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A new cosmological argument

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Abstract. We present a valid deductive cosmological argument for the necessary existence of a powerful and intelligent creator of the actual universe. Whereas traditional cosmological arguments had to employ a strong version of the principle of sufficient reason that held that every fact *actually* has an explanation, our argument can make do with the weak version of Duns Scotus according to which every fact *possibly* has an explanation. As a result, our argument is less vulnerable to the charge of begging the question than are these traditional cosmological arguments.

I

We will give a new cosmological argument for the existence of a being who, although not proved to be the absolutely perfect God of the great medieval theists, also is capable of playing the role in the lives of working theists of a being that is a suitable object of worship, adoration, love, respect, and obedience. Unlike the absolutely perfect God, the God whose necessary existence is established by our argument will not be shown to have *essentially* the divine perfections of omnipotence, omniscience, omnibenevolence, and sovereignty. Furthermore, it is not even shown that He is *contingently* omnipotent and omniscient, just powerful and intelligent enough to be the supernatural designer–creator of the exceedingly complex and wondrous cosmos that in fact confronts us.¹ Hopefully, his benevolence can be taken to be unlimited.

II

THE ARGUMENT

The argument makes use of certain technical notions that need to be defined and explained at the outset. A *possible world* is a maximal, compossible conjunction of abstract propositions. It is maximal in that, for every proposition p , either p is a conjunct in this conjunction or its negation, not- p , is, and it is compossible in that it is conceptually or logically possible that all of the conjuncts be true together. Let us call the maximal, compossible

¹ Richard M. Gale sees this as a desirable feature of our new argument, for he has argued at length in his book, *On The Nature and Existence of God* (Cambridge: Cambridge University Press, 1991), that a necessarily existent God who essentially has all of the divine perfections is an impossible being. His reason is that since such a being exists in every possible world and is at its greatest greatness in every one of them, given that it essentially has all of its omni-properties, in no possible world is there an instance of a purely gratuitous or unjustified evil; but, plainly, it is possible that there be such an evil, thereby engendering a contradiction. Alexander R. Pruss is not convinced by this ontological disproof, because he is inclined to be a modal sceptic about such alleged possibilities.

conjunction that a given possible world is identical with, the ‘Big Conjunctive Fact’ of that world.² The Big Conjunctive Fact for a given world comprises all the propositions that would be true if this world were to be actualized. The actual world comprises all the propositions that are actually true. (If this were intended as an analysis of actuality, it wouldn’t be much help!) A ‘contingent proposition’ (or ‘being’) is one that possibly, in the broadly conceptual or logical sense, is true (or existent) and possibly is false (or nonexistent). A being is a ‘necessary being’ (or has necessary existence) if and only if it is necessary that it exists. Such a being is a self-explaining being in that there is a successful ontological argument for its existence, even if we aren’t up to giving it.

Let us look more closely at a world’s Big Conjunctive Fact. Some of the conjuncts in this fact will be necessary propositions, assuming there are such propositions, as for instance, a proposition that reports the existence of a necessary being, e.g., the number 2, or some necessary relation between abstracta, e.g., that $2 + 2 = 4$. Since these sort of propositions are necessary, they will appear as conjuncts in every world’s Big Conjunctive Fact, and thus they will not serve to individuate or distinguish between worlds. In addition to these necessary propositions, every world’s Big Conjunctive Fact will include as a part of itself a ‘Big Conjunctive Contingent Fact’ comprised of all the contingent propositions that are true in that world. These propositions report the existence or nonexistence of a contingent being, as well as the occurrence or non-occurrence of a contingent event or states of affairs. A Big Conjunctive Contingent Fact perhaps could have a conjunct that reports what some necessary being contingently does, for example that a necessarily existent God freely elects to actualize a certain possible world.

A possible world is uniquely individuated by its Big Conjunctive Contingent Fact. This is because a possible world, according to our definition, is identical with a ‘maximal’, compossible Big Conjunctive Fact. From this it follows that a world’s Big Conjunctive Contingent Fact will be maximal with respect to contingent propositions. Thus, for every contingent proposition, p , either p is a conjunct in this Fact or $\text{not-}p$ is. And from this it follows that no two worlds have the same Big Conjunctive Contingent Fact. For since these worlds share the same necessary propositions, it is their Big Conjunctive Contingent Fact that serves to individuate them. This will serve as the first premise in our argument:

- (1) If p_1 is the Big Conjunctive Contingent Fact of a world w_1 and p_2 is the Big Conjunctive Contingent Fact of a world w_2 , and if p_1 and p_2 are identical,³ then $w_1 = w_2$. (True by definition.)

