The Gale–Pruss cosmological argument: *Tractarian* and *advaita* Hindu objections

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Abstract: The article criticizes Gale and Pruss's new cosmological argument (hereafter GP) which purports to prove that the world is created/designed by a powerful intelligent necessarily existing supernatural being (not the full-fledged God of theism). First, the article employs a 'necessitist' counterexample to GP's modal premise, S5. Second, it is argued that GP presupposes a restricted range of possible accounts of the generation of the universe. Third, it is argued that GP's argument that the creator is a necessary being is flawed. Fourth, it is argued that GP's argument against Quinn's objection, modelled on the *advaita* Hindu view of creation by an impersonal being, also fails.

Richard Gale's new version of the cosmological argument was first published in 1999 under the title, 'A new argument for the existence of God: one that works, well sort of'. Gale and his former student Alexander Pruss later jointly published the strengthened Gale–Pruss modal version of the argument (hereafter GP) in 1999 titled 'A new cosmological argument'. GP does not purport to prove the existence of Anselm's God but does purport to prove that the actual world is created/designed by a very powerful and intelligent necessarily existing supernatural being (called 'G'). The present article argues that GP fails in several important ways that shed much illumination on the issues.

The first section presents a summary of GP. The second develops a 'necessitist' critique of GP. The third argues that GP presupposes a narrow range of possible accounts of the generation of the universe that contains a theistic bias. The fourth argues that GP's inference to a necessary being is flawed in several ways. The fifth argues that GP fails to eliminate Quinn's *advaita* Hindu objection to GP.

The Gale–Pruss modal cosmological argument

GP makes several assumptions. GP employs the notions of contingent and necessary propositions. A contingent proposition is a proposition that is possibly true and possibly false (i.e. true in some possible worlds and false in others). A necessarily true proposition is true in every possible world. GP understands a possible world as 'a maximal, compossible conjunction of abstract propositions'. It is *maximal* in the sense that for every proposition p, either p is a conjunct in this conjunction or ∼ p is, i.e. in every possible world it is either true or not true that Richard Nixon drove an ice cream truck from 1969 to 1974. Every possible world is compossible in the sense that it is conceptually or logically possible that all of the conjuncts in the conjunction that specifies that world are true together: there can be no (contradictory) impossible worlds. There are also possible worlds that have different laws of nature than the actual world. Further, GP treats necessary truths as facts, i.e. it is a 'fact' that it is *not* both raining and not raining (at the same time in the same place).

GP grants that it would be unfair to assume Spinoza's and Leibniz's strong principle of sufficient reason which holds that there is a *sufficient* explanation for any fact in the world. Since, however, opponents of the cosmological argument cannot reasonably deny that it is at least *possible* that the facts in the world have a sufficient explanation GP only asserts the weak version of the principle of sufficient reason that it is *possible* that such facts have a sufficient explanation.

GP also assumes the modal axiom S5 that if it is possible that it is necessary that p then it is necessary that p. For example, since it is possible that $2 + 2 = 4$ is necessarily true then, by S5, it is necessarily true that $2 + 2 = 4$. Thus, the simplified skeleton of GP is this: (1) If it is possible that a necessary supernatural creator of the actual world exists, then it is necessary that it exists. But (2) it is possible that a necessary supernatural creator of the actual world exists. Therefore, (3) it is necessary that a necessary supernatural creator of the actual world exists. The first premise is an instantiation of S5. Since GP presupposes S5 this is not pursued here.[1] The second premise is, therefore, the key and much of GP is directed towards proving it.

The argument for the second premise begins with the definition of a Big Conjunctive Fact (BCF). The BCF of a given world is the conjunction of all propositions that would be true of that world, were it actualized. The BCF of a world is a maximal compossible conjunction of propositions that would be true in that world, were it actualized. The BCF of the actual world consists in all the propositions that are actually true, including *both* the necessary and contingent propositions true in the actual world.

