

Ultimate Naturalistic Causal Explanations

There are various kinds of questions that might be asked by those in search of ‘ultimate explanations’. Why is there anything at all? Why is there something rather than nothing? Why is there causal stuff? Why is there causal stuff rather than complete absence of causal stuff? Why is there causal stuff that behaves as it does? Why is there causal stuff that behaves as it does rather than causal stuff that behaves in other ways?

In this chapter, my focus will be on ‘ultimate causal explanations’ and ‘ultimate explanations of the natural world’—or, more exactly, on the *relative merits* of theistic and naturalistic ‘ultimate causal explanations’ and ‘ultimate explanations of the natural world’. If we suppose that there are non-causal things—abstracta and the like—then we will not suppose that this discussion exhausts what there is to say about the relative merits of theistic and naturalistic ‘ultimate explanations’. However, I leave discussion of the relative merits of theistic and naturalistic accounts of the existence of non-causal things—abstracta and the like—for another day.

It is not part of my project to argue for the *absolute* virtue of the naturalistic ‘ultimate causal explanations’ that will be canvassed in this article. The explanations in question depend upon controversial assumptions about causality, modality, the meaningfulness of talk about ‘ultimate explanation’, and perhaps other things as well. What I do want to argue is that, against the background of these controversial assumptions, there is good reason to prefer naturalistic ‘ultimate explanations’ to theistic ‘ultimate explanations’. Moreover, I shall argue that, if I am right in thinking that naturalistic ‘ultimate explanations’ are better than theistic ‘ultimate explanations’, then those considerations alone are sufficient to defeat all cosmological arguments for the existence of God.

1. Modality

My favourite theory of modality goes like this. Wherever there was objective chance, there were alternative possibilities. Wherever there is objective chance, there are alternative possibilities. Wherever there will be objective chance, there will be alternative possibilities. Possible worlds are alternative ways that the actual world could have gone, or could go, or could one day go; possible worlds all ‘share’ an initial history with the actual world, and ‘branch’ from the actual world only as a result of the outworkings of objective chance. Since the laws that govern the evolution of possible worlds do not vary over the course of that evolution, all possible worlds ‘share’ the same laws. If there was an initial state of the actual world, then all possible worlds ‘share’ that initial state; if there was no initial state of the actual world, then all possible worlds ‘share’ some ‘infinite’ initial segment with the actual world, and hence any two possible worlds ‘share’ some ‘infinite’ initial segment with one another.

My favourite theory of modality does not assume that there are objective chances. However, if there are no objective chances then, on my favourite theory, there is just one possible world: the actual world. I take it that quantum mechanics affords some reason to suppose that there are objective chances. However, I note that the interpretation of quantum mechanics remains fraught; and, in any case, I note further that the inconsistency of quantum mechanics with general relativity provides us with

good reason to suppose that quantum mechanics does not yet tell us the ultimate truth about natural reality. If it turns out that there is just one possible world, then the actual world is fully deterministic: any state of the world is both necessary and sufficient for all other states of the world.

My favourite theory of modality has the evident advantage of theoretical frugality. On the one hand, if there are objective chances, then any theory of modality is surely committed to the possibility of the outcomes that lie in the relevant objective chance distributions. On the other hand, it is not clear that we have good reason to commit ourselves to any possibilities beyond those that are required by whatever objective chances there might be; at the very least, any expansion of the range of possibilities clearly requires some kind of justification.

Of course, my favourite theory of modality is controversial: there are many who suppose that it omits further possibilities. For example: (a) some suppose that there might not have been anything at all; (b) some suppose that the initial state of the world—or the entire beginningless history of the world—might have been different; (c) some suppose that the laws might have been different; (d) some suppose that the laws might change as the state of the world evolves; and perhaps there are yet other suppositions that might also be entertained. On my favourite theory, these alternative suppositions are purely doxastic or epistemic: while they are ways that *it might be supposed that* the world could have gone, or could go, or could one day go, they are not ways that the world could have gone, or could go, or could one day go.

I do not suppose that it needs pointing out that what I have called “my favourite theory of modality” is really only a fragment of a full theory of modality. For example, I have here taken no stance on the metaphysics of possible worlds: for all that I have said, the correct theory of possible worlds could be realist, or ersatzist, or primitivist, or perhaps something else again. All that I have been discussing here is what might be called “the range of possibilities”—what is and isn’t possible—and the ways in which the range of possibilities is related to what is actually the case.

2. Causal Reality

Causal reality has parts that stand in a fundamental external relation. If we are naturalists, we can suppose that the fundamental external relation is spatiotemporal. However, if we are supernaturalists, we cannot suppose that the fundamental external relation is spatiotemporal (though we may perhaps suppose that the fundamental external relation has a temporal ‘dimension’).

