

Naturalism

In 2009, the PhilPapers Survey canvassed the philosophical opinions of 3226 respondents, including 1803 philosophy faculty members and/or PhDs and 829 philosophy graduate students. Among philosophers who specialised in philosophy of religion, 72% identified themselves as 'theists' and just 20% identified themselves as 'naturalists'. However, among those who did not specialise in philosophy of religion, 79% identified themselves as 'atheists', and 58% identified themselves as 'naturalists'. Overall, 73% of philosophers identified themselves as 'atheists' and 50% identified themselves as 'naturalists'.

Given the popularity demonstrated in this survey, it is not surprising that, for many philosophers, the label 'naturalist' is a badge of honour, while, for some, the same label would be a mark of shame. Moreover, it is entirely unsurprising that there is widespread disagreement about exactly what naturalism is and what naturalists are committed to, both among those who regard naturalism favourably and among those who look upon it with disdain.

One typical characteristic of naturalism is a view about ontology: a view about what kinds of entities and properties there are. Some people call this characteristic of naturalism 'metaphysical naturalism' or 'ontological naturalism'. My preferred formulation of the characterising claim is something like this:

Metaphysical Naturalism: Natural reality exhausts causal reality: there are none but natural causal entities with none but natural causal properties.

Note that this is just a claim about causal entities: all causal entities are *natural* causal entities. Moreover, the claim that is made about natural causal entities is a claim about their causal properties: all causal properties possessed by natural causal entities are *natural* causal properties. Putative causal entities that are ruled out by this characterisation include: ancestor spirits, angels, astral intelligences, demons, devas, fairies, ghosts, gods, gremlins, mermaids, trolls, vampires, werewolves, witches, wizards, zombies, and so on. Putative causal properties that are ruled out by this characterisation include: ch'i, clairvoyance, kami, karma, miracles, precognition, samsara, sat, tao, telekinesis, telepathy, and so forth.

Some who self-identify as naturalists would prefer to say that natural reality exhausts reality: there are none but natural entities with none but natural properties. In addition to ruling out the putative entities and properties mentioned above, this stronger view also rules out abstract objects and, arguably, evaluative, logical, mathematical, modal, and normative properties.

A second typical characteristic of naturalism is a view about epistemology: a view about how we identify causal entities and causal properties. Some people call this characteristic of naturalism 'epistemological naturalism' or 'methodological naturalism'. My preferred formulation of the characterising claim is something like this:

Epistemological Naturalism: Well-established science is our touchstone for identifying the denizens of causal reality: (a) Naturalists accept all of the causal entities, causal properties, and causal explanations accepted by well-established science; and (b) Naturalists do not accept any causal entities, causal properties, or causal explanations that are not accepted by well-established science. (Hence, in particular, naturalists do

not accept any causal entities, causal properties, or causal explanations rejected by well-established science.)

Note that this is a claim that adverts to what is accepted and rejected by *well-established* science. Where the status of putative causal entities, putative causal properties, and putative causal explanations remains controversial among relevant scientific experts, naturalists who are not themselves numbered among the relevant scientific experts reserve judgment about those putative causal entities, putative causal properties, and putative causal explanations. Note, again, that this is a claim that adverts only to causal entities, causal properties, and causal explanations: it is simply silent on questions about, for example, evaluative, logical, mathematical, modal, and normative properties.

Some who self-identify as naturalists would prefer to say that science is our touchstone for identifying the denizens of reality: what objects there are and what properties they have. Again, this stronger view plausibly rules out abstract objects and, arguably, evaluative and normative properties.

A third typical characteristic of naturalism is a view about mindedness: a view about the distribution of consciousness, agency, perception, belief, desire, intention, memory, learning, prediction, feeling, empathy, suffering, reason, calculation, communication, and so forth in causal reality. We might call this characteristic of naturalism ‘psychological naturalism’. My preferred formulation of the characterising claim is something like this:

Psychological Naturalism: Minded entities are either relatively recently evolved biological organisms or else downstream constitutive or causal products of the activities of relatively recently evolved biological organisms.