² There will be no truth-functional repetitions in a world’s Big Conjunctive Fact, such as (p and p) or (p or p), both of which are to be replaced with plain old p . This restriction is necessary in order to avoid the absurdity of a conjunction being one of its own conjuncts.

³ Here, two propositions are identical if every conjunct in one is a conjunct in the other.

Our argument will consider the actual world, which is fitting since the intent of our argument is to establish that there exists in the actual world a very powerful and intelligent supernatural designer–creator of this world’s universe, where a world’s universe is what verifies or makes true all of the conjuncts in this world’s Big Conjunctive Contingent Fact. (A universe is a maximal concrete aggregate of contingent beings.) Let us call the actual world’s Big Conjunctive Contingent Fact p ; p will not only report the existence or nonexistence of every contingent being and the occurrence or non-occurrence of every contingent event in the actual world but also the contingent acts of any necessary beings that there might be in this world. The second premise of our argument states that:

- (2) p is the actual world’s Big Conjunctive Contingent Fact. (True by hypothesis.)

Is there an explanation for p ? According to the strong version of the Principle of Sufficient Reason (PSR), namely,

- S-PSR For every proposition, p , if p is true, then there is a proposition, q , that explains p ,

there actually is an explanation for p . It would be imposing on the atheistic opponents of our argument to ask them baldly to accept S-PSR, as do all traditional cosmological arguments. For the strong version of PSR occupies almost as high an echelon in one’s wish book as does the proposition that God exists. Our new cosmological argument far outstrips traditional cosmological arguments in that it can make do with Duns Scotus’ very weak version of PSR that requires only the possibility that there be an explanation for any true proposition; that is, for any proposition, p , if p is true, then it is possible that there exist a proposition, q , such that q explains p . When recast in terms of a possible worlds semantics, this says:

- (3) W-PSR For any proposition, p , and any world, w , if p is in w ’s Big Conjunctive Fact, then there is some possible world, w_1 , and proposition, q , such that w_1 ’s Big Conjunctive Fact contains⁴ p and q and the proposition that q explains p .⁵

Whether or not w_1 is identical with w is left open by W-PSR. Whereas the atheistic opponents could have been justified in not granting PSR to traditional cosmological arguers, it would seem unreasonable for them not to grant us W-PSR. More will be said about this in section III.

The next step in our argument involves applying the principle of universal instantiation to W-PSR. By substituting the constants or proper names p , the

⁴ We say that a proposition p_1 contains a proposition p_2 , or equivalently that p_2 is in p_1 , if and only if every conjunct of p_2 is a conjunct of p_1 .

⁵ The authors are indebted to Jerome Gellman for suggesting to us this way of formulating W-PSR. Helpful comments were made also by Graham Oppy and Peter van Inwagen.

actual world, and q respectively for the variables p , w , and q in W-PSR, we get:

- (4) If p is in the actual world's Big Conjunctive Contingent Fact, then there is some possible world, w_1 , such that w_1 's Big Conjunctive Fact contains p and q and the proposition that q explains p .

This enables the derivation of:

- (5) There is a possible world w_1 and a proposition q , such that w_1 's Big Conjunctive Fact contains p and q and the proposition that q explains p . (From 2 and 4 by *modus ponens*.)

What now must be shown is that w_1 is identical with the actual world. To do so appeal must be made to the premise that holds a world's Big Conjunctive Fact to be unique to it and thereby individuating. Now, as premise (2) says, p is the actual world's Big Conjunctive Contingent Fact and, as (5) has it, p is in w_1 's Big Conjunctive Fact. We now show that therefore p not only is in but is identical with w_1 's Big Conjunctive Contingent Fact.⁶ For, let p_1 be w_1 's Big Conjunctive Contingent Fact. Since every conjunct of p is a contingent proposition true in w_1 (by (2) and (5)), every conjunct of p is a conjunct of p_1 by definition of p_1 . Conversely, suppose r is a conjunct of p_1 . Then either r or not- r will be true in the actual world by bivalence. If not- r is true in the actual world, then not- r is a conjunct in p (since not- r is contingent as r is), and hence is a conjunct in p_1 as we have shown that every conjunct in p is a conjunct in p_1 , so that then both r and not- r are conjuncts in p_1 , which contradicts the fact that p_1 is the Big Conjunctive Contingent Fact of a *possible* world. Hence, not- r cannot be true in the actual world, so r must be true there. Since r is contingent, it must then be a conjunct of p . Therefore we have shown that every conjunct of p_1 is a conjunct of p and conversely so that p and p_1 are identical, and thus by premise (1),

- (6) $w_1 =$ the actual world.