For the purposes of the following discussion, I shall just take it for granted that the fundamental external relation uniquely partitions causal reality into maximal parts that: (a) themselves have no parts that stand in causal relations and (b) are totally ordered under the relations of causal priority and causal anteriority. In particular, I assume: (i) *irreflexivity* (no maximal part is causally prior (anterior) to itself); (ii) *anti-symmetry* (if maximal part A is causally prior (anterior) to maximal part B, then maximal part B is not causally prior (anterior) to maximal part A); (iii) *transitivity* (if maximal part A is causally prior (anterior) to maximal part B, and maximal part B is causally prior (anterior) to maximal part C, then maximal part A is causally prior (anterior) to

maximal part C); and (iv) *completeness* (for any pair of distinct maximal parts A and B, either A is causally prior (posterior) to B, or B is causally prior (posterior) to A).

While I make these assumptions for the purposes of subsequent discussion, I do not suppose that it is actually *true* that the fundamental external relation uniquely partitions causal reality into maximal parts that (a) themselves have no parts that stand in causal relations and (b) are totally ordered. Speaking very impressionistically, we can say that, for naturalists, this assumption is analogous to supposing that there is a unique global foliation of a general relativistic space-time. I think that it is quite clear that the argument that I am developing would not have a different outcome if, instead of adopting this pretence, we instead developed a suitable “extension” of the idea that there may be no unique general foliation of relativistic space-time to the fundamental external relation as it is manifest in supernatural causal reality.

I take it that the standing of the other assumptions is similarly contentious. For instance, there are well-known disputes about the possibility or impossibility of causal loops. Nothing in the forthcoming argument turns upon the outcome of those disputes. On my favourite theory of modality, I’m inclined to think that causal loops really are impossible; on more permissive theories of modality, matters seem to me to be rather less clear. However, even if there are acceptable theories of modality on which there might be causal loops, there are no acceptable theories of modality on which there might be single-membered causal loops, i.e. cases in which something stands in an unmediated causal relation to itself.

3. Hypotheses about Causal Reality

There are various hypotheses that one might make about the global shape of causal reality. In framing these hypotheses, we make no assumptions about the contents of causal reality, i.e., we make no assumptions about the relative extents of the natural and the supernatural. Moreover, in framing these hypotheses, we consider only the simplest versions of these hypotheses.

1. *Regress*: Causal reality does not have an initial maximal part. That is, it is not the case that there is a part of causal reality which (a) has no parts that stand in causal relations to one another, and (b) is not preceded by some other part of causal reality which has no parts that stand in causal relations to one another.
2. *Necessary Initial Part*: Causal reality has an initial maximal part, and it is not possible that causal reality had any other initial maximal part. On the assumption that the initial maximal part involves objects, both the existence and the initial properties of those objects are necessary.
3. *Contingent Initial Part*: Causal reality has an initial maximal part, but it is possible that causal reality had some other initial maximal part. On the assumption that the initial maximal part involves objects, at least one of the existence and the initial properties of those objects is contingent.

If we adopt my favourite theory of modality, then we get the following consequences.

According to *Regress*, every possible world shares an ‘infinite’ initial segment with the actual world. More accurately: in every possible world, there is no part of causal reality which (a) has no parts that stand in causal relations to one another and (b) is not preceded by some other part of causal reality which has no parts that stand in causal relations to one another; and every possible world shares an initial segment with the actual world.

According to *Necessary Initial Part*, every possible world has the same initial maximal part. In particular, then, every possible world has the same initial maximal part as the actual world. If the initial maximal part involves objects, then both the existence and the initial properties of those objects are necessary. If there is more than one possible world, then other possible worlds differ from the actual world because the evolution of the total state of the world is chancy: the laws and the initial properties of the objects that exist in the initial maximal part do not fully determine the subsequent history of the world.

Of course, on my favourite theory of modality, *Contingent Initial Part* is ruled out: on my favourite theory of modality, it cannot be that at least one of the existence and the initial properties of the objects that belong to the initial maximal part of the actual world is contingent. In order to accommodate theories according to which at least one of the existence and the initial properties of the objects that belong to the initial maximal part of the actual world is contingent, we need to retreat to a view on which the initial maximal part of the world might have been different: either because different things might have existed in that initial maximal part, or because those necessary existents that belong to the initial maximal part might have had different properties in that initial maximal part from the properties that they actually had in that initial maximal part, or because there might have been nothing at all.

4. Naturalism and Theism

Naturalism and theism are, at least *inter alia*, competing hypotheses about the contents of global causal reality.

According to naturalism, global causal reality is exhausted by natural causal reality: there are none but natural items—objects, events, states—related by natural causes, and none but natural properties involved in the causal evolution of those items.

According to theism, there is more to global causal reality than natural causal reality: for, apart from anything else, God is the supernatural creator of natural causal reality. Of course, many theists make more than this minimal supposition. On the one hand, many theists suppose that God’s causal relation to natural reality involves much more than an initial act of creation: perhaps, for example, they may suppose that God’s supernatural agency is required to sustain the existence of natural reality; or perhaps they may suppose that God makes supernatural interventions in the natural causal order, or, in other words, causes miracles of one kind or another; etc. And, on the other hand, many theists suppose that the supernatural realm contains much more than God: there are angels, demons, and a whole host of other supernatural entities that God brings into existence, and who have causal commerce with God and with the natural order. However, for the purposes of this paper, we shall focus our attention solely on the suggestion that God is the (lone) cause of the existence of the natural

causal order: God brings into existence both the initial maximal part of the natural causal order and the laws that govern the evolution of the natural causal order.