The paradigm cases of minded entities are individual organisms: humans, other primates, other mammals, reptiles, etc. These organisms are relative latecomers to our universe: there were no organisms in our universe before there were third-generation stars. A slightly controversial case of minded entities is collectives of organisms: groups of individual minded organisms—e.g. human institutions—and perhaps also groups of non-minded individual organisms—e.g. ant colonies. A similarly controversial case of minded entities is AIs: minded entities created, at least in the first instance, by minded organisms.

Some who self-identify as naturalists claim that the class of minded entities extends further: some say that the universe may be minded; some say that clouds of interstellar gas may be minded; some say that the earth may be minded; and so on. My naturalists think that those who make these kinds of claims have mistaken views about the nature of mindedness: none of these entities has the kinds of environmental inputs and behavioural outputs required for mindedness.

A fourth typical characteristic of naturalism is a view about values: a view about the absence of certain kinds of values from causal reality. I shall call this characteristic of naturalism ‘evaluative naturalism’. My preferred formulation of the characterising claim is something like this:

Evaluative Naturalism: There is no part or aspect of reality that is divine, or sacred, or worthy of worship.

This claim can be factored. First, there is no part or aspect of causal reality that is divine, or sacred, or worthy of worship. Second, if there are any other parts or aspects of reality, then none of those further parts or aspects of reality is divine, or sacred, or worthy of worship. If there is any non-causal reality, then that domain is populated by merely abstract objects. I do not think that it is controversial to claim that merely abstract objects are not divine, not sacred, and not worthy of worship. So, by my lights, it would do to formulate evaluative naturalism this way: there is no part or aspect of *causal* reality that is divine, or sacred, or worthy of worship.

Some who self-identify as naturalists claim that there are natural causal entities that are divine and/or sacred and/or worthy of worship: the universe, the stars, the earth, mountains, rivers, rocks, and so forth. I am happy to agree with these people that the things in question are *awesome*; but I also insist that whatever else it takes to make things divine and/or sacred and/or worthy of worship is not present in any of these things.

The naturalism that I have characterised is *modest*: the four claims come nowhere near characterising a comprehensive theory of everything. Nonetheless, it is straightforward to explain the attractions of naturalistic theories of everything, i.e. theories of everything that consistently incorporate the four characterising claims.

Any *adequate* theory of everything accepts the causal entities, causal properties, and causal explanations of well-established science; any *minimally committing* theory of everything populates causal reality with no causal entities, causal properties, and causal explanations beyond the causal entities, causal properties, and causal explanations of well-established science. Any *adequate* theory of everything accepts the minded entities recognised by naturalistic theories of everything; any *minimally committing* theory of everything accepts no additional minded entities beyond the minded entities recognised by naturalistic theories of everything. No *minimally committing* theory of everything recognises parts or aspects of causal reality that are divine, or sacred, or worthy of worship. Naturalistic theories of everything are minimally committing theories of everything that are adequate to well-established science.

Why should we look fondly on minimally committing theories of everything that are adequate to well-established science? My answer to this question has two parts.

First, there are reasons why well-established science is epistemically privileged. Speaking very roughly, science is a collective enterprise of data driven description, prediction and explanation in which universal expert agreement functions as regulative ideal. The role of universal expert agreement as regulative ideal in science entails that (a) reproducibility, parsimony and consilience are fundamental scientific values; (b) there are strict protocols governing the conduct of experiments and the collection and analysis of data; and (c) there are significant institutions devoted to protecting the integrity of scientific investigation, publication, recognition and reward. Because of what science is, expert scientific consensus has maximal authority: there is nothing else that it makes sense to conform your opinions to in domains where there is expert scientific consensus. If your theory of everything does not accept the causal entities, causal properties, and causal explanations of well-established science, then your theory of everything is epistemically inadequate.