Since all possible worlds share the same set of necessary propositions the distinction between the various possible worlds resides in their different *contingent* propositions that would be true in those worlds, were they actualized. GP defines the Big Conjunctive Contingent Fact (BCCF), which contains the

contingent propositions that would be true in a possible world, were it actualized. Since all possible worlds share the same set of necessary propositions, the different possible worlds are individuated by their different BCCFs. Since every possible world is *maximal*, for every contingent proposition p, either p or $\sim p$ is a conjunct in this BCCF. Thus, no two possible worlds can have the same BCCF.

GP calls the BCCF of the actual world p (not to be confused with the *variable* 'p' used earlier), where p includes *all* the *contingent* facts in the actual world. Thus, p includes the existence and non-existence of all contingent beings in the world and the occurrence and non-occurrence of all the contingent events in the actual world, including the *contingent acts* of any necessary beings that may exist in the actual word.

GP argues that p has a sufficient explanation as follows: one cannot deny that there is some possible world w_1 that contains p but also contains q and the proposition that q explains p. But, GP argues, this hypothetical possible world w_1 turns out to be identical with w. For, suppose there were some difference between w and w_1. In that case, since possible worlds are maximal, there must be some proposition r true in w_1 but not true in w. But if r is true in w_1 and not in w, then, by the law of the bivalence, $\sim r$ is true in w. However, since, by hypothesis, everything *actually* true in w is also true in w_1, $\sim r$ is true in w_1 as well. But this means that r & $\sim r$ is true in w_1, which is a contradiction, and that cannot be because w_1 is supposed to be a *possible* world. Since the assumption that w_1 is a different possible world from w implies a contradiction, w_1 is the same as w – which means that w, the actual world, contains q and the proposition that q explains p. Since q is supposed to explain the totality of propositions in p, call this 'the Necessity of a Total Explanation Thesis' or NTE.

GP holds that there is such a q in every possible world: '[A]lthough our argument shows that in every possible world there exists a necessary being who freely brings about its [BCCF], there are possible worlds that are so nasty that nothing very admirable can be inferred about the qualities of their necessary explaining beings' (GP, 468). That is, some possible worlds are so 'nasty' that one is not justified in interpreting the q in those worlds as referring to anything like G. It is only the grandeur of the actual world that enables one to upgrade its q into a report of the intentions of a G that approximates to the God of theism.

All attention now turns to the nature of this q. GP here departs from purely logical demonstrations and claims that the the only sorts of explanations that can be conceived are either scientific or personal or explanations, which GP describes as 'some kind of conceptual truth' (GP, 465). Call this the 'Either Scientific or Personal explanations thesis' or ESP. A scientific explanation explains why some proposition is true by reference to some conjunction of law-like propositions and at least one contingent proposition that reports a state of affairs at some time. A personal explanation explains why some proposition is true by reference to the *intentional* action of an agent. GP admits that there might be types of explanation that are beyond our ken, but, 'in philosophy we ultimately must go with what

we can make intelligible to ourselves after we have made our best effort' (GP, 465). But q cannot be a scientific explanation. Since scientific propositions are contingent, this would mean that q is part of the actual worlds BCCF and that would mean that the explanation of the actual world's BCCF is a part of that BCCF. However, since 'law-like propositions cannot explain themselves', q can only, by disjunctive syllogism, be a personal explanation that 'reports' the intentional actions of some being.

The next question is whether this being is contingent or necessary. Obviously, however, q cannot report the actions of a contingent being. If q refers to a contingent being, the proposition that states that being's existence would be part of the BCCF of the actual world w and 'q is not able to explain why the contingent being it refers to exists, since a contingent being's intentional action presupposes, and hence cannot explain, that being's existence' (GP, 465). Thus, q must report the intentional actions of a necessary being.

One might assume that q must, therefore, be necessarily true because it reports the action of a necessary being. But appearances are deceiving. GP holds that 'q is a *contingent* proposition that reports the *free* intentional action of a necessary being' (GP, 466–467). This divides into two claims, first that q is a *contingent* proposition, and second that q reports the intentional actions of a *free* being. Additional analysis is possible but not necessary here.