And given that identicals have all their properties in common, it follows from (5) and (6), by substituting the actual world for w_1 in (5), that:

- (7) There is in the actual world a proposition q , such that the actual world's Big Conjunctive Fact contains p and q and the proposition that q explains p .

What kind of a proposition is q ? It is the burden of the remainder of our argument to flesh out q . We already know from (7) that q explains p . But just how does q explain p ? The only sort of explanations that we can conceive of are personal and scientific explanations, in which a personal explanation

⁶ The authors are grateful to Uwe Meixner and an anonymous referee for this journal for reminding us of the necessity of giving an explicit argument showing that from the Big Conjunctive Contingent Fact of one world being *in* that of what is putatively another world, it follows that the two Big Conjunctive Contingent Facts are actually *identical*.

explains why some proposition is true in terms of the intentional action of an agent and a scientific one in terms of some conjunction of law-like propositions, be they deterministic or only statistical, and one that reports a state of affairs at some time. There might be types of explanation that we cannot conceive of; but in philosophy we ultimately must go with what we can make intelligible to ourselves after we have made our best effort. Thus,

- (8) q is either a personal explanation or q is a scientific explanation.
(Some sort of a conceptual truth.)

It cannot be the case that q gives a scientific explanation of p . The reason is that q must contain some law-like proposition, as well as a proposition reporting a state of affairs at some time, but such propositions seem to be contingent, especially the latter. And, since they are contingent they are members of the Big Conjunctive Contingent Fact. But then they would have to explain themselves, since q must explain each and every contingent proposition in this fact, as well as the conjunction as a whole. But law-like propositions cannot explain themselves.⁷ Therefore,

- (9) q is not a scientific explanation. (Premise.)

From (8) and (9) it follows by the principle of the Disjunctive Syllogism that:

- (10) q is a personal explanation.

Since q is a personal explanation, q will explain p in terms of the intentional action of either a contingent or a necessary being. (There is no need to consider an impossible being, since such a being cannot explain anything.) Thus:

- (11) q reports the intentional action of a contingent being or q reports the intentional action of a necessary being. (Premise.)

It is impossible that q reports the intentional action of a contingent being. The reason is that if it did, there would be in the Big Conjunctive Contingent Fact a proposition reporting the existence of the contingent being in question. But q itself is not able to explain why the contingent being it refers to exists, since a contingent being's intentional action evidently must presuppose, and hence cannot explain, that being's existence. Thus, it can be inferred that:

- (12) It is not the case that q reports the intentional action of a contingent being. (Premise.)

⁷ That q cannot give a scientific explanation of p holds even if we accept a theory of causation in terms of the powers of enduring substances, rather than events. For the explanans still will contain contingent propositions, namely propositions reporting the existence of the contingent substances in question, along with ones that report contingent, law-like connections between the dispositional states of these substances and their event effects. Since these contingent propositions will be conjuncts in p , they will have to explain themselves.

And from (11) and (12) it follows by the principle of Disjunctive Syllogism that:

(13) q reports the intentional action of a necessary being.

Notice that there will not be in the Big Conjunctive Contingent Fact a proposition reporting the existence of the necessary being in question, since this proposition is necessary, given that a being has necessary existence only if it is necessary that it exists.

Proposition q stands in need of further fleshing out: q is true in the actual world by (7) but, firstly, is q contingent or necessary? And, secondly, is the intentional action of the necessary being that is reported by q done freely or not? We will argue for the first disjunct in each of these two questions.