These characterisations of naturalism and theism are lean. Many discussions of ‘naturalism’ and ‘theism’ build much more into the definitions of these terms. For example, many theists suppose that there is much more to the essence of God than merely being the supernatural creator of natural causal reality. However, it is not my intention to here provide *analyses* of naturalism and theism. For the purposes of the forthcoming argument, all I need to suppose is that these characterisations supply necessary conditions: naturalism *entails* that global causal reality is exhausted by natural causal reality, and theism *entails* that there is a supernatural lone creator of natural causal reality.

Even though my characterisations of naturalism and theism are lean, they are plainly not unproblematic. In particular, my characterisations take for granted a robust understanding of the distinction between the natural and the supernatural. Perhaps there are serious difficulties involved in the detailed explanation of this distinction. However, even if so, it is not clear that this is a threat to the argument that I shall be developing. After all, there are serious difficulties involved in the detailed explanation of just about any philosophically interesting distinction, and yet philosophers manage to continue to ply their trade, making use of terms that are intended to draw philosophically interesting distinctions. It seems to me that the distinction between the natural and the supernatural is in sufficiently good standing to bear the weight of subsequent argument; in consequence, at the very least, I think that I would need to be provided with strong reasons to retreat from this considered view.

5. Hypotheses Compared

The central idea behind my argument is that we can compare the merits of naturalism and theism, considered as hypotheses about the contents of global causal reality, under the various different assumptions that we might make about the global shape of causal reality. That is, for each hypothesis that we can frame about the global shape of causal reality, we can ask whether naturalism or theism should be preferred on that hypothesis about the global shape of causal reality, *all else being presumed equal*. If it turns out that, on each hypothesis that we can frame about the global shape of causal reality, we should prefer naturalism to theism, *all else being presumed equal*, then we can conclude that the global shape of causal reality gives us reason to prefer naturalism to theism, *all else being presumed equal*. And even if it only turns out that there is no hypothesis that we can frame about the global shape of causal reality on which we should prefer theism to naturalism, *all else being presumed equal*, we shall still be able to conclude that the global shape of causal reality gives us no reason to prefer theism to naturalism, *all else being presumed equal*.

This brief presentation of the central idea behind my argument raises at least two significant questions that require further comment. *First*, there is the question of what considerations we should take into account when deciding between theism and naturalism (on the various different hypotheses about the contents of global causal reality); and, *second*, there are some questions about the role and significance of the insistence that all else should be presumed equal when we make our decision between

theism and naturalism (on the various different hypotheses about the content of global causal reality).

I assume that, in the general case, there are a range of considerations that bear on choices between hypotheses or theories: *simplicity* (which a matter of minimisation of theoretical commitments, taking into account ontological commitments, ideological commitments, and whatever other theoretical commitments there might be); *goodness of fit with data*; *explanatory scope and power*; *fit with other accepted hypotheses and theories*; and so forth. However, in the case that all else is presumed equal, I take it there are just three considerations that bear on choice between hypotheses or theories: simplicity, goodness of fit with data, and explanatory scope and power. (Even if this isn't right, and there are further considerations that bear on choice between hypotheses or theories when all else is presumed equal, I do not think that the subsequent argument will be affected. If necessary, we can return to consider this point further.)

What, then, is it for all else to be presumed equal? Essentially, for all other considerations to be ignored. If we ask whether naturalism or theism should be preferred on a hypothesis about the global shape of causal reality, all else being presumed equal, then we ask whether naturalism or theism should be preferred given that *that* hypothesis about the global shape of causal reality is the *only* thing that is being taken into account.

Why would it be an interesting result to establish that, on each hypothesis that we can frame about the global shape of causal reality, we should prefer naturalism to theism (or, at least, *not* prefer theism to naturalism)? Because, I take it, this result would decisively defeat all cosmological arguments for theism. On the one hand, it is obvious that the result would defeat all logical ('deductive') cosmological arguments, since *all else* is certainly ignored in these arguments. On the other hand, it is no less obvious that the result would defeat all evidential ('probabilistic') cosmological arguments, since such arguments rely on the assumption that all else is properly ignored. (This observation extends to some cases in which evidential cosmological arguments are supposed to contribute to a cumulative case for theism, namely those cumulative case arguments in which each of the cases makes an *independent* incremental contribution to the overall case.) Of course, the result would not defeat arguments in which the global shape of causal reality is taken to be just one of several factors that are being *jointly* considered in the comparative assessment of theism and naturalism. (We shall have reason to return to this point towards the end of the chapter.) It hardly needs to be added that arguments in which the global shape of causal reality is taken to be just one of several factors that jointly serve to support theism over competing hypotheses are *not* properly called 'cosmological' arguments.

6. The Argument

With various preliminaries behind us, it is a straightforward matter to state the central argument. We consider, in turn, each of the hypotheses that we might make about the global shape of causal reality.

