

God by Design?

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“Natural” Theology and the Design Argument

The term ‘natural theology’ has a wider and a narrower use. The wider one says, essentially, that we can arrive at some measure of understanding of the nature and existence of god on the basis of premises none of which appeal to mysticism, revelation, or other sources of belief lying outside the area of “natural reason”, which we may take to include logic, mathematics, the sciences, and common sense observation insofar as consistent with scientific method. This very wide use, however, would make all the familiar arguments for the existence of god into arguments from natural theology.

The narrower usage would include only those accounts of god appealing to premises that are empirical and contingent: given that the world is like this, rather than like that (as it logically could have been), we have reason to suppose it was created by a superpowerful minded being, rather than having got to be the way it is as the result of purely natural processes. This narrower view would comprehend what were classically known as Arguments from Design, and would exclude the Ontological argument. It requires a further decision whether to include the Cosmological argument since it is unclear what to say about the empirical status of arguments whose bare premise is that there is a material universe, though any old material universe would do for the purpose, so long as it was laid out in time. But on the whole, I think, we should classify this as not really an argument in “natural theology” in the narrower sense. That term I will reserve for arguments to the effect that the world has some features which can only be accounted for, or at least are best accounted for, on the hypothesis of a minded supercreator. Even so, there are certain features of cosmological arguments, especially in recent treatments, that will be of interest for my further discussion, even though my main concern is the so-called Argument from Design. So I start with a note about that.

The Cosmological Argument

According to the Cosmological argument, the material world, in general, is temporal, in which

respect it is a series of events, going back in time. How far, then? On the one hand, says the argument, nothing comes from nothing: events have beginnings, and in order to have them, something or other must bring it about that they do so begin. For all theoretically relevant purposes this amounts to the claim that every event has a cause (in the usual sense of the term, which is the Aristotelian “efficient” type, as distinct from “formal”, “final”, and “material” causes.) The argument then proceeds to invoke a premise to the effect that trains of causes cannot go on forever, and so it concludes that there must have been a “first” cause.

At this point, things get murky. On the face of it, the argument’s two premises are mutually inconsistent. If events are all laid out in time - which, by hypothesis in this argument, they are - and if indeed all events have causes, in that usual sense of the term ‘cause’ (what Aristotelians call “efficient” causes), then there cannot be a “first” cause, since the event in which that cause consisted would, contrary to that premise, have no cause.

If, on the other hand, the argument is that the whole material universe must ultimately have been caused by something immaterial, then the argument is no longer “natural” in the usual sense of the term. The idea that there might be “immaterial causes” of this sort is distinctly odd. Our experience of psychological causation, as we may call it, does not include creating material entities out of nothing. (It does, to be sure, include creating ideas out of what seems, from the point of view of the thinker, to be nothing - but then, we are all thoroughly familiar with the fact that ideas aren’t things, fantasies not accomplished real situations, and so on - and also, that all the ideas we have occur in our heads, which are material things). But in any case, even if we were willing to allow such a strange premise into the argument, the problem it was allegedly supposed to solve seems to recur. For after all, minded entities operate in time too, and if so, one can obviously ask the question when that entity - say, the god whose existence the argument is an attempt to establish - is supposed to have “come from.” Proponents of the argument seem to think that we aren’t allowed to ask this question; somehow the immortality of the divine mind is thought to be a premise delivered on a silver platter. But if the argument was supposed to appeal only to “natural” premises, the silver platter looks tarnished.

If we are allowed to ask when the divine mind came into being, we will, of course, be precise where we began. Either there are things that have no beginning, in which case it is unclear why we

are not allowed to suppose that other things besides God are like that; or if the divine mind had a beginning too, then we are, to put it mildly, no clearer what brought it about than what brought the material world about. Claims that there can't be a first event do not work any better for mental events than for physical ones.

Proponents of cosmological arguments, at this point, turn to metaphysics. Some try to argue that the idea of an infinite series of events going back into the past (or, of course, forward into the future) is logically impossible, on the ground that there cannot be "actual infinities." That bit of obscurantism can be rejected, however; every number in an infinite series can be finite, as we know. Dr. Craig, for example, argues¹ that time itself began, as a result of the Big Bang - not just the physical universe in time - and that when it did it was due to the action of a hitherto timeless god who suddenly shifts gears into timeliness at that point. Those who are ready to accept this as an "explanation" of anything are not, I suggest, seriously doing science any more. We cannot help ourselves to the language of causation in the absence of the applicability of temporal notions, and so the thesis that time "began" at time t, as the result of an action of a deity, simply doesn't make sense. No explanation at all is surely preferable to such proposals.

Arguments from Design: Telling creation from noncreation

We turn now to the project of arguing for, or at least rationalizing belief in, the existence of a minded creator as having made the world we live in, on the basis of the observed characteristics of that world. It is the main purpose of this essay to cast doubt on the sense of that whole project.