Regarding the modal status of q , it might appear at first glance that it would be contradictory to hold q to be contingent. The reason is as follows. Since a necessary being is such that it is necessary that it exists, q is equivalent to the proposition that it is necessary that there exists a being who intentionally brings it about that p . But then a contradiction results from holding q to be contingent, since it results in the apparently contradictory proposition that it is contingent that it is necessary that there exists a being who intentionally brings it about that p . Appearances, however, deceive in this case. If this proposition is contradictory, then so is any proposition that results from an existential instantiation of it. But the existential instantiation of this proposition is not contradictory. For example, when we existentially instantiate this proposition with the constant or proper name G , it results in the proposition that it is contingent that (it is necessary that G exists and G intentionally brings it about that p). The latter is contradictory only if its second conjunct also is necessary, but that does not appear to be the case. An independent argument would have to be given for its necessity in order to claim that we have a contradiction.

Spinoza and Leibniz would argue that q is necessary, because they take G to be God and believe, on the basis of their ontological argument, that God is essentially benevolent and thus required by His nature to actualize intentionally the best of all possible worlds, which happens to be the actual world. It will not do for us to argue against Leibnoza that the necessary being which is referred to by q , since it is not subject to any possible kind of coercion, freely brings it about that p ; and, because a necessary condition for acting freely is being able to do otherwise, this being could have done other than intentionally bring it about that p , thus establishing the contingency of the proposition that it is necessary that G exists and G intentionally brings it about that p . For we have not shown that this necessary being, G , is omnipotent and thereby not subject to any form of external coercion. And even if we could establish its omnipotence, Leibnoza could charge our argument with begging the question against his theory of freedom, since he takes a free act to be one

that accords with the nature of the agent, thereby not requiring a could-have-done-otherwise condition for a free action.

A more effective argument for q 's contingency is the following *reductio ad absurdum* argument from the assumption that q is necessary. If q is necessary, q is a conjunct in every possible world's Big Conjunctive Fact. But q entails p , since that a necessary being intentionally brings it about that p entails that p , and thus p also is a conjunct in every possible world's Big Conjunctive Fact. Given that p is the actual world's Big Conjunctive Contingent Fact and that a possible world is individuated by its Big Conjunctive Contingent Fact, it follows that every possible world is identical with the actual world. Therefore, there is only one possible world. And this, surely, is absurd. Thus, it can be inferred, in conjunction with (13), that:

(14) q is a *contingent* proposition that reports the intentional action of a necessary being.

That there is only one possible world for Leibnoza has the consequence that he cannot make use of our argument. For him, every true proposition is necessary, and therefore, there is no Big Conjunctive Contingent Fact, and thus premise (2) fails for want of a suitable explanandum.

The next issue that must be resolved in our fleshing out of q is whether the intentional action of the necessary being is free or not. As will be seen in section III, unless the action is free, q will not terminate the regress of explanations and thus will not serve to explain p . The question, then, is whether q is to be fleshed out as:

q_1 There is a necessary being who freely intentionally brings it about that p ,

or as:

q_2 There is a necessary being who unfreely intentionally brings it about that p .

If q is understood as q_2 , there is a proposition, r , not identical with q_2 , that explains q_2 ; r will report that something, perhaps something psychological or perhaps an external force, compels the necessary being mentioned in q_2 to bring it about that p . There are two possibilities: either r is necessary or r is contingent. It is to be argued that if r is necessary, a contradiction results, and, if r is contingent, a vicious circularity in the order of explanation results. Therefore r is neither necessary nor contingent; but r must be one or the other because if an action is coerced, then it is true that something internal or external coerces the action.

Let us first assume that r is a necessary proposition. r entails q_2 , because the proposition that something coerces q_2 's necessary being to bring it about that p entails the proposition that q_2 – that there is a necessary being who unfreely brings it about that p . But given that $[L(p \supset q) \text{ and } LP] \supset Lq$ is a valid

argument form, it follows that from Lr and $L(r \supset q_2)$ that Lq_2 ; however, q has already been proven to be contingent, and since q is assumed to be the same as q_2 , the contradiction that q_2 is both necessary and contingent results.

Things fare no better if we assume that r is contingent. r explains q_2 , since r explains how it is that q_2 's necessary being is coerced into bringing it about that p . And q_2 , in turn, explains p . But, since r is contingent, r is a conjunct in p , and this results in a vicious circularity of explanation – r explains q_2 , while q_2 explains r since q_2 explains p and therefore every conjunct in p , including in particular r . Since q is either q_1 or q_2 , and q_2 leads to either a contradiction, if taken to be necessary, or a vicious explanatory circle, if taken to be contingent, it follows that q is to be understood as

q_1 There is a necessary being who freely intentionally brings it about that p .