GP provide several arguments that q is a contingent proposition but its main argument is a *reductio ad absurdum*. If q is necessarily true, then q is a conjunct in the BCF of *all* possible worlds. Since, however, q entails p, and since a possible world is individuated by its BCCF that would mean that every possible world is identical with the actual world (i.e. there is only one possible world). Since, notwithstanding vehement protestations from Spinoza and Leibniz, this is surely absurd, q is a contingent proposition.

Since G is a necessary being it satisfies one key component of the traditional notion of a theistic God, but such theistic views find it hard to account for the contingency in the world. Leibniz holds that God's choices are necessary, but that depends on certain of his other views. That is, even though, speaking momentarily with the vulgar, Leibniz condescends to call certain propositions 'contingent', he is committed to hold that from God's point of view (the only fully adequate one) all propositions are necessary (Russell (1967), 60–61). Leibniz cannot use GP because he holds that there *really* is no such thing as a BCCF. Unlike Leibniz, GP finds appropriate roles both for contingent and necessary truths. The actual world is created by a necessary being but the contingency in it arises from G's free choice.

A *necessitist* objection

NTE asserts that if w contains p then it also contains q and the proposition that q explains p. But is it really obvious that there *must* be some possible world that contains a q that explains p? Recall that GP holds that q 'reports' G's intention

but does not provide this q. Since G's intention, involving, presumably, a massive detailed specification of physical constants, laws, etc., sufficient to determine the entire actual universe, is far too complex to be formulated by any human being, GP purports only to prove that there is such a q without providing it. Why, however, should one believe that such a q is even possible? Though most philosophers hold that logic is neutral with regard to metaphysical issues, the 'permanentists' or 'necessitists' hold that there is a necessary metaphysical substratum of the world that fixes the range of possibilities (Williamson (2008), x, 376–422). Necessitism is controversial but it is not obvious that it is false (Uzquiano (2014), § 4.4.3). Since 'necessitism' is represented by Wittgenstein's familiar view in the *Tractatus* (Wittgenstein (1961); hereafter, *TLP*) that it is necessary *what* things there are but contingent *how* those things are (*TLP*, 5.552–5.5521; Williamson (2008), 1–2), a *simplified TLP*-model is employed to *illustrate* this point.

TLP (1.1, 2, 2.01–2.02) holds that the world is reducible to a totality of atomic facts where each atomic fact is the existence of a possible *state of affairs*, a concatenation of simple objects. Each atomic state of affairs (therefore, each atomic fact) is logically independent of all the others (5.134–5.135). Further, the set of possible states of affairs (and, therefore, possible atomic facts) is fixed by the substratum of the world (2.021). This substratum also determines the set of possible relations into which these objects can enter (2.023–2.0231). *TLP* also holds certain related modal views. The propositions of logic are tautologies that 'say nothing' (6.1–6.11, 6.37). Since the only necessity that exists is logical necessity, there is no causal nexus (5.136–5.1361, 6.3). *TLP's* necessitism envisions a very austere world.

Consider a simple *TLP*-model of the way this substratum fixes the set of possible states of affairs (and possible facts). Suppose, for heuristic purposes, that the basic substratum of the world consists in two basic objects, a and b, and one possible relation, R. All possible combinations of these objects and this relation are possible except that the objects cannot be in this relation to themselves. In this case, there are four possible states of affairs: a is R to b; a is not R to b; b is R to a; b is not R to a. Suppose now that the *actual* world w is one compossible actualization of one of these possibilities, namely, that a is R to b and that b is not R to a. Call this Simple *TLP*-world 'w_{st}'. The 'p' that states the BCCF of w_{st} is 'a is R to b and b is not R to a'. NTE claims that there is some possible world w_1 that contains some q that explains p, but, on *TLP*'s view, there is no such possible q. Since the substratum of the world fixes the total set of possibilities there are no other possible facts in w_{st}. Further, even if there were other possibilities there is no causal nexus and, therefore, no possible *explanation* in w_{st} of p. On *TLP's* view, one can *describe* the distribution of facts in w_{st} but nothing in a *TLP*-world explains anything else. Thus, *TLP* denies that p even *can* be explained by the 'laws of nature' (6.371) – let alone by some contingent act of 'divine intention' (whatever that is supposed to mean).[2] For there is no room in w_{st} for such a divine intention to 'compel' one set of facts rather than another (6.37). Although the real world is much more

complicated than w_{st}, this simple *TLP*-model illustrates why Wittgenstein (in Wittgenstein (1966), 79; see also *TLP*, 6.432) states that 'God is, how things stand'. Since God *is* how things stand, appeal to God's intentions cannot *explain* how they stand. Indeed, it is not even possible assign any meaning to such theological sentences. Call this the '*TLP*-Counterexample-Thesis' or TCT.