The first thing we must do in order to discuss the matter at all, of course, is to contrast the hypothesis of a creator with others supposedly competing with it. In thinking about this, we at once encounter two problems. Firstly, the things we usually call "creation" are themselves natural processes, and this makes it a little difficult to get the intended contrast off the ground. Mary baking pies is a creative process, of a minor but nice sort; we don't think any magic is involved there. The pie grows by purely natural processes, unless we want to claim that Mary's thoughts as she proceeds are themselves "non"-natural. Now some may want to make that claim, but it is quite unclear what the status of the claim is, and in any case the model is quite inappropriate to the hypothesis of a minded supercreator, which would seem to have to be a pure mind, not a mind in a

finite material body - which, of course, is our situation.

The second problem is more fundamental. A supercreator, clearly, could create any sort of universe. This is presumably true by definition, at least if we use the familiar characterization of “omnipotence” - the power, or ability, to do anything whatever, anything with a consistent description. If that is so, however, then we’re going to need some further premises if we wish to insist that this universe must, uniquely or at least probably, be the work of a creator rather than having come about by natural processes. For the religious person is surely at liberty to believe, and indeed presumably must believe, that the deity also made those very processes.

If there are Laws of Nature, as exemplified by Newton’s and some others, then the religious person will presumably insist that god, as it were, legislated those laws. Indeed, that is what St. Thomas Aquinas, for example, appears to have thought.² But it is our understanding - such as it is, but fairly extensive - of natural processes, that is, our more or less intuitive grip on the “laws of nature” such as gravitation, inertial mechanics, and biological processes, that form the background upon which we distinguish “natural” from other sorts of causes. If creation of the laws of nature themselves is in question, there is no background to fall back on, nothing to give any sense to a distinction between the natural and the supernatural. This complication is so fundamental that it would leave us hardly knowing what to say about any of these questions, and I will continue to suppose, contrary to what we are really entitled to suppose, that we could have a workable distinction between the natural and the supposedly not natural here.

Design arguments need to come down fairly heavily on the contrast between natural processes, taken independently of any idea that they are themselves due to creation anyway, and the “others”; they then argue that something about our world invites or even requires the hypothesis of creation. In view of the previous point, we will appeal to our own understanding of creation, which is the invention of things to serve human purposes. Paley’s “watch” analogy will serve well to exemplify design arguments - both in what they originally claimed, and in the problem involved in claiming it. The argument was that if we came upon a gold watch lying on the beach in what we supposed was a deserted island, this would give us good reason to infer that there was a human somewhere or other who invented or manufactured that watch. Watches, we reason, don’t grow on trees or spring spontaneously from the sand. Given their intricacy and their evident incorporation o

purpose, we take it that the watch was “created” rather than having come about by other processes.

Very well, we must ask, where do we go from there? The answer is that we are looking at arguments from design as proposing an account of the origin of the universe, insofar as we are acquainted with it. The argument in Paley’s case, is that the universe is rather like a watch, and so in like manner invites or perhaps requires the hypothesis of a creator. But the answer to the answer is that the world as we know it is not very much like a watch (even though you can use it to tell time! rather than supposing that the planetary motions and the rest are all parts of some big mechanism with cosmic purpose, we suppose that planets do what they do because they have no purpose at all but are subject to familiar mindless physical forces, especially gravitational ones. If a thing weighs as much as a planet and gets flung out from some passing star, it just will end up going around that star, and purpose has nothing to do with it. Indeed, such motions seem to be paradigmatically, if cosmically, mechanical. And as to watches, we can see that and why they are produced by humans. Therein, as we will see, lies a large problem for Natural Theology: the world has no evident purpose and it is impossible to ascribe such a purpose to a supposed creator on the basis of anything except wishful thinking on our part. Would the deity, after all, need to tell time? Is this why he invented the universe? Presumably not. In the absence of any possible use for a watch, the hypothesis that humans must have invented them is not plausible. In the absence of any motive for creating a universe, we likewise have no explanation of the universe in the hypothesis of a creator.

Clarifying ‘design’

Arguments “from design” go from design in one sense of that term to design in another. The conclusion of a design argument uses what we may call the “output” sense of the expression. In this sense, to have design is to have been designed, by somebody for some reason. But the design argument attempts to support that conclusion from premises of a different sort, using what I shall call the “input” sense. In this sense, we must confine ourselves to utilizing observable features that look as if or suggest that they were the product of design in the other sense. Thus regularity, or aesthetically interesting structure, or the possession of features peculiarly suited to human purposes are all properties available at this “input” level.

The question is, when do we have evidence for divine creation in this respect? To answer this

we must attend to a distinction in the brief list just given: between (a) design in the sense of regular pattern, as with checkerboards and honeycombs, and (b) design in the sense of looking suitable for certain purposes, plausibly ascribed to proposed creators of those items.