Regress: If there is a global causal regress, then (a) according to naturalism, there is a regress of global natural causal states; and (b) according to theism, there is a regress

of global natural+supernatural causal states. (Here, I allow that ‘global natural+supernatural causal states’ might lack a natural component, but that ‘global natural+supernatural causal states’ cannot lack a supernatural component. In fact, I suspect that the only version of this view that cannot be ruled out on other grounds is one in which there is a ‘finite’ series of global natural+ states preceded by a regress of global supernatural causal states. However, nothing in the subsequent argument turns upon the correctness of this supposition.)

In the nature of the case, it is obvious that, on the assumption that there is a global causal regress, neither naturalism nor theism fits better with the data or provides an explanation with greater scope or power—both views appeal to regress to answer the question why there is something rather than nothing, etc. However, it is equally obvious that naturalism scores better than theism on the count of theoretical commitment: naturalism has fewer ontological commitments than theism (fewer kinds of things to which it is committed), fewer ideological commitments than theism (fewer primitive predicates that are required for the development of the theory), and plainly does no worse than theism in point of whatever other theoretical commitments there might be. Spelling out what I take to be obvious: naturalism is committed to one kind of entity (the natural), one kind of external relation (the spatiotemporal), one kind of causation (the natural), one kind of non-topic-neutral property (the natural) and so forth, whereas theism is committed to two kinds of entities (the natural and the supernatural), two kinds of external relations (the natural and the supernatural), two kinds of causation (the natural and the supernatural), two kinds of non-topic-neutral properties (the natural and the supernatural), and so on.

Moreover, even if one is inclined to dispute this assessment of the matter, I do not see how one could reasonably deny that, under the hypothesis that there is a global causal regress, there is no explanatory advantage that accrues to theism over naturalism when it comes to the answering of ‘ultimate’ questions: Why is there anything at all? Why is there something rather than nothing? Why is there causal stuff? Why is there causal stuff rather than complete absence of causal stuff? Why is there causal stuff that behaves as it does? Why is there causal stuff that behaves as it does rather than causal stuff that behaves in other ways? Etc. For, as I noted above, *both views appeal to regress in exactly the same kind of way* in order to provide whatever answers they provide to these ‘ultimate’ questions, and it is not in question that naturalism does *no worse than* theism in point of theoretical commitments.

On my favourite theory of modality, given that there is a global causal regress, that regress is necessary (though, on the assumption that objective chance is ubiquitous, no part of the regress is necessary). That is, there is no possible world that fails to share an initial part of the actual world’s global causal regress, even though, for any non-initial part of the actual regress, there are possible worlds that ‘branch off’ from the actual world prior to that non-initial part. On other, more permissive theories of modality, it may be that, given that there is a global causal regress, that regress is contingent. But assessing our hypotheses according to those more permissive theories of modality does not change the relative explanatory standings of naturalism and theism: it remains the case that we have no better (or worse) fit with data or explanatory scope and power in the one case than we do in the other (and we still have it that naturalism does better than theism in point of minimisation of theoretical commitments).

In short, if there is a global causal regress, we should prefer naturalism to theism (or, at the very worst, we should not prefer theism to naturalism.).

Necessary Initial Part: If there is a necessary initial part of the global causal order then (a) according to naturalism, there is a necessary initial natural part of the global causal order that precedes a ‘finite’ series of natural parts of the global causal order; and (b) according to theism, there is a necessary initial supernatural part of the global causal order that precedes a ‘finite’ series of supernatural parts of the global causal order that in turn precedes a ‘finite’ series of natural+supernatural parts of the global causal order. (Here, I allow that the ‘finite’ series of supernatural parts of the global causal order might be null: it might be that the creation of the natural causal order is immediately consequent on the necessary initial supernatural part of the global causal order. However, in order for it to be the case that the natural order has a supernatural cause, there must at least be an initial purely supernatural part of the global causal order.)

Of course, the argument, that there is good reason to prefer naturalism to theism—or, at the very least, not to prefer theism to naturalism—on the hypothesis that there is a necessary initial part of the global causal order, is exactly the same as it was in the case of the hypothesis that there is global causal regress. On the one hand, insofar as it is the necessity of the necessary initial part that is carrying the entire explanatory load, there is no advantage in fit with data or explanatory scope or power that accrues to theism above naturalism. But, on the other hand, theism is the leaner theory. All else being presumed equal, we have reason to prefer theories that fewer theoretical commitments; but there is no question that, insofar as we are only taking into account considerations that bear on global causal order, naturalism carries a substantially lighter theoretical load.

Perhaps it might be objected that there are reasons to prefer the hypothesis that there is a necessary initial global supernatural causal state to the hypothesis that there is a necessary initial global natural causal state. However, it is very hard to see how such a view might be defended. In particular, it is worth noting that my favourite theory of modality is almost inescapable on the supposition that there is a necessary initial global causal state. Certainly, it is just built into the view that all possible worlds share the same initial global causal state (and hence the same initial ‘laws’ governing the evolution of global causal state). Perhaps it might be denied that the only way that worlds can ‘diverge’ from the actual world is via the outworkings of objective chance—but, at the very least, considerations of simplicity militate against that denial. But, given that it just falls out of the associated theory of modality that there is a necessary initial global causal state, I cannot see how one could hope to motivate the suggestion that it is more theoretically virtuous to suppose that that initial global causal state is supernatural rather than natural.