Second, there are reasons why minimally committing theories of everything that are adequate to well-established science are epistemically privileged. It is *only* in science that universal

expert agreement functions as regulative ideal. In domains that traffic in non-natural causal entities, non-natural causal properties, and non-natural causal explanations, there is no [expert] consensus and no shared expectation that opinion is required to conform to [expert] consensus. Given the universality of disagreement about non-natural causal entities, non-natural causal properties, and non-natural causal explanations—among those who think that there are non-natural causal entities, non-natural causal properties, and non-natural causal explanations—you minimise your epistemic losses if you suppose that there are no non-natural causal entities, no non-natural causal properties, and no non-natural causal explanations. If you are interested in maximising the expected ratio of truth to falsehood in your believing, then you do best to adopt a minimally committing theory of everything that is adequate to well-established science.

While the attraction of naturalism is evident *a priori*, reasonable commitment to naturalism is *a posteriori*. There are no *a priori* considerations that rule out ancestor spirits, astral intelligences, demons, devas, fairies, ghosts, gods, gremlins, mermaids, trolls, vampires, werewolves, witches, wizards, zombies, and so on; and there are no *a priori* considerations that rule out ch'i, clairvoyance, kami, karma, miracles, precognition, samsara, sat, tao, telekinesis, telepathy, and so forth. However, by the lights of naturalists, we have sufficiently good *a posteriori* reasons to rule out all of these things: taking all relevant considerations into account, best views to adopt are minimally committing theories of everything that are adequate to well-established science.

Anyone who self-identifies as a naturalist and who accepts the four claims that I take to be constitutive of naturalism is committed to many other fundamental claims. However, by my lights, those additional fundamental claims are not naturalistic commitments, i.e. they are not commitments constitutive of naturalism. Rather, those additional fundamental claims are either uncontroversial claims that belong to all best theories of everything, or else they are claims that are subject to dispute between naturalists.

Some who self-identify as naturalists are [value] *nihilists* or [value] *error theorists* or [value] *eliminativists*: they reject all values and valuations. Some who self-identify as naturalists are [value] *expressivists* or [value] *non-cognitivists*: they take valuations to be nothing more than expressions of desires. Some who self-identify as naturalists are [value] *subjectivists*: they take valuations to be nothing more than expressions of subjective opinions. Some who self-identify as naturalists are [value] *realists*: they suppose that there are truths about values and valuations that we discover rather than invent. There is no position on values and valuations that is either representative or constitutive of naturalism.

Some who self-identify as naturalists are [belief] *nihilists* or [belief] *error theorists* or [belief] *eliminativists*: they deny that there are beliefs and believings. Some who self-identify as naturalists are [belief] *identity theorists*: they say, roughly, that for minded organisms to believe just is for them to be in certain kinds of neural states that have been appropriately shaped by local, social, and evolutionary history, that are appropriately related to the behaviour of those organisms, and that are appropriately related to other kinds of neural states that have also been appropriately shaped by local, social, and evolutionary history. Some who self-identify as naturalists are [belief] *functionalists*: they say, roughly, that for minded organisms to believe just is for them to be in certain kinds of functional states that are realised by the neural states that identity theorists take to be beliefs. There is no position on belief that is either representative or constitutive of naturalism.

Some who self-identify as naturalists are [abstract object] *nihilists* or [abstract object] *error theorists* or [abstract object] *eliminativists*: they deny that there are algebras, arbitrary objects, attributes, characteristics, classes, contents, fictional objects, functions, generic objects, groups, impossibilia, incomplete objects, inconsistent objects, institutions, intensional objects, intentional objects, mappings, mere possibilia, numbers, patterns, properties, propositions, rings, sets, states, structures, types, universals, values, and so on. (Among these naturalists, some are [abstract object] *fictionalists*, some are [abstract object] *figuralists*, and some are other kinds of [abstract object] *nominalists*.) Some who self-identify as naturalists are [abstract object] *realists*: they are committed to at least some of the things that are denied by [abstract object] *nihilists*. There is no position on abstract objects that is either representative or constitutive of naturalism.