One might object that TCT is a very unusual 'counterexample'. Rather than specifying a possible world in a familiar way, e.g. sketching a world that is just like the actual world except that Richard Nixon drove an ice cream truck from 1969 to 1974 in it instead of being the president at that time, TCT merely rehearses *TLP*'s contentious metaphysical views.

The claim is not, however, that *TLP*'s necessitist view is clearly correct but that GP does not eliminate such necessitist views. NTE just assumes that there is not some basic substratum to the world that precludes the existence of NTE's q. But without a successful argument against such necessitist positions GP is not justified in assuming its basic premise that it is possible that there is some w_1 that contains a q that explains p. GP simply makes a major unjustified 'metaphysical' assumption.

The theistic bias

Since much of the remainder of GP is directed towards determining the nature of the q that provides the total explanation of p, and since, as argued in the previous section, GP's argument for NTE is inadequate, much of these arguments are moot because they are built on this weak foundation. However there are several additional sub-arguments in the latter part of GP that are worth considering in their own right.

GP purports to prove the existence of some being G that is quite close to Anselm's God: a necessarily existing supernatural purposeful intelligence that creates or designs the world by an intentional act (GP, 461, 469). A key premise in this sub-argument is that one can only conceive of two possible types of explanation, scientific or personal explanations (ESP). A personal explanation explains an event e as the product of an intentional act by an intelligent being: 'Why is my car in the swimming pool?' Answer: 'Because your teenage daughter wants it there'. By contrast, a scientific explanation explains e by adverting to scientific laws and at least one contingent fact. 'Why is my car in the swimming pool?' Answer: 'Because there is a physical law that objects in a gravitational field roll downward on an inclined plane' and 'There was an earthquake this morning that turned your driveway into an inclined plane aiming at your swimming pool'. GP argues that q cannot be a scientific explanation and infers, by disjunctive syllogism, that it must, therefore, be a personal explanation.

First, GP simply assumes that a personal explanation must be *intentional*. However, there are personal explanations that invoke *voluntary* rather than intentional actions, e.g. S admits he kissed N but insists that he did not do so

intentionally because he mistook N for M (the latter being real object of his affection). His kissing N was voluntary because he did it willingly but not intentionally because he did not intend to kiss N. Applying this to GP's creation story, perhaps G *voluntarily* created the world but did not do so *intentionally*. If questioned why s/he created the world G might reply: 'The creation of the world was an accidental but voluntary by-product of one of my other projects'. Recall Whitehead's (1968, 81) remark that in Greek philosophy the creation of the entire temporal universe 'was an inferior avocation of [the] Absolute'. The creation of this imperfect world was not the Absolute's intention but a voluntary by-product of its more sublime timeless intention.

Further, GP is not justified in restricting the range of possible explanations to scientific or personal. There are other sorts of explanations that are 'within our ken'. GP addresses a version of this objection put in private correspondence to the authors of GP by Phil Quinn.

Quinn suggests that one might explain the BCCF of w by reference to 'an impersonal necessary being, rather like the *Brahman* of *advaita* Hinduism that generates the cosmos by means of blind but indeterministic mechanical causation' (GP, 472). Quinn holds that this impersonal Hindu god is a necessary being so he is open to the reply, which GP does make, that this Hindu creator is not a necessary being in GP's sense of a being 'the concept of which explains its existence' (GP, 462, 470). Since GP's argument that G is a *necessary being* occurs *after* GP's argument that the explanation must be personal, this point concerning the status of the alleged necessary being is dealt with in the next section. The present question is only whether Quinn's *advaita* counterexample can be modified to address GP's assertion that all explanations must be either scientific or personal.