Since the Big Conjunctive Contingent Fact reports the existence of the actual world's universe, it follows from q_1 that:

(15) q_1 is a contingent proposition that reports the *free* intentional action of a necessary being that explains the existence of the actual world's universe.

Considerably more fleshing out of q_1 is required before its necessary being can be shown to be capable of playing the role in the lives of working theists of a being that is a suitable object of worship, love, respect, and obedience. Because this being is necessary it is not included in the universe, which is the maximal aggregate of contingent beings, and thereby qualifies as supernatural. But that this being is supernatural is not alone enough for the working theist, since it is left undetermined how powerful, intelligent, and good this being is. For, although our argument shows that in every possible world there exists a necessary being who freely brings about its Big Conjunctive Contingent Fact, there are possible worlds that are so nasty that nothing very admirable can be inferred about the qualities of their necessary explaining beings. Is our world one of them? At this point in the argument, we must avail ourselves of the whole battery of teleological arguments to establish that:

(16) The actual world's universe displays a wondrous complexity due to its law-like unity and simplicity, fine tuning of natural constants, and natural purpose and beauty. (Premise.)

Herein we see the need to make out a global case for theism.

Given these facts about the universe, there are some grounds for inferring that:

(17) q_1 is the contingent proposition that there exists a necessary supernatural being who is very powerful, intelligent, and good and freely creates the actual world's universe.

Since q_1 has been proven to be a member of the actual world's Big Conjunctive Contingent Fact, and any member of this Fact is actually true, it follows from (17) that:

(18) It is contingently true that there exists a necessary supernatural being who is very powerful, intelligent, and good and freely creates the actual world's universe. (QED.)

III OBJECTIONS

Even if our argument has avoided committing any nonsequitur, there are numerous objections that could be raised. By considering these objections, we hope to deepen the reader's understanding of our argument, making clear just what it does and does not accomplish.

The explanation is agglomerative objection

A crucial step in the argument was the claim that the Big Conjunctive Contingent Fact in a given world is explainable only by the free action of a necessary being. It could be objected in the name of Hume that if the conjunction were infinite, with each conjunct being explained by another conjunct, the entire conjunction would thereby be internally explained. This assumes that explanation is agglomerative, meaning that it is closed under conjunctive introduction: if there is an explanation for P and another explanation for Q , there is an explanation for the conjunction ($P \& Q$). We have both argued elsewhere at length that Hume's objection fails.⁸ For instance, it could be a mere coincidence that P and Q are true together, even when each of them has some explanation. It also is possible that there is a common cause that explains their conjunction – their being true together.

The taxicab objection

Our argument proved that the Big Conjunctive Contingent Fact is explained by a contingent proposition that reports the free action of a necessary being. But this contingent proposition goes unexplained. And, since we are

⁸ Richard M. Gale, *On the Nature and Existence of God*, Chapter 7, and Alexander R. Pruss, 'The Hume-Edwards Principle and the cosmological argument', *International Journal for the Philosophy of Religion*, 43 (1998), 149–165.

willing to countenance an unexplained proposition why should we not have accepted as a brute, unexplained fact the Big Conjunctive Contingent Fact with which our argument started? Is not our argument, to paraphrase Schopenhauer's objection to the cosmological argument, like a taxicab that we hire and dismiss when it suits our purpose?

Pace what this objection contends, our explanation for the Big Conjunctive Contingent Fact is in terms of a proposition that ends the regress of explanations. The proposition that there is a very powerful and intelligent necessary being that freely causes the existence of the actual cosmos (or brings it about that the Big Conjunctive Contingent Fact is true) is a self-explaining proposition (and thus not unexplained) in spite of it being a contingent proposition. The reason for this is that a necessary being is one whose existence can be explained by an ontological argument, even if we cannot give it, and that a being *freely* performs an action, such as freely causing the actual cosmos to exist, stands in need of no further explanation, at least on the Libertarian Theory. Thus, the proposition that some necessary being freely does action A is a regress-of-explanation ender. Hence, it is possible that a conjunct could explain a conjunction of which it is a member without vicious circularity, provided the proposition is a self-explaining one that explains why all of the other conjuncts in the conjunction are true together. And this is just what our proposition *q* does for the Big Conjunctive Contingent Fact, *p*, of which it is itself a conjunct.

