackie 1977 in defense of an error-theoretic approach.

naturalization project with the intent of recovering the objectivity of moral discourse by other means than construing it as the detection of *sui generis* moral properties.

Naturalization projects for other domains would be motivated in similar fashion, although the details would differ depending on the domain. The nominalization of mathematics used in science, for example, would be motivated, not by the attempt to reconcile quantification over abstract mathematical entities in science with the conviction that the scientific worldview does not countenance such things,⁹ but instead by the difficulties involved in making sense of our detection of them by such means as science suggests is available to us.

Such a motivation for naturalization projects is obviously akin to that based on conceptual naturalism. But there is a crucial difference, in that the opportunistic naturalist does not assume any analysis of epistemic concepts. The claim is not that all knowledge involves physical causal relations, and so there can be no knowledge of entities that do not participate in the physical causal order. It is, instead, that if the target domain is construed as positing entities that we somehow detect on the model of our detection of trees but which detection does not involve the human sensory receptors, and given that there is no other discernable conduit through which humans gain information than by

⁹ Although this is the most frequently cited motivation for nominalist projects, its coherence is doubtful. Quantification over abstract entities in science is worrisome, supposedly, because the naturalist will find herself committed to such entities if she applies Quine's criterion of ontological commitment to the best (pre-nominalized) scientific doctrine. But if abstract entities *do* result from application of that criterion, by which application the naturalist expresses her acceptance of scientific ontology, then on what possible grounds could she worry that abstract entities should *not* be part of the scientific worldview? The denizens of that worldview are then not being determined solely by application of the criterion, which application now awaits completion of a nominalization project motivated by an independent aversion to abstract entities. It is hard to see how that independent motivation can be reconciled with the claim that established science alone is the appropriate determinant of our ontological commitments. See esp. Field 1980 for expression of this motive.

stimulation of those receptors, then we are left with a mystery as to how humans could come by information about such things.

This leaves it entirely open whether all knowledge is causal. A particular naturalization project—an expressivist account of ethical discourse, for example—might indeed require denying that any causal interaction with an independent state of affairs is involved. The project is motivated, not by any sweeping analysis of knowledge or justification, but by the concern that unless one or another technique of naturalization is successful—according to which knowledge within the target domain may well be represented non-causally—our grasp of that domain will fail to mesh with what else we know about ourselves.

The fundamental difference between the motivation for naturalization projects originating in opportunistic naturalism and that originating in ontological, methodological, or conceptual naturalism is that in the former case the motivation is based on empirical information about ourselves gleaned from the sciences, whereas in the latter cases it issues from the characterization of naturalism itself. It is to be expected that a motivation for naturalization projects which originates in empirical information rather than philosophical conviction stands a better chance of being true to the naturalist's scruples.

This motivation for naturalization projects does provide less assurance of success. The scientific self-image is still only the vision of ourselves as generated by the sciences. It remains conceivable—and compatible with opportunistic naturalism—that this image is incomplete in precisely the ways that the non-naturalist suggests, or in others.

That does not, however, undermine the motivation. We recognize a certain domain of discourse as important to us in one way or another. But we also recognize that if that domain is construed on its face it becomes difficult to reconcile our knowledge of it with our scientific self-image. So we attempt, in one way or another, to construe the domain otherwise than on its face, in way of reconciliation.

That attempt remains reasonable in the face of the possibility that the scientific self-image is incomplete. The progress demonstrated by the scientific investigation of the human organism is sufficiently impressive as to make the attempt to align the rest of our beliefs with the emerging self-image reasonable notwithstanding the possibility that it might fail. And in light of the tremendous in-roads that the scientific image has made in other ways, and the frequency with which domains originally thought to be beyond the pale of scientific investigation have come under its purview (often only after much effort), the failure would have to be persistent indeed before it would be reasonable to throw up one's hands.

The motivation for naturalization projects along these lines is more a hope than a promise, the underlying naturalism more a working assumption than a worldview. Many would see it as barely deserving of the naturalist title. But anything more ambitious than this transforms an empirically grounded naturalistic strategy into self-undermining transcendental metaphysics. The tentative optimism that underlies the approach offered here is, after all, the attitude of the empirical scientist. The naturalist should recognize that the modesty appropriate to the sciences is the right attitude for naturalism itself.

References

- Benacerraf, P. 1983, "Mathematical Truth," in Benacerraf, P. & Putnam, H., *Philosophy of Mathematics: Selected Readings, Second Edition* (Cambridge: Cambridge University Press), 403-420.
- Dretske, F. & Enç, B. 1984, "Causal Theories of Knowledge," *Midwest Studies in Philosophy IX*, 517-528.
- Field, H. 1980. *Science Without Numbers: A Defense of Nominalism* (Princeton: Princeton University Press).
- Kornblith, H. 1997, "Introduction: What is Naturalized Epistemology?," in Kornblith, H. ed., *Naturalizing Epistemology, Second Edition* (Cambridge: MIT Press), 1-14.
- Mackie, J. L. 1977, *Ethics: Inventing Right and Wrong* (New York: Penguin).
- Moser, P. K. & Yandell, D. 2000, "Farewell to Philosophical Naturalism," in W. L. Craig & J. P. Moreland, eds., *Naturalism: A Critical Analysis* (London: Routledge), 3-23.
- Quine, W. V. 1969, "Epistemology Naturalized," in *Ontological Relativity and Other Essays* (New York: Columbia University Press), 69-90.
- Quine, W. V. & Ullian, J. S. 1970, *The Web of Belief* (New York: Random House).
- Quine, W. V. 1976, "Posits and Reality," in *The Ways of Paradox and Other Essays, Revised Edition* (Cambridge: Harvard University Press), 246-254.
- Quine, W. V. 1990, *Pursuit of Truth* (Cambridge: Harvard University Press).