Consider sense (b) first. Paley's watch shows some of the former and a lot of the latter. When we know how the thing works, we know it can be used to tell time, and we know that people want to know what time it is, for various reasons we also well understand. Primitive people encountering Paley's watch might well have regarded it as just some kind of oddity, having no idea what it was for, perhaps not even caring about keeping track of time to the level of precision we are used to and so never coming close to entertaining an idea that this item enables us to do so. Knowing about people independently does wonders for the plausibility of the argument. Of course, it would also make the argument from (a) to (b) virtually redundant: we know so much about time telling, and watches, and people living in our sort of circumstances, that we scarcely recognize it as any sort of inference at all when we identify a thing on the beach that looks exactly like a watch as, indeed, a watch, that is, draw an inference from its observable features to the conclusion that it is, indeed, a watch, made by some humans and used by others to tell time.

But the other sense, involving regular patterns, is another matter, for there is no necessary connection between it and design in the "designed" sense - the sense, that is, in which design implies designer. Crystal lattices, snowflakes, and many other natural phenomena show regular pattern without having come from designers. Why they end up looking as they do is a matter of mechanics: their appearances are byproducts of the natural and mindless processes by which they come to be.

So the question now arises: Which do we discern in the universe - 'design' in the sense (b) that implies a designer? Or merely design in sense (a), of pattern or regularity? Kant was impressed by the starry heavens above, though frankly they're pretty much of a mess, apart from being impressive by virtue of their vastness, and rather pretty because of the twinkle effect (which we now know, alas, to be due merely to our atmosphere, especially if it benefits from a bit of pollution, rather than to anything in the heavenly bodies themselves.) In truth, the nebulae etc. look to be what they are: pretty random. Indeed, one of the merits of (and stimuli for) the "Big Bang" theory is that the galaxies etc. look as though they were just flung out, rather than neatly hung in their appropriate slots in the firmament. In any case, such regularity as they display is certainly

accountable for without recourse to design. So this classic argument, at least as applied to the astronomical universe, just doesn't work. And the biological situation, attending for example to the orderliness of the parts and interrelations among the parts of the human and other animal bodies, fares, if anything, even worse, as will be seen below.

All of the foregoing reflections lean, of course, on the distinction of natural from supernatural processes - and that, unfortunately, is not clearly available at the level at which it would be really needed. For it is our understanding - such as it is, to be sure, yet fairly extensive - of natural processes, our more or less intuitive grip on the "laws of nature" such as gravitation, inertial mechanics, and biological processes, that form the background upon which we distinguish "natural" from other sorts of causes. If creation of the laws of nature themselves is possible, however - if their content is simply up for grabs by supercreators - then there is no background to fall back on, nothing to give any sense to a distinction between the natural and the supernatural. Certainly we must exit from anything that can reasonably be termed "natural" theology at this point.

The Argument from Design: Mechanisms

All of this, however, has to be set against the backdrop of the two most spectacular deficiencies of Natural Theology: lack of explanatory detail about the mechanism of creation, and lack of evident purpose. Both, I shall argue, are essential to the plausibility of arguments from design to designers. Let's look at each in turn. Here we'll consider the first - the question, "Well, just how is god supposed to have done this?"

It ought to be regarded as a major embarrassment of natural theology that the very idea of something like a universe's being "created" by some minded being is sufficiently mind-boggling that any attempt to provide a detailed account of how it might be done is bound to look silly, or mythical, or a vaguely anthropomorphized version of some familiar physical process. Creation stories abound in human societies, as we know. Accounts ascribe the creation to various mythical beings, chief gods among a sizable polytheistic committee, giant tortoises, supermom hens, and, on is tempted to say, god-knows-what. The Judeo-Christian account does no better, and perhaps does a bit worse, in proposing a "six-day" process of creation.³

It is plainly no surprise that details about just how all this was supposed to happen are totally lacking when they are not, as I say, silly or simply poetic. For the fundamental idea is that some infinitely powerful mind simply willed it to be thus, and, as they say, Lo!, it was so! If we aren't ready to accept that as an explanatory description - as we should not be, since it plainly doesn't explain anything, as distinct from merely asserting that it was in fact done - then where do we go from there? On all accounts, we at this point meet up with mystery. "How are we supposed to know the ways of the infinite and almighty god?", it is asked - as if that put-down made a decent substitute for an answer. But of course it doesn't. If we are serious about "natural theology," we ought to be ready to supply the sort of content in our explication of hypotheses that, like the standard ones in science, actually carry the brunt of explanation. Why does water boil when heated? The scientific story supplies an analysis of matter in its liquid state, the effects of atmospheric pressure and heat, and so on until we see, in impressive detail, just how the thing works. Calling an explanation 'scientific' is, indeed, in considerable part earned precisely by its ability to provide such detail.