It might be objected that the Libertarian explanation of an action is not a *full* explanation and thus not a regress-of-explanation ender. Explanation is highly context-sensitive, since it is an attempt to answer someone's 'why' question, and thus is relative to the interests and purposes of this person. There are contexts in which the simple Libertarian explanation, 'She did it of her own free will', is a *full* explanation in that it fully satisfies the interests and needs of the questioner. There could be other contexts in which this explanation will need further fleshing out if it is to fully satisfy the questioner. For example, our Libertarian explanation for God's creating the actual world's universe in terms of His freely doing so, permits a more detailed explanation that would specify His reason for doing so, if that should be what the questioner requires.

The unintelligibility of theistic explanations

Scientistically-inclined philosophers find unintelligible the notion of a purely spiritual being freely causing there to exist a cosmos by His will because there is not the required relation of statistical relevance between His free effort of will and its effect, the resultant cosmos. We cannot in this paper do full justice to this objection, since a proper response to it would have to defend the coherence of theism against this and many similar types of objections, such as that the theistic explanation for the existence of the cosmos does not enable

predictions to be made and thus is no explanation. Of course, in effect, this objection would necessitate the denial of even the Duns Scotus' Weak PSR, since it would imply that the universe as a whole with all its natural laws *cannot* have an explanation. This is a priori implausible.

The general strategy for a response to the incoherency-of-theism-objection is to charge it with employing a question-begging scientific premise, which we will call 'The Legislativeness of Scientific Contexts' principle. This principle holds that the features that inform the use of a concept in a scientific context are legislative for the use of this concept in every context, any use that does not incorporate them being unintelligible. Thus, the scientific objector finds through his analysis of the use of the concept of causation in scientific contexts that it involves a relation of statistical relevance between the cause and its effect, and thereby demands on the basis of the principle of the legislativeness of scientific contexts that every use of the concept of causation have this feature. Since theistic uses of the concept of causation do not, he charges them with being unintelligible. One has only to state this principle in order to defuse the unintelligibility-of-theistic-explanations objection that is based on it. For the principle is not one that is vouchsafed by science. Rather it is a metaphysical thesis that fails to find adequate argumentative support and rightly can be charged by the theist with begging the question.

It would be dogmatic for the scientific objector to dismiss the Libertarian Theory of freedom that is involved in q 's explanation of p . Our argument has established that if it is possible, as W-PSR requires, that there is an explanation for p , it must be in terms of a necessary being's Libertarian-type free action. Thus, to reject the Libertarian Theory is, in effect, to reject W-PSR, and this does not seem reasonable.

The unintelligibility of a free necessary being

One might charge our concept of a God who is both a necessary being and a free agent with being unintelligible. We assume that the problem is not concerned with the concept of a necessary being nor that of a Libertarian free agent but with the conjunction of them. Given that the latter concept is employed in some extant religious creeds, the onus rests with those who find this conjunctive concept to be an impossible one to give some good argument to support their modal intuition; for a concept that is employed in actual language games should be assumed to be innocent until proven guilty. We know of no such argument. Moreover, our argument shows that a free necessary being exists, and hence a fortiori is possible. Furthermore, we gave a *reductio ad absurdum* argument against the existence of the Leibnozian God, who is a necessary being determined by His nature to actualize the best of all possible world, which showed that then there is only one possible world and that every true proposition is necessary.

The nonpersonal God objection

Phil Quinn, in correspondence, has questioned our claim that the only type of explanation that we can imagine or conceive of for the Big Conjunctive Contingent Fact, p , in the actual world, given that it cannot have an explanation whose explanans contains at least one contingent proposition that does not report the action of a necessary being, is a personal one in terms of the intentional actions of a necessary being. He writes:

I agree that the necessary being cannot be a number or Platonic form. Nor, I would add, can it be the Plotinian One, from which the cosmos emanates of necessity. I also agree that it cannot be without power. But I think it can be without intelligence or will. I can conceive of explaining [the Big Conjunctive Fact] in the following way: There is an impersonal necessary being, rather like the Brahman of *advaita* Hinduism, that generates the cosmos by means of blind but indeterministic mechanical causation.