Some may feel that there is more to say here. For example: given that all non-initial global natural causal states are contingent, isn’t there a good inductive argument to the conclusion that an initial global natural causal state would also be contingent? I don’t think so. After all, given that all non-initial creators are contingent, surely there would be an equally good (or bad) inductive argument to the conclusion that any initial creator would also be contingent. Of course, I don’t deny that many theists have

the intuition that the hypothesis that there is a necessary initial state involving a necessarily existent supernatural creator (with necessary initial properties) is more theoretically virtuous than the hypothesis that there is a necessary initial state that involves nothing supernatural. However, it seems to me that this is pretty plainly a case in which the intuition is consequent upon the prior adoption of theory: there just is nothing *intrinsically* more virtuous in the supposition that there is a necessarily existent supernatural creator (with necessary initial properties) than there is in the supposition that there is a necessary initial global natural causal state.

Contingent Initial Part: If there is a contingent initial part of the global causal order then (a) according to naturalism, there is a contingent initial natural part of the global causal order that precedes a ‘finite’ series of natural parts of the global causal order; and (b) according to theism, there is a contingent initial supernatural part of the global causal order that precedes a ‘finite’ series of supernatural parts of the global causal order that in turn precedes a ‘finite’ series of natural+supernatural parts of the global causal order (as before, I allow that the ‘finite’ series of supernatural parts of the global causal order might be null: it might be that the creation of the natural causal order is immediately consequent on the necessary initial supernatural part of the global causal order).

If there is a contingent initial natural part of the global causal order, then we can suppose either (a) there is at least one necessarily initially existent natural entity—“the initial singularity”—at least some of whose initial properties are contingent; or else (b) that there are only contingently initially existing natural entities which may or may not have only essential initial properties. (Of course, the label “the initial singularity” is not meant to be taken seriously: I am not assuming that natural reality is something like a standard big bang universe. However, it will be convenient to have a tag to use in the subsequent discussion.) If there is a contingent initial supernatural part of the global causal order, then we could suppose either (a) there is at least one necessarily initially existent supernatural entity—God—at least some of whose initial properties are contingent; or else (b) that there are only contingently initially existing supernatural entities which may or may not have only essential initial properties.

Given that our interest in is theism—i.e. in the hypothesis that there is exactly one initially existent supernatural entity—we need only compare theism with versions of naturalism on which there is just one initially existing entity. If we do this, then, on the one hand, we compare the hypothesis that there is a necessarily existent initial singularity at least some of whose initial properties are contingent with the hypothesis that there is a necessarily existent supernatural creator at least some of whose initial properties are contingent; and, on the other hand, we compare the hypothesis that there is a contingently existing initial singularity which may or may not have only essential initial properties with the hypothesis that there is a contingently existing supernatural creator which may or may not have only essential initial properties.

The argument that there is good reason to prefer naturalism to theism—or, at the very least, not to prefer theism to naturalism—on the hypothesis that there is a contingent initial part of the global causal order, is exactly the same as it was in the case of the hypothesis that there is a necessary initial part of the global causal order. On the one hand, as before, there is no advantage in fit with data or explanatory scope or power that accrues to theism above naturalism. But, on the other hand, theism is the leaner

theory: it does better in point of ontological commitment, ideological commitment, and whatever other kinds of theoretical commitments there might be. Of course, on my favourite theory of modality, it is not even possible that there is a contingent initial natural part of the global causal order; and, in that case, these alternative theories do not even furnish possible answers to our ‘ultimate’ questions. However, even if we retreat from my favourite theory of modality to views on which it is possible that there is a contingent initial natural part of the global causal order, we do not arrive at any views on which theism provides better answers to those ‘ultimate’ questions than naturalism provides. (I suppose that there have been few, if any, theists who have wished to say that there is a contingently existing supernatural creator which may or may not have only essential initial properties; however, we lose nothing by including this hypothesis among the class on which we are comparing theism with appropriate naturalistic alternatives.)

The upshot of the considerations rehearsed in the argument is clear: if we are only interested in the global shape of causal reality, and if we set all other considerations aside, then we have no reason at all to prefer theism to naturalism (and, very plausibly, we have good reason to prefer naturalism to theism).

7. Other Explanations?

Regress, *Necessary Initial State* and *Contingent Initial State* afford three different kinds of answers to ‘ultimate’ questions: Why is there anything at all? Why is there something rather than nothing? Why is there causal stuff? Why is there causal stuff rather than complete absence of causal stuff? Why is there causal stuff that behaves as it does? Why is there causal stuff that behaves as it does rather than causal stuff that behaves in other ways?

Regress says: there has always been something; there has always been something rather than nothing; there has always been causal stuff; there has always been causal stuff that behaves as it does; etc. (Of course, Regress can also say: It had to be that there has always been something; it had to be that there has always been something rather than nothing; it had to be that there has always been causal stuff; it had to be that there has always been causal stuff that behaves as it does; etc.) Necessary Initial State says: there had to be something; there had to be something rather than nothing; there had to be causal stuff; there had to be causal stuff that behaves as it does. Contingent Initial State (involving necessary existents) says: there had to be something; there had to be something rather than nothing; there had to be causal stuff; there had to be causal stuff, but there is no explanation why it is the way it is rather than some other way that it could have been. Contingent Initial State (involving only contingent existents) says: there might have been nothing, and there is no reason why there is something rather than nothing; there might have been no causal stuff, and there is no reason why there is causal stuff rather than absence of causal stuff; there might have been no causal stuff, but, given that there is causal stuff, it had to be the way that it is (or, alternatively: there might have been no causal stuff and, given that there is causal stuff, there is no explanation why it is the way that it is rather than some other way that it could have been).