Natural theology proposes the hypothesis of creation as an explanation of how things got to be as they are. But in the absence of any remotely credible account of mechanism, in the broadest sense, it is an "explanation" in name only - a wave of the hand, or perhaps we should say a sweeping under the carpet, when scientific push comes to explanatory shove.

It has been part of the etiquette of natural theology that questions like this aren't given any attention - not, as we might say, the time of day. Do its proponents need to do this? That is really the only serious question, for if they do, then arguments from design are hopeless from the start. But if they don't, why don't they? If the answer is that such things are beyond human understanding, then the reply is simple: Didn't you say that you were going to produce an argument appealing only to natural reason and empirically intelligible premises?

5. Design and cosmic Purpose

When is it plausible to invoke design as an explanation? Our information, and our analogies, come from animal and, especially, human behavior. We can see that watches, say, are things of a sort that lie within the capability of humans, given lots of ingenious work and a certain amount of

luck. But it is not the elaborateness of structure or the intricacy of its mechanism that, by themselves, license an inference to human purpose. Rather, it is that we know humans well enough to ascribe purposes to them of a kind that make sense of the production of watches, shoes, automobiles, and the rest of it. But suppose we had no source of such information? If we had no reason to suppose that the animal we want to ascribe watch-making to would have the slightest interest or need for keeping track of time, we would have no reason to ascribe watch-making to it either.

For that matter, there is a tradition to the effect that God is timeless. If so, one supposes that in His view, time is too crass for creators to muck around with. Why, then, produce a universe so utterly different from the ideal situation? Why would he regard it as any credit to himself to have done so?¹

To be sure, people do odd things, for odd reasons. Take art, for example: people have devoted lives to the production of paintings, symphonies, and the like, even though these notoriously have no “useful purpose” - apart from the supremely useful purpose of providing interesting and enjoyable visual and auditory experience to organisms like us. These interesting activities, familiar enough to us all, might be thought to provide some grist for the budding theologian’s mill. If humans are rather unpredictable, their behavior often puzzling, can’t that be used to fill out a theological hypothesis to the effect that the reason why the universe is such an odd place is that it was created by such an odd creator? But the difficulty is that with people, we have independent evidence of their existence, and can observe their behavior. That’s how we know that they’re pretty odd organisms in so many ways. When we explain some phenomenon by the hypothesis that some human did it for reasons unknown, we are really invoking a background of solid information: ‘reasons unknown’ in the case of humans, is a fairly familiar category, and actually explains quite a lot, in its modest way. Of course in one sense we do not exactly have an “explanation” when we invoke reasons unknown. But in another, we do: a human did it, rather than some other sort of process independent of human contrivance, and we know humans, notably ourselves, well enough to understand that they might do things like that. And that’s something, even if it doesn’t also tell us why the human in question did it, or at least not at a level of detail that would make it altogether clear.

¹ My thanks to Neil Manson for bringing up this point.

What we do have, however, is recourse to chance or to submicroscopic goings-on in the brain or nervous systems, or both. We can understand how some exotic process in our material bodies could affect our motivations, or our deviations from established courses of action. But those are not available in the case of gods, obviously. More generally, we have, again by hypothesis, no independent mode of verification or source of information. The inference to gods is pure, in the sense that there is no independent way of observing the entity being invoked, nor of any processes by which his motives or ways of doing things may be understood. Stories in sacred books are, especially, of no avail: their authors knew a lot less than we do, for one thing, and their claim to be in a good position to know the sort of thing they ascribe to their god is no more credible than the claim itself.

In the case of modern science, exotic entities are familiarly invoked. But exotic though they are, they are pinned down in a network of empirically supported theory. There is no reasonable doubt of the existence of molecules, atoms, or even electrons, and the still more submicroscopic entities of modern physics, while some are still conjectural, fit in fairly well understood ways into the network of theory and observation. Moreover, it is often possible to make predictions on the basis of these hypotheses, and those predictions are confirmed or disconfirmed; either way, they count in favor of or against the hypotheses in question. In order for natural theology to be an eligible “discipline,” its hypothesis would have to be in similarly decent shape. But is it?

The hypothesis is that the world as a whole was, somehow, created by a minded supercreator. The idea, improving on the supposedly more primitive religious notions of pygmies, Yucatan Indians, and many others, is that instead of some mythical man-like being, we have an individual of unlimited powers. Being unlimited, no wonder he can make this entire universe!