First, GP does not consider the kind of explanations that are proposed in connection with the ideas of chaos and self-organizing systems. These sorts of explanations are, arguably, scientific, but they do not typically appeal to scientific *laws* as normally understood and speak instead of the emergence of unforeseeable new patterns (Goodwin (1994), viii, 87–88, 202, 215). Further, although the question whether chaos theories provide genuine *explanations* of the relevant phenomena is not settled, there is a body of literature that argues that they *can* be explanatory (Bishop (2008), 5.2–5.3). Second, Hume (1998, § VII) puts forward a version of Quinn's point when he suggests that 'the great vegetable, the world . . . produces . . . certain seeds [that] . . . vegetate into new worlds'. Similar views are also present in the Orphic tradition (West (1983), 205). These 'organic cosmogonies' in Orphism, Hinduism, and Hume are not 'scientific' because they do not appeal to the biological *laws* of *genesis* for support. One might object that such views are more mythological than scientific, but GP does not oppose Quinn's admittedly 'interesting' case on such grounds (GP, 472).

GP's real argument against such organic cosmogonies invokes a supplementary 'argument from design': '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' (GP, 472). It is, however, not clear why a personal explanation explains this any better than an impersonal one, especially when GP cannot supply G's intention. Recall that GP only purports to prove that there is a q that 'reports' the divine intention but does not provide it. But the distinction between no explanation and an explanation that human beings cannot provide (or possibly understand), is, for explanatory purposes, a distinction without a difference.[3] Second, contrary to GP, an oak tree and a blue whale also display considerable law-like regularity, simplicity, and fine tuning of their physical constants without being obviously produced by the intention of some intelligent being. It would be question-begging to insist that they must be so produced. Indeed, if Hume is right, the actual universe more resembles the product of organic generation from eggs or seeds than it does a product of intelligent intention. Thus, GP has not shown that the universe could not have sprouted or hatched *impersonally* from an egg or seed. Since GP unjustifiably limits the choice to personal and scientific explanations, the second of which is easily dismissed, it introduces one of the main tenets of *theism* into the premises without warrant – the anthropomorphism that the 'creator' (seed?) resembles a human person.

The inference to a necessary being

GP's sub-argument that q refers to the act of a necessary being is worth considering in its own right. First, what justifies GP in assuming that q reports the actions of a *being* at all? Why not a *process*, or even just the *principles* of *genesis*, whatever they are, in w? In fact, GP's assumption that q refers to a *being* is guided by its prior assumption that q, whatever it is, must refer to the acts of something that resembles the God of theism.

Second, even if one grants that q describes the actions of a being, what justifies GP's assumption that it is *one* being? Why could not q refer to the actions of a *committee* of beings? Hume makes an analogous objection against the argument from design (Russell (2013), § 4). Recall GP's argument in the first section of the present article that if p states the BCCF of w then w must also contain q and the proposition that q explains p. However, this formulation is ambiguous. Let it be that w contains q and that q reports an intention to create/design the world. GP just assumes that q reports a *single* intention by a *single* being. Why could not q be subdivided into q_1 that explains *part* of p and q_2 that explains the remainder of p? Perhaps q_1 states the contingent intention of one deity and q_2 the contingent intention of a second deity. One can construct further examples for q_n for any n. Thus, GP's q might refer to the actions of a committee, perhaps even a committee whose members change from time to time. In this case, GP's 'necessary being' would turn out to be a necessary *committee* of creator-designers where no particular member of the committee is necessarily a creator. This would not be congenial to theists, but GP gives no reason to preclude this possibility.