Considered as answers to ‘ultimate’ questions, it is controversial whether each of *Regress*, *Necessary Initial State* and the two versions of *Contingent Initial State* is

acceptable. Some suppose, for example, that *Contingent Initial State (involving only contingent existents)* and the weaker version of *Regress* could not possibly be supposed to afford acceptable answers to ‘ultimate’ questions. However, I hope that it is obvious that this controversy has no implications for the argument that I have just developed. Showing that there is something unacceptable or even impossible about *Contingent Initial State (involving only contingent existents)* and the weaker version of *Regress* cannot contribute anything at all towards showing that theism gives a better answer to ‘ultimate’ questions than naturalism does, so long as it is true that naturalism dominates theism, i.e., so long as it is true that, on each hypothesis that one might make about the global shape of causal reality, naturalism is more theoretically virtuous than theism.

Of course, there is something that would contribute towards showing that theism gives a better answer to ‘ultimate’ questions than naturalism does: namely, the identification of a different kind of answer to ‘ultimate’ questions than those that are canvassed in the course of my argument. Perhaps there is some other hypothesis about the global shape of causal reality on which theism outscores naturalism? Or perhaps there is an answer to my ‘ultimate’ questions that does not essentially amount to an assumption about the global shape of causal reality?

I think that both of these suggestions can be fairly quickly dismissed. On the one hand, it seems to me to be quite implausible to suppose that there is a hypothesis—however outré—concerning the global shape of causal reality on which theism turns out to be more theoretically virtuous than naturalism (in the sense required by the argument that I have developed). On the other hand, it seems to me to be no less implausible to suppose that there are promising candidate answers to our ‘ultimate’ questions that do not amount to assumptions about the global shape of causal reality.

This is not to say that the literature has not thrown up other candidate answers for ‘ultimate’ questions. In particular, some have been driven to suppose that our ‘ultimate’ questions might be given the following kinds of answers: there is something because it is good that there is something; there is something rather than nothing because it is good that there is something rather than nothing; there is causal stuff because it is good that there is causal stuff; there is causal stuff rather than absence of causal stuff because it is good that there is causal stuff rather than absence of causal stuff; there is causal stuff that behaves as it does because it is good that there is causal stuff that behaves as it does; there is causal stuff that behaves as it does rather than in other ways that it might behave because it is good that there is causal stuff that behaves as it does rather than in other ways that it might behave; etc.

While this axiarchial strategy seems hopeless to me—it’s no explanation at all of why something exists to observe that it is good that it exists—I don’t think that I need to insist on this in order to respond to the suggestion. For it seems to me that naturalists can be just as satisfied (or dissatisfied) with the suggestion that the initial singularity exists *because* it is good that the initial singularity exists as theists can be with the suggestion that God exists *because* it is good that God exists. While the reasons may not be exactly the same in each case, it seems clear to me that the axiarchial hypotheses are a very poor explanatory fit for both naturalism and theism: in each case, the axiarchial hypotheses are *ad hoc* non-causal additions to a fundamentally causal explanatory framework. Few theists suppose that goodness is explanatorily

prior to God; few naturalists suppose that goodness is explanatorily prior to global natural causal reality.

8. Other Considerations?

Even if it is granted that, *all else being presumed equal*, naturalism gives better (or, at any rate, no worse) answers to ‘ultimate’ questions than theism does, it might be suggested that this is not a particularly significant or interesting result. After all, what really matters is whether naturalism or gives better answers to ‘ultimate’ questions *all things considered*. Perhaps, all things considered, theism gives better answers to ‘ultimate’ questions than naturalism does, because the additional theoretical commitments that are incurred by theism provide explanatory advantages elsewhere: better fit with data, greater explanatory scope and power, better fit with established hypotheses and theories, and so forth.

I think that there is one sense in which this response is clearly not correct. Even if it turns out that, all things considered, theism gives better answers to ‘ultimate’ questions than naturalism does, because the additional theoretical commitments that are incurred by theism provide explanatory advantages elsewhere: better fit with data, greater explanatory scope and power, better fit with established hypotheses and theories, and so forth, it would actually still be significant and important if it were established that, *all else being presumed equal*, naturalism gives better (or, at any rate, no worse) answers to ‘ultimate’ questions than theism does. The reason for this is that contemporary discussion of cosmological arguments would be significantly transformed if the conclusion of my argument were broadly accepted. As I noted earlier, acceptance of the conclusion of my argument would sound the death knell for: (i) logical cosmological arguments; (ii) probabilistic cosmological arguments; and (iii) discrete cumulative case cosmological arguments. For, in each of these categories, the arguments in question proceed by considering nothing apart from the shape of global causal reality.