There are several ways of attempting to meet this interesting objection. First, we could concede the objection and work with a more generic brand deity who is a common denominator of the different cosmos-explaining necessary supernatural beings. Our argument, then, would prove the existence of a necessary supernatural being of considerable power who is the cause, though not necessarily in a personal manner, of the cosmos. This is no mean feat; however, we don't think we have to concede to Quinn's objection. In the first place, the Brahman of the *advaita* is not a necessary being in the sense that is relevant to our argument, namely a being the concept of which explains its existence. Furthermore, it is dubious that the purported explanation of the cosmos in terms of the blind, indeterministic activity of this impersonal force is any better explanation of the existence of the cosmos than that in terms of a mystical One out of which the actual cosmos emanates. This cosmos displays considerable law-like regularity and simplicity, as well as remarkable fine tuning of its physical constants, all of which goes unexplained by an impersonal 'explanation'. Moreover, there is a dilemma argument possible. Either the impersonal force acts deterministically or not. If it acts deterministically, then we end up in a universe that could not be other than it is. In such a case, e.g., that there exist humans will be a logical necessity. This seems highly implausible. On the other hand, if the impersonal force acts indeterministically then we still do not have an explanation of why it acted as it did, and so the objection contradicts the conclusion of our argument that there is an explanation of the actual universe, since any such explanation will have to be a self-explainer. For an indeterministic action is a self-explainer only if it is a *free* action.

The our-argument-doesn't-do-enough objection

One of the aims of our argument was to escape the closing of the gap problem

that has infected past cosmological arguments, the unwarranted move from a conclusion that there exists a first mover (cause, etc.) to the claim that this being is God, that is, has *all* of the divine perfections. This yawning chasm was papered over by St Thomas's glib remark that '*et hoc dicimus Deum*'. So as to avoid the difficult problem of closing the gap, we chose to have the more modest conclusion that there necessarily exists a very powerful and intelligent supernatural being who is the free cause of the actual world's universe. But in avoiding the Scylla of the gap problem we may have wrecked on the Charybdis of proving the existence of a being who falls far too short of the divine.

So far we have done nothing to show that our God is one. It is reasonable, however, to infer that our God is one because of the law-like regularity and simplicity of the universe. Moreover, Ockham's Razor should come into play: multiple gods are not to be posited where one will do.

Another aspect of the problem concerns whether our argument proves 'God' to be powerful and intelligent enough to be a suitable object of worship and adoration for the working theist. But given the incredible complexity and wonderfulness of the actual cosmos, any being who is capable of designing and causing this cosmos is sufficiently awesome in his power and intelligence to be a suitable object of worship and adoration by the working theist. That this 'God' has not been proved either to be omnipotent or omniscient, no less essentially so, should not render the argument entirely unserviceable for the needs of ordinary believers. We do not claim that the conclusion of our argument gives all theists, in particular theologians of a scholastic bent who seek the absolutely perfect God (the one who essentially has all of the omni-perfections), everything they want. Our claim is only that it gives the average working theists, who do not have the conception of logical or metaphysical necessity, everything *they* want.

The most serious problem concerns the moral attributes of our 'very powerful and intelligent supernatural necessary being that freely causes the existence of the cosmos in the actual world'. If we cannot show that this being is at least a very good being, our argument may very well have created a Frankenstein, for this being will not be a suitable object of worship and thus will not meet the needs of the working theist.

To begin with, our creator God is not shown to be such as to have the essential property of always doing what is right, and thus our God logically could do wrong in the actual world. For some theists, this has the advantage of saving God's freedom, which was required to meet the taxicab objection. Moreover, our God was not even shown to be perfectly good in every possible world, and for this reason the God of our argument's conclusion will not fully satisfy the hopes and wants of all theists. What matters foremost to the working theist, however, is not whether it is *logically* possible (which is a concept that she does not have) that God do what is morally wrong, but

whether God is capable of doing so in the actual world, in which *capable* is understood in terms of what a being has the capacity, knowledge, and opportunity to do. God could be said to be incapable in the *actual* world of doing wrong in the sense that He could not get Himself to do so, that He is above temptation, that we can place absolute confidence in Him. This does not require that it be logically impossible that God does wrong.