Disagreement among naturalists on these—and other—matters is no mark against naturalism. The theories that one adopts about beliefs, values, abstract objects, and so forth, are entirely independent of the theory that one adopts about the range of causal entities and causal properties—or, for those with relevant nominalistic dispositions, causal predications. Best naturalistic theories of everything contain whatever are the best theories about beliefs, values, abstract objects and so on. Naturalists can go on arguing among themselves about these other matters without in any way endangering the claim that the best theories of everything are naturalistic theories of everything.

Among the entities ruled out by naturalism, gods are likely to be the focus of the most heated dispute, at least in philosophical circles: ancestor spirits, astral intelligences, demons, devas, fairies, ghosts, gremlins, mermaids, trolls, vampires, werewolves, witches, wizards, zombies, and so on have not fared well in the modern academy. At any rate, I expect the strongest pushback to what I have written to come from certain kinds of believers in God. In the last couple of decades—from 2000's *Naturalism: A Critical Analysis*, edited by W. Craig and J. Moreland (New York: Routledge) to 2019's *The Naturalness of Belief*, edited by P. Copan and C. Taliaferro (Lanham: Lexington Books)—there has been a steady stream of criticism of 'naturalism' by Christian philosophers of religion based primarily—but not solely—in the United States. Some of this criticism objects to the suggestion that we can have a satisfactory account of the causal domain without God; much more of this criticism objects to the suggestion that we can have a satisfactory account of other domains without God. In particular, theists have argued that there is no satisfactory account of values, or beliefs, or abstract objects without God. One small irony here is that, on the one hand, these theists often criticise naturalism because of its—according to me, merely imagined—'reductionism' in its accounts of values, beliefs and abstract objects, while, on the other hand, their own theism indulges in a clearly very real reductionism when it turns to those very same subject matters.

One common objection to *ontological* naturalism is that the existence of natural causal reality stands in need of causal explanation. According to naturalists, this thought is forlorn. Obviously enough, it cannot be that the existence of causal reality has a causal explanation. But causal reality just is natural causal reality. So, by naturalist lights, natural causal reality cannot have a causal explanation, and so does not stand in need of one. Perhaps some may wish to object that natural causal reality can have a cause with special explanatory properties. But naturalists reply that whatever legitimate special explanatory properties might be in question here are best attributed to natural causal reality itself. Rather than suppose that natural causal reality has a necessarily existent cause, naturalists will suppose instead that natural causal reality—or, at any rate, some initial part of natural causal reality—is necessarily existent. Rather than suppose that natural causal reality has a cause that possesses

‘existential inertia’, naturalists will suppose instead that natural causal reality possesses ‘existential inertia’—at least until there comes a point at which it does not. And so on.

Another common objection to *ontological* naturalism is that there are features of natural causal reality that stand in need of non-natural causal explanation. Consider, for example, the *alleged* fine-tuning of ‘freely adjustable’ cosmological parameters. Suppose it turns out to be true that there are ‘freely adjustable’ cosmological parameters which are such that, if they took values only very slightly different from their actual values, either our universe would have been very short-lived or else our universe would have expanded so rapidly that it would always have consisted or more or less nothing but empty space. Why do these ‘freely adjustable’ parameters take the values that they do? Clearly, that depends upon where in causal reality, those values have been fixed. If it is fixed everywhere in causal reality that those parameters take the values that they do, then it seems best to suppose that it is necessary that the parameters take the values that they do. (The only alternative is to suppose that it is brutally contingent that the parameters take the values that they do rather than other values that they might have taken.) On the other hand, if there is a transition point in causal reality at which the values of the parameters become fixed, then it is simply a brutally contingent matter that the parameters take the values that they do rather than other values that they might have taken. Postulating a non-natural cause of natural causal reality does nothing to improve the explanatory situation in either case. (If, for example, you suppose that the values are as they are because God wanted them to be as they are, then the key question to ask is whether God always wanted them to be as they are. Either it is necessary that God wanted the values to be as they are, or it is brutally contingent that God wanted the values to be as they are rather than other values that they could have been.)

One common objection to *epistemological* naturalism is that it is *reductionistic*. As I have already noted, this criticism typically ignores the full range of naturalistic opinion, and, often enough, emerges from positions that are themselves reductionistic. I shall illustrate these points in a discussion of values; similar points could be made in discussion of abstract objects and beliefs.