But in order for the explanation to have any content, we need to know something that is not often addressed: why is this being supposed to have done this? Consider that a being of this type already knows everything there is to know, so he can hardly have created the world to satisfy his curiosity. And since he has no body, no senses, and no needs in any usual sense of the word, where are we to get the psychological premises we would require in order to make an inference to his creative activity plausible? (Note my natural use of the pronoun ‘his’ in the preceding sentence. Feminists may object that it is a sexist characterization of the deity, and I cheerfully accept the

charge. Were we to try to correct this by saying ‘she’, a countercharge would be equally in order. But of course both would be wrong, and for the same reason: having no body, and no reproductive system, and all of that familiar stuff that immerses you and me in the world we live in, there is no reason to attribute to a supercreator any properties of the kind. Unfortunately, that serves to point us in the direction of the basic problem: the situation is quite a lot worse than that, for there is in turn no reason to attribute any motives of any kind, just as such, to a being so described.

Below we shall consider the hypothesis that the creator has one other essential attribute: morally good motives. But even that attribution is in for heavy weather when purely spiritual supercreators are in question, for it is hard to see why gods should have any “sense of obligation” whatsoever. Who’s to complain, and why should it listen to any complaints? Indeed, since god is alleged to have created people along with the rest of the world, the whole game would seem to be quite thoroughly rigged anyway.

But first, bracketing that discussion for the moment, consider such ideas as that god would at any rate be supremely “rational” - at least consistent, say. But unfortunately, this is of no help, when carefully considered. Consistency is primarily defined with reference to propositions, and we may agree that you won’t catch a deity believing inconsistent pairs of propositions; and of course we must not describe the deity in ways that are mutually incompatible (which is not a virtue of the deity but a needed virtue in human accounts of the deity.) But why won’t we catch him, contra Einstein, playing dice, for example? People, after all, sometimes do, so it’s not as if it can’t be done. And if the point is that god would always know how the throws come out, fine: he would always know how everything comes out, so why bother to do any of them? Indeed, what was supposed to have been the point of creating universes in the first place? What’s he going to do with the darned thing, anyway? We are, obviously, at a loss for reasonable answers to any such questions.

But since we are, we are also unable to get anywhere at all with the project of natural theology. No matter what the universe is like, it could have been created by a supercreator who, for some utterly unknowable reason, just wanted to create one of those, precisely the way it is. There is, for instance, no reason to suppose that such a being would necessarily like a nice orderly universe (rather than the cluttered, messy one we actually have). That he would “prefer” a “consistent” one is obvious, but only because it is a misunderstanding to suppose that consistency is a property of

universes. It is, rather, a property of what purport to be descriptions of them, and of course if the description is inconsistent then it does not describe a possible universe and that's that. But that's consistent with universes being just incredibly messy, or incredibly simple and boring, or whatever. This being so, there is obviously no sense in saying, "Well, it's this way rather than that way, and so, you see, that makes it more likely that it was created by a deity." Alas, no such specification of "way" makes it more likely. Not only doesn't it make it "necessary", as overly enthusiastic formulations of the Argument from Design might have it, but it makes it utterly arbitrary - just like any other hypothesis in this particular field.

Three Examples

In light of this, consider three recent ideas - the major impetus, indeed, behind the conference which was the occasion for writing this paper.⁴ They are, respectively, the "Big Bang" hypothesis in physics, singularities in evolutionary biology, and the "fine tuning" thesis. To this we can add one very old idea: appeals to miracles. Each deserves a fairly brief comment - that is, given the level of interest and attention they've aroused, they deserve comment, and given the actual merits of the proposals, the comment need hardly be long.

1. The Big Bang. According to recent science, it begins to look as though the whole known universe as we know it emerged from a quite fantastic explosion some fifteen billion years ago, give or take a few billion. Some are seizing on this theory to proclaim that this, indeed, was that very First Creation that the deity indulged in. Mind you, the story is a bit different from what we read in the Book of Genesis, where it took god - for some reason - six days to create various categories of things, animals, and people. But what's a few billion years among friends? The real problem with the Big Bang idea as relating to theology is that there simply isn't any reason to see why a deity would do things that way rather than any other way. Indeed, it is not clear what a "way" is for a being who is supposed to be able to will things into existence, effortlessly. Bertrand Russell used to point out that, logically, the entire world could have come into existence five minutes ago, complete with all the features that make us think it has been around a lot longer than that. Mightn't the deity have done it that way instead? Assuredly he might. We need hardly add that there is no known reason why the Big Bang, if it occurred, should not have been the umpteenth in an unending and

unbeginning series of Big Bangs. Why not? Those who think they can give a reasonable answer to that question have not, I think, considered the nature of their hypothesis with sufficient care. Being unlimited is a major hazard in this business.