The most serious problem with our argument is not whether its God is essentially benevolent but whether He is *actually* benevolent. And this is of primary concern to the working theist. It is here that our argument becomes quite vulnerable. To meet this problem we'll have to marshal all of the extant theodicies for God's permitting all of the known evils of the world, again showing the need for making out a global case for theism. This battery of theodicies will still leave countless apparently gratuitous evils, and it is at this point that faith must enter in that God has morally exonerating reasons for permitting these evils, even if we cannot access these reasons.

The objection to our Principle of Sufficient Reason

Our argument employed a weak version of the Principle of Sufficient Reason, namely:

W-PSR For any proposition, p , and any world, w , if p is in w 's Big Conjunctive Fact, then there is some possible world, w_1 , and proposition, q , such that w_1 's Big Conjunctive Fact contains p and q and the proposition that q explains p .

Our atheistic opponent might have been willing initially to grant us this premise, but after it is seen what results from this acceptance it will no longer be granted. The opponent might charge W-PSR with begging the question. When confronted with a valid deductive argument for the existence of God, the atheist can always charge one of its premises with being question-begging. The problem with this facile move is that it lays the foundation for charging every valid deductive argument with begging the question in one or more of its premises.

The concept of begging the question is based on an historical context that has to do with the background beliefs and assumptions that the disputants have *before* the argument is presented. Many atheists would be willing to grant W-PSR before we gave our argument, but once they see what follows from it in conjunction with some other seemingly innocent premises, they will no longer grant it to us and will charge it with begging the question. This move looks dogmatic, unless they can muster some grounds for doubting W-PSR. It appears as if they are dogmatically committed to rejecting any deductive theistic argument by rejecting some one of its premises.

There are, however, cases in which atheists are well within their rights in

leveling the charge of begging the question against a theistic argument. A good case in point is the possibility premise of the S₅-based modal ontological argument which states that it is possible that it is necessary that there exist a being who essentially has every divine perfection. Whereas the Biblical Fool gladly consented to the possibility premise of Anselm's ontological argument in Chapter 2 of the *Proslogion*, in which what is at issue is the plain old existence of a being who essentially has all of the divine omni-properties, he would rightly reject the souped-up possibility premise of the S₅ argument. He is a fool but not a complete idiot. This means that he will not consent to a proposition that he does not understand. A consent to this possibility premise can be informed only if the consentor understands what is meant by its nested modal operators, it is possible that it is necessary that. But to understand this requires understanding the S₅ axiom (that what is possibly necessary is necessary) to which it is subject. Thus, the properly informed fool will not only withhold his consent but will charge it with begging the question.

But our argument's use of W-PSR is far less subject to the charge of begging the question, since the existence of God is not an immediate consequence of it, in the way in which it is in regard to the possibility premise of the S₅ argument. We are not omniscient and thus cannot always know all of the deductive consequences of propositions that we accept. The deductive powers of the opponent of an argument are another feature of the historical context that determines whether there is a begging of the question.

Still, it might be felt that W-PSR leads too quickly, with too few steps, to the highly controversial and amazing proposition that there *actually* is an explanation for the actual world's Big Conjunctive Contingent Fact, which would be an immediate consequence of S-PSR. Not only is there no general answer to the question of how many steps are required in a deduction for an argument not to be question-begging, but it is wrong-headed to even try to find an answer to it. The reason is that much of an argument consists in its stage-setting – the concepts and distinctions that it employs. It is like laying siege to a city. Much of the success of such an operation depends upon assembling just the right weapons and properly positioning them. Once this is accomplished the siege might require only a short time to get the city to capitulate. Similarly much of the originality and power of our argument consists in the background concepts and distinctions that we forge, concerning possible worlds and their Big Conjunctive Facts, and the manner in which we assemble and deploy them.

Even if our atheistic opponents reject W-PSR, our argument represents an advance over traditional cosmological arguments that had to appeal to S-PSR in that the atheists must pay a greater price, run a greater risk of being wrong, for rejecting our argument than a traditional cosmological argument. For our argument manages to use weaker premises than do these other

cosmological arguments and thereby runs a lesser chance of having a false premise.

But how much does our argument justify theistic belief? There is room here for widespread disagreement, especially because of the gap problem that could be closed only by appeal to a battery of teleological-type arguments and theodicies. We believe, however, that it goes quite some way, maybe even making it more likely than not that God exists. Especially when combined with other arguments, like that from religious experience, the case may become quite compelling.⁹

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