Some naturalists are reductionists about values: in particular, those naturalists who are non-cognitivists and subjectivists about values are reductionists about values. But, among those naturalists who are realists about values, there are some naturalists who are not in any sense reductionists about values. For example, there are naturalists who think that there are primitive truths about values. Those naturalists are evidently not reductionists about values.

Consider the following claim: *necessarily, it is wrong to kill except in a limited range of special cases*. Special cases include some cases of self-defence, some cases of defence of kith and kin, and some cases of killing by police officers and soldiers. Special cases might also include, among others, some cases of abortion, some cases of voluntary euthanasia, some cases of assisted suicide, some cases of state-sanctioned killings, and some cases of killing for commercial, industrial and recreational purposes. While we cannot expect all value realists to agree on the range of special cases, we can expect value realists to agree on the claim itself. Moreover, we should expect that value realists who agree on this claim suppose that it stands in no need of further explanation. Whatever is necessarily true is true no matter what. Given that it is necessarily wrong to kill except in a limited range of special cases, there is nothing further to which appeal can be made to explain why this is so.

Some theists might be tempted to say: necessarily, it is wrong to kill except in a limited range of special cases because, necessarily, God says that it is wrong to kill except in a limited range of special cases. But this is wrong twice over. First, as we just noted, there is no explanation of what is necessary: if it is true both that (a) necessarily, it is wrong to kill except in a limited range of special cases; and (b) necessarily, God says that it is wrong to kill except in a limited range of special cases, then there is no explanatory relationship that holds between this pair of claims. Second, if we suppose that, while it is necessarily true that it is wrong to kill except in a limited range of special cases, it is merely contingently true that God says that it is wrong to kill except in a limited range of special cases, the theist gets the direction of explanation the wrong way around: at most, what is true is that God says that it is wrong to kill except in a limited range of cases because it is necessarily wrong to kill except in a limited range of cases. The attempted theistic reduction of moral value to the say-so of God is simply unacceptable.

Another common objection to *epistemological* naturalism is that it is *self-defeating*. The central premises in this objection are that: (a) because naturalists accept that our cognitive faculties have arisen in the way in which the [natural and social] sciences tell us that they have, naturalists are committed to the claim that it is very unlikely that our cognitive faculties are reliable; and (b) it is irrational to be committed to the claim that it is very unlikely that our cognitive faculties are unreliable. The key to naturalist response to this objection is to look more closely at the claim that our cognitive faculties are unreliable.

Given that our cognitive faculties have arisen in the way in which the [natural and social] sciences tell us that they have, we should expect that our cognitive faculties—of perception, memory, introspection, moral sense, and so forth—are reliable across a wide range of everyday domains. Moreover, given that our cognitive faculties have arisen in the way in which the [natural and social] sciences tell us that they have, and given the scientific institutions that we have developed, we should expect that our [collective] cognitive faculties are reliable across the breadth of scientific domains as well. Quite generally, where we have non-collusive agreement or non-collusive expert agreement, we have compelling evidence that our cognitive faculties are reliable. However, in domains where there is no non-collusive expert agreement, we have compelling evidence that our cognitive faculties are not reliable. Moreover, these domains—religion, politics, philosophy—are precisely the domains where it is intuitively plausible that our cognitive faculties are not reliable.

Since naturalism is a philosophical doctrine, it belongs to one of the domains in which there is no non-collusive expert agreement. So—even if naturalism escapes the charge that it undermines itself by claiming that our cognitive faculties are unreliable—it might seem that naturalism is impugned merely by the fact that it is a claim of a kind that we know to be unreliable. Perhaps there is something in this. Perhaps we should not be too confident that naturalism is correct. On the other hand, if there is anything to the arguments for naturalism that I sketched earlier, perhaps naturalists can console themselves with the thought that naturalism is the very worst view to hold *except* for all of the views that compete with it. At the very least, it does seem that there is something attractive about the view that minimally rounds out the theory of (almost) everything vouchsafed to us by commonsense and science.