2. There has been, especially on the North American side of the Atlantic, considerable public kerfuffle on the supposed issue of “creationism” versus “Darwinism” in biological theory. According to Darwinians, the various species we have are here because they were, in the circumstances, equipped to survive. Over millions of years, such factors as mutation, changing gene frequencies, random splicing, and other matters too subtle for ordinary folk like the writer (and his audience) to have much of a grip on, but clearly relevant for the purpose of explaining these things bring about alterations in organisms, and some of these result in extinction while others result in organisms which survive long enough to reproduce in their turn. Where we are now is simply the latest in this prolonged and increasingly elaborate show. The supposedly alternative view is that the deity created the different species - all at once, contra the evidence? Complete with leftover fossils make evil scientists think somebody else did it? Whatever. But the basic point remains clear: since the deity could have done it either way, what’s to argue about? Believers can believe that god starts or continues to support, an evolutionary process just as well as any other way of doing such things. And of course the epistemic situation remains the same: there is no credible reason why he would have done it one way, or another, or for that matter - worse yet - at all. As for the idea that there are mechanisms in some or all of our species that “cannot” arise by “natural processes,” it is a bit late in the game to entertain notions like that, is it not? At the end of the 20th century, when we have insight into computers, atomic fission, voice recognition, and so on, it takes a good deal more than rashness to insist that there are structures that “cannot be explained” on the basis of recognizable, lawlike processes, especially when we include chaos theory.⁵

3. The “Fine tuning” thesis has it that, e.g., the human species requires a combination of conditions whose antecedent probability (however you compute that!) is astronomically small, making it a cosmic accident that there are people. From this it is inferred that the existence of people must be due to divine intervention, divine fine tuning, after all. This is perhaps the most remarkable of all of these arguments, for it evidently implies that the deity prefers vastly improbable ways of bringing about intended results (the existence of people) to the much more plausible ones that

presumably he could also have done at the drop of the divine hat. Why on earth would he behave like that?

. And that's just the trouble. The lack of answers to this question is matched by the lack of good answers to any other question of this general type you can ask. Bodiless minded supercreators are a category that is way, way out of control. To all questions, there is but one general answer: "who are we to understand the mysterious ways of the deity?" A good point, in its way - but one that utterly undermines the project of design arguments, since we no longer know what is to count as "evidence" for or against any such hypothesis.

4. A Note on Miracles. It was once popular to suppose that the various stories in the Bible - but not, of course, the various comparable stories in innumerable others of the world's religions - constitute prima facie evidence for the existence of god. The intermediate premise, of course, is that the stories are true, and analysts from David Hume onward have rightly pointed out that the stories in question are short on credibility, to put it mildly. But it seems to me that another question must be asked about them: namely, why on earth (or in heaven) would the deity engage in such shenanigans, anyway? Here, we are told, we have a deity who goes way out of his way to subject everything in nature to laws; then he proposes to induce people to believe in his existence (again, for reasons unknown) by speaking to them out of burning bushes, or curing lepers on the spot, or what-have-you. Well, what are the more rationalistically minded among his flock supposed to make of this odd stuff? Why miracles on Monday but not on Tuesday, to this lot of simple fisherman or shepherds rather than that? The god this would induce people to believe in must, evidently, be a remarkably arbitrary one - contrary to initial billing. Again, the theological story tends to unravel before our eyes. In the end, of course, the only conclusion about this that commends itself to reason is that the stories were invented or embroidered by believers, and in particular by believers not inclined to ask too many embarrassing questions.

Thus far, I have complained about the project of shoring up natural theology by arguments from design on two counts: first, that the hypothesis is devoid, at the crucial points, of explanatory power because mysteries must always be invoked when it comes to embarrassing details such as how he did it; and second, that the hypothesis is of such a sort as to deprive us of an essential premise: namely, a clear insight into the motivations of the supposed creator, beginning with the question of why he would have any "motives" at all. But it behooves us to consider the remarkably

popular thesis that the deity is not only superpowerful but, somehow, good.

The Goodness of God and the Badness of Theological Explanations

People are moved to worship the divinity not only because of its alleged omnipotence, but also because of its moral perfection. We must admit that a tendency to fall on one's knees before potentates good, bad, and indifferent has been a prominent feature on the human scene, but the more thoughtful among believers will readily agree that the worshipworthiness of a divinity is crucially a function of his moral character and not just his impressive assets for big-time coercion.

Bringing morality into the picture complicates matters for the would-be natural theologian. On the one hand, it adds - or at least, should add - real content to the story, for the hypothesis that the world exists because of the good taste of a supercreator certainly suggests that we are no longer left wide open in our choice of worlds that might have been created by it. Good worlds, one assumes, are a subset and perhaps a very small subset of all the logically possible worlds: Leibniz, indeed, seems only consistent in affirming that god would, of course, create the "best" of all possible worlds.

Well - best how? If the world attests to the goodness of god, we need relevant criteria of assessment. The claim that the world was created by a morally good being should, one hopes, be quite different from the claim that it was created by somebody who was really good at creating worlds, for instance; or good at sowing confusion, or playing dice, or whatever. Moral goodness is a narrow notion on any tolerable account.