Setting aside implications for the debate about cosmological arguments, it is clear that there is a sense in which the above point should be conceded. In the end, the most important question is whether naturalism or theism should be preferred, *all things considered*. When everything is taken into account, answers to ‘ultimate’ questions may turn out to be a matter of spoils to the victor: if one hypothesis trumps the other in every other domain, on every other piece of relevant evidence, then we shall reasonably conclude that that hypothesis gives better answers to the ‘ultimate’ questions as well. However, if this is right, then it is worth asking how far the kind of argument that I have developed in connection with the shape of global causal reality can be extended.

Suppose, for example, that we decide to compare theism and naturalism taking into account both the global shape of causal reality and the fine-tuning for life of our part of causal reality: can we argue that naturalism still trumps theism on all of the hypotheses that we might frame about the shape of global causal reality and the point in that global causal reality at which the fine-tuning for life of our part of causal reality is first established? I think so! While I cannot develop the full argument here, I can at least outline how it goes. In essence, there are only two hypotheses about where in global causal reality the fine-tuning for life of our part of causal reality is first

established (if, as we shall simply suppose for the sake of argument, it is really true that our part of causal reality is fine-tuned for life). On the one hand, the fine-tuning could be there in the initial state; on the other hand, the fine-tuning could first arise in some non-initial state. On the latter hypothesis—i.e. on the hypothesis that the fine-tuning arises in some non-initial state—it must be that the fine-tuning is simply the outcome of objective chance; and, on the former hypothesis—i.e. on the hypothesis that the fine-tuning is present in the initial state—we can go on to suppose either that the fine-tuning is a contingent feature of the initial state, or that it is a necessary (or essential) feature of the initial state. But, in every one of these cases, there is no difference in the ultimate ground of the explanation of the fine-tuning between theism and naturalism. That is, the situation turns out to be exactly the same as it was in the case of the global shape of causal reality: theism and naturalism are on a par with respect to everything other than theoretical commitments; and naturalism trumps theism (or, at any rate, plainly does not worse than theism) on point of theoretical commitments. So, I say, it's not just the discussion of cosmological arguments that should be transformed by adoption of the kind of approach that I have sketched. If I'm right, there is a very similar argument that sounds the death knell for: (1) logical fine-tuning arguments; (ii) probabilistic fine-tuning arguments; (iii) discrete cumulative case fine-tuning arguments; (iv) logical cosmological + fine-tuning arguments; (v) probabilistic cosmological + fine-tuning arguments; and (vi) discrete cumulative case cosmological + fine-tuning arguments.

Of course, I do not suppose that this argument admits of indefinite extension: I don't suppose that, waiting in the wings, there is an extension of this argument for the conclusion that naturalism should be preferred to theism *all things considered*. For all that can be argued along these kinds of lines, it might be that the theoretical economies of naturalism are trumped by the greater explanatory virtues of theism in connection with consciousness, or reason, or mathematics, or miracles, or religious experience, or what have you. However, that theism trumps naturalism in this way is clearly something that would remain to be argued, and that has not hitherto been satisfactorily argued.

Perhaps there are a couple of further remarks that it will be useful to make here. First, the preceding discussion may have interesting implications for ontological arguments. In particular, acceptance of my favourite theory of modality has interesting implications for such descriptions as “the greatest possible agent” and the like. On the version of metaphysical naturalism that is tied to my favourite theory of modality, a description like this, if proper, will pick out a possible natural agent (and perhaps even a possible human being)! Second, there are good reasons to suppose that Euthyphro-style considerations rule out the suggestion that theism gains advantage over naturalism from considerations about: mathematics, meaning, morality, modality, and a host of related domains. So, while I do not suppose that, waiting in the wings, there is an extension of the presented argument to the conclusion that naturalism should be preferred to theism, all things considered, I do think that the presented argument contributes to the task of narrowing the turf upon which battles between theism and naturalism might be conducted in the future.

9. Personal Explanation?

I anticipate that some may say that the argument that I have been developing improperly ignores a distinction that can be made between scientific explanation and personal explanation. In discussing explanations of fine-tuning, I asserted that theism has no explanatory advantage over naturalism if either: (a) the fine-tuning is an outcome of objective chance; or (b) the fine-tuning is a feature of the initial state of global causal reality. However, if the fine-tuning is an outcome of objective chance, then, whereas naturalism claims that this is just a result of the outworkings of natural law, theism claims that this is result of God's free creative decision. And, if the fine-tuning is a feature of the initial state of global causal reality, then, whereas naturalism claims that this is brute (though perhaps necessary) feature of the initial state of global causal reality, theism claims that this is a brute (though perhaps necessary) feature of the (initial state of the) mind of God. Might someone reasonably object that objective chances are more theoretically virtuous if attributed to free creative decisions than if attributed to the outworkings of natural law? Might someone reasonably object that brute (though perhaps necessary) features are more theoretically virtuous if attributed to the mind of God than if attributed to the initial state of the natural world?