We should attend to one important point about this at the beginning: there are some, still, who affect to believe that goodness is whatever the creator wants to say it is - no controls! If that were so of course, the subject would be otiose, and any appeal to argument pointless. If whatever the deity wants is ipso facto good, then we can't appeal from the goodness of the world to the conclusion that it must have been made by a god, since the claim amounts to no more than that it is the way he made it, which could be just any way and therefore provides no information whatever that could contribute credibility to an argument of the type.

But these same people rarely claim that it is actually a good thing to stuff several million Jews in ovens or exterminate tens of millions of people in Siberian labor camps or inflict cancer on a few

hundred million randomly selected humans, or unleash e coli on us unsuspecting humans. Not, that is, a good thing in itself.

The idea that god could somehow invent morality while he was at it is a nonsense claim, taken at face value. When people believe that god is good, they attribute some nonarbitrary properties to the personage in question. Most especially, given the requirement that god is to be maximally good and not just ordinarily or somewhat good, they presumably mean to claim that god is ultra-benevolent as well as ultra-fair, and other things that we expect of persons claimed to be outstanding in moral respects.

Notoriously, this is not going to look too plausible in the face of the world we actually have, in which all of the preceding examples and countless more are standard fare. The serious proponent of ultra-moral god needs, then, to do something about this. One thing, of course, is to try to blame it all on us. Humans didn't cause cancer, TB, typhus, malaria, and the rest of it, to be sure, but they do cause wars, great and small, and maybe the blame can be fobbed off on us and diverted from the divinity via the hypothesis that we are being punished, or our souls tried, or whatever. Such maneuvers do have a problem, though: why did this supposedly super-good being who is also super-powerful let all these bullies get away with it? The standard reply is the "free will defense", but it is an odd one. Here comes the assassin with his dagger or his .45. If we manage to get him first, we will certainly short-circuit his free will, which in fact is just what, at this point, we certainly want to, ought to, and surely have a right to be doing, considering what the miscreant is bent on doing to us. The fact that the murderer was acting "of his own free will" isn't an excuse, either for him or for whoever is supposed to be defending us from him, and it certainly isn't the remotest shadow of a reason why the victims of his ferocity should put up with it - yet this shabby story is supposed to be good enough to exculpate the creator from what, on any usual view of the matter, must be accounted horrendous crimes.

Now, the wily theologian will invoke assorted other hypotheses to square the facts with the apparent aspirations of the being whose existence they hope to infer from the facts about the world we live in. But all of them amount to the same thing: there is no doubt some justification for all this somewhere down the pike, but it is beyond our understanding, or words to that effect. And so we are back where we were at the end of the preceding section: with a "hypothesis" that can be

”squared” with any facts you like. And that has the usual result - that nothing whatever can be inferred from it, putting it beyond refutation and, consequently, beyond the reach of science. And, I remind the reader of our project here, putting us beyond the pale of good arguments with plausible premises and valid reasoning.

According to the ancient astronomer Ptolemy, the heavenly bodies must have circular orbits. On the face of it, this implies a lot of predictions which, alas, don’t accord with the facts as reported by Lydian shepherds and other worthies. Never you mind, says Ptolemy: for they don’t just go in plain ordinary big circles, but they also go in little circles - epicycles - that operate in the big orbits thus accounting for deviations from the big circles. Moreover, you get to add littler circles on the epicycles too. Indeed, I am told by persons with much more mathematical prowess than I that if you add enough epicycles, you can account for any sort of orbit you like, including of course the elliptical ones that Newtonian physics tells us are what you’d expect of heavenly bodies with gravitational forces acting on them. But then we pay the price: once the number of epicycles is unlimited, you no longer have a hypothesis with predictive power, but rather one that can be squared, *ex post*, with the facts, whatever they may be.

Exactly the same is true of natural theology with morality added on. You may add what you like to your characterization of the deity - noting the floridity of religious stories around the world and back in time in assorted cultures, not to mention contemporary variants such as feminist theology, gay theology, and so on, it would seem that the sky is the limit on this; so it is clear enough that adding what you like is pretty much the name of the game, what with several thousand distinct religions flourishing in America alone at present and no doubt many more to come. But the more you add, the more your hypothesis looks as though it predicts, and therefore the more amenable to refutation at the hands of the facts. No religion can afford to let that happen, of course and they don’t. All you need is that old reliable, supreme epicyclical gambit: that “the Lord works in mysterious ways his wonders to perform,” and you needn’t worry about mere facts.

But of course you do need to worry about “mere facts” if you’re a scientist, and that is what the natural theologian purports to be. The need for the sort of maneuvers that are commonplace in all religions is clear enough, but resorting to them takes the hypothesis out of the realm of science. And that is my point. People have religious beliefs for emotional reasons, not as genuine

explanatory hypotheses, and once you adopt a “hypothesis” because you like the idea rather than because it is genuinely helpful in explaining phenomena, you aren’t doing science any more. On the whole, then, Natural Theology is not a genuine enterprise. Its apparent insight, its air of explaining things, is all smoke and no genuine content; the talk of “evidence” is really beside the point - window-dressing rather than the real thing.

A Note on Religion as a Social Phenomenon

Religions have been extremely popular through the ages, and indeed some want to take that very fact as evidence for its truth - ignoring the complication that there are an enormous number of religions, each specifically distinct from and prima facie incompatible with all the others, so that if the fact of belief in one of them is to be taken as evidence for that religion, it must also count as evidence against all the others. But plausible explanations for the phenomenon of religion itself are not so difficult to come by. They also suggest that religions have the potential to be very serious problems for mankind, as they certainly have been. It can hardly escape notice that religions, especially the western monotheistic ones, are models of absolute despotism: here is the mighty ruler, whose word must therefore be taken as law by all, and put beyond question, even to the point that daring to question at all is often regarded as a deadly sin. What better for aspiring earthly authorities than to present themselves as the indispensable intermediaries between ordinary people and the fearful but ultimately (the emphasis must, of course, be on the “ultimacy” of this aspect) benevolent god who rules over us all? Cushy jobs in the church hierarchy, the respect of one’s “flock”, and of course their malleability before the seats of power, is all grist for the aspiring politician/prelate. A brief excerpt from a recent Internet post, though it was about democracy rather than theology, makes the point well enough:

”Make as many rules as possible. Leave the reasons for them obscure. Enforce them arbitrarily. Accuse your child of breaking rules you have never told him about and carefully explain that ignorance of your rules is not an excuse for breaking them. Keep him anxious that he may be violating commands you haven't yet issued. Instill in him the feeling that rules are utterly irrational. This will prepare him for living under a democratic government.”⁶

Substitute any kind of government, or the governance of churches themselves, as well as of unruly flocks of human sheep by divine absolute monarchs for ‘democratic’ and the point holds even better.

Of course this all leads to problems, not only with internal rebels, who may require the Inquisition or other familiar modes of control, but also with rival tribes and their different but equally inscrutable religions. If the god of people H calls for stern measures against those miscreants, the Ps, and vice versa, we may be sure that the proposal to assemble an academic conference to explore the merits of the rival hypotheses and settle on the best one isn’t going to cut it. Instead, we will have the Thirty Years’ War, the Palestinians versus the Israelis, Shiites vs. Sunnis, and the like, and it will take (has taken) many centuries to see the futility of all that, and the absolute necessity of the principle of freedom of religion (including irreligion) if we are to enjoy peace among men (and women). Religion as a human institution has, indeed, a great deal to answer for. But the point is, its general properties are quite sufficient to account for its considerable prominence on the human scene - though not in a way that attests to its truth, or even its plausibility.

This is not meant to be a general condemnation of religion, though it may sound like it. For one thing, we owe much of the world’s great art to religion, and it may be that we also owe some of the western world’s considerable measure of civility to its influence, though I think that in that respect it is overrated. The point, rather, is that there is no difficulty in understanding why a human group might soon equip itself with the general sort of mythology that religions abound in. In particular, its epistemically refractory features are just what the leaders of an ignorant multitude need: intelligible, testable stories are bound to suffer at the hands of the facts, and simple ones won’t do because they might lead people to think they don’t need human religious leaders to expound them. That the ideology of religion should be subservient to human purposes - some of them, unfortunately, not very nice ones - makes ample sense on reflection. But it also further undermines the suggestion that theology should be regarded as a respectable entry on the ledger books of science, via versions of the argument from design. That it is not.

Notes

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1. I refer to William Craig's address to the Gifford Conference in Aberdeen, Scotland, May 27th, 2000.
2. I am not an Aquinas scholar, and accept correction on all interpretive points from my betters at such things, who are numerous. When I say that Aquinas "believed p," understand this to mean that there is a moderately popular understanding - or misunderstanding , as may be - of his work according to which he believed p.
3. The account, as scholars have noted, includes two slightly differing and specifically incompatible accounts within a few lines of each other (Genesis I:27 and 2:22 et seq) of the creation of Woman.
4. The Gifford Conference on Natural Theology, Aberdeen, Scotland, May 25-28, 2000.
5. I note, recently, a book by the eminent geneticist Richard Dawkins entitled The Blind Watchmaker, with the subtitle, "Why the Evidence of Evolution Reveals a Universe Without Design." (Harlow: Longman Scientific & Technical, 1986.)
6. Source: "Offshore & Privacy Secrets," May 29, 2000. Published by OPC International <http://permanentsourist.com>