I don't think so. If the thought is that personal explanations—explanations in terms of beliefs, desires, intentions, and the like—come at no theoretical cost, then the thought is evidently forlorn. And if the thought is that personal explanations—explanations in terms of beliefs, desires, intentions, and the like—comes as a lower theoretical cost than explanations in terms of the outworkings of natural law, then, again, that thought is surely forlorn. A contingent desire to bring about a fine-tuned natural reality incurs no less theoretical cost than a contingent fine-tuned natural reality; a necessary desire to bring about a fine-tuned natural reality incurs no less theoretical cost than a necessary fine-tuned natural reality; an objectively chancy causing of the fine-tuning of natural reality by a free creative decision incurs no less theoretical cost than an objectively chancy causing of the fine-tuning of natural reality by the outworking of natural law. No matter which hypothesis we entertain about the fine-tuning of natural reality, there just is no theoretical advantage that accrues to the “personal” version of that hypothesis.

Of course, in our ordinary practice of giving personal explanations—i.e. our ordinary practice of explaining the behaviour of human agents in terms of their beliefs, desires, intentions, and the like—we typically don't need to worry about the theoretical costs involved in the postulation of the relevant beliefs, desires, intentions, and so forth. I can have great confidence in my attribution of beliefs, desires, intention, and the like to human agents, without having much at all by way of knowledge of the causal aetiology of those beliefs, desires, intentions, and so forth, in those agents. Nonetheless, when I causally explain the behaviour of those agents in terms of those beliefs, desires, intentions, and the like, I do *not* suppose that the relevant beliefs, desires, intentions and so forth have no causes. The theoretical costs involved in the giving of personal explanations may typically escape our notice when we give those explanations; but this is not good grounds for supposing that there are no such costs.

10. *Metaphysical* Naturalism?

I anticipate that some may say that the argument that I have been developing involves an inadequate or improper conception of naturalism. The *metaphysical* naturalism that I have been discussing will surely be anathema to many contemporary naturalists:

methodological naturalists, scientific naturalists, and the like. Whatever the merits of the view that I have been defending, isn't it simply inconsistent with mainstream contemporary naturalistic philosophies?

Not at all! Of course, I grant that I have been discussing theories of modality, causality, ultimate explanation, and so forth, that are regarded as anathema by some contemporary naturalists. But there is nothing in the argument that I have developed that required *endorsement* of any of those theories. If those theories of modality, causality, ultimate explanation, and so forth, are properly eliminated on other grounds, then, pretty clearly, the standard metaphysical arguments for theism—cosmological arguments, fine-tuning teleological arguments, and the like—are properly eliminated as well (since those arguments cannot even be framed without the support of those theories). But even methodological naturalists, scientific naturalists, and the like, who are quite certain that these theories of modality, causality, ultimate explanations and the like, are properly eliminated on other grounds can still ask: *What if we are wrong about that?*

So, of course, the point of the argument that I have been developing is not to argue for the absolute merits of the metaphysical naturalism under discussion. Rather, the point of the argument that I have been developing is to argue for the absolute lack of merit of standard metaphysical arguments for theism. If you want to buy into the controversial theories of modality, causality, ultimate explanation, and so forth, that are the stock in trade of the standard metaphysical arguments for theism, then, it seems to me, there is a pretty compelling case to be made that the arguments that you can erect on those foundations provide more support for the metaphysical naturalism outlined in this paper than they do for theism (and, at the very least, it is surely plain that those arguments provide no less support for the metaphysical naturalism outlined in this paper than they do for theism).

11. Concluding Remarks

I don't claim to have original answers to offer to questions about 'ultimate explanation'. I suppose that, at some level, there are only three competing views: (i) nothing is impossible; (ii) nothing is possible (but not actual); and (iii) nothing is actual. On my favourite theory of modality, (i) turns out to be correct: it is not possible for there to be nothing. If pushed to make a choice, this is the view that I favour. However, I take it that (ii) remains a serious contender: there are alternative theories of modality on which it is possible for there to be nothing, even though it is not actually the case that there is nothing. (iii) is, I think, definitely ruled out. (If you are an ontological nihilist, and if you insist that there is nothing but first-order quantification, then you can insist on the literal truth of the claim that there is nothing. However, it is clear that the informal statement of (i)-(iii) is premised on the assumption that we are not restricted to first-order quantification: in the relevant sense, even ontological nihilists do not accept that there is nothing.)

It seems to me that metaphysical naturalists do not need to suppose that they have answers to 'ultimate questions' in order to justify the claim that consideration of those 'ultimate questions' gives them grounds to favour metaphysical naturalism over theism. It seems to me that metaphysical naturalists can properly be utterly agnostic about the shape of global causal reality—perhaps regress, perhaps loop, perhaps

necessary origin, perhaps contingent origin, perhaps something else ...—while nonetheless being confident that considerations about the shape of global causal reality favour naturalism over theism. Of course, there is a sense in which this kind of “agnostic” metaphysical naturalism is more complicated than competing views that settle on a definitive answer; but the complexity in question is not one that speaks to the greater theoretical virtues of those competitors (whether theistic or naturalistic). There is no good methodological precept that militates against reasonable withholding of judgment; yet, as things stand, it is very hard to see any good reasons to favour any particular class of answers to ‘ultimate questions’ (regress, or loop, or necessary origin, or contingent origin, or something else again...).