Third, GP's argument that G is a necessary being is too indirect. GP explains that 'A being is a *necessary being* . . . if and only if it is necessary that it exists' (GP, 466). GP's argument is that q either reports the action of a contingent or a necessary being but it cannot report the action of a contingent being because if it did then the BCCF of w would contain a conjunct asserting the existence of that being which would be non-explanatory (see the first section of the present article). Once again, GP infers, by disjunctive syllogism, that q reports the action of a necessary being.[4]

GP does reference such a more direct argument: '[A necessary] 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' (GP, 462). Thus, GP purports to prove by *indirect* means that a self-explaining G necessarily exists without being able to provide the required ontological argument.[5]

In fact, GP's logic here is not straightforward. Recall that there are certain 'nasty' possible worlds where GP proper only proves that there is some q that reports the action of *some* necessary being but not one that closely resembles GP's G. It is only the addition of a supplementary argument from design that this minimal necessary being gets upgraded to something approaching G. It is a cosmological argument for some *minimally* necessary explanatory being and it is only by adding a supplementary argument from design that GP purports to prove G's existence. There is an important sense, therefore, that GP is not really a cosmological argument for G's existence. The cosmological' portion of the argument only purports to prove a first cause – perhaps even a 'nasty' one. To be fair, it is only to be expected that finite humans need to resort to such indirect sorts of proof when attempting to demonstrate supernatural theses. On the other hand, GP employs certain indirect sorts of devices that take one beyond what one can comfortably claim to know or even understand (e.g. G's complex supra-human intention). Indeed, what these problems really suggest is that such supernatural 'theses' are beyond the limits of human understanding and proof.[6]

The Gale–Pruss objection to the *advaita* Hindu view of Creation

An additional problem with GP comes out in GP's reply to Quinn's suggestion that the *advaita* Hindu view offers a genuine alternative to GP's dichotomy of scientific and personal explanations. GP's first reply to Quinn's suggestion is that the *Brahman* of the *advaita* is not a necessary being in the sense that GP requires. It is true that Hindu philosophers do not make such assertions because of their basic view that such matters are unknowable by human beings (Taimni (1974), 1–2). However, although *advaita* Hindus do not generally claim that the creator is 'self-explainer' in GP's sense, they do regard the *Brahman* as 'Absolute' and 'unconditioned' (Flood (1996), 84–85). There is therefore no reason why a Hindu philosopher could not claim that there is a successful ontological argument that proves the necessary existence of the *Brahman* 'even if we aren't up to giving it'. Since GP

admits it cannot provide the successful ontological argument proving that G is a 'self-explainer' the more humble *advaita* view appears quite sensible.

GP's second argument against Quinn's proposal is premised on the view that either this impersonal *Brahmanic* force acts deterministically or not. The view that it acts deterministically is rejected because that implies the implausible view that the universe could not be other than it is. Since GP's argument against the view that this *Brahmanic* force acts indeterministically is more interesting it is considered here. An indeterministic force '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. An indeterministic action is a self-explainer only if it is a *free* action' (GP, 472). It is, however, unclear what the notion of explanation here has to do with explanation in science other than the shared word, e.g. it is not clear why Ed Kemper's statement that he *freely* intentionally murdered six innocent young women because he had been abused by his mother *explains* his actions. Borrowing an old dichotomy (von Wright (2008)), one might say his statement enables one to *understand* his action but not to *explain* it: 'OK, Ed, I get it. Your mother mistreated you. So did mine. But I never even considered killing innocent girls'. Indeed, the idea that free actions are *self-explaining* presupposes the old metaphysical-cosmological idea that freedom consists in an exotic kind of cause that *initiates* a new causal series *ex nihilo*. That is, GP is advanced as a 'cosmological' argument that *proves* the existence of a first cause but it actually *presupposes* the existence of first causes in its appeal to these miraculous *self-explaining* free actions. Further, if GP can assume such miraculous self-explaining free actions, why cannot *advaita* Hindus do the same? Indeed, *advaita* Hindus *do* speak of impersonal free and 'self-luminous' actions of the *Brahman* (Deutsch (1973), 9, 28, 41, 44, 50). It might be objected that these *advaita* claims are obscure but they are no more obscure than GP's suggestion that free actions are self-explaining uncaused causes. GP's argument against the *advaita* counterexample is inconclusive.

Conclusion

In the absence of a successful argument against necessitist metaphysical views, GP is not justified in inferring the existence of a q in w that explains p. GP's argument that the only two possible kinds of explanations are personal and scientific explanations overlooks both chaos-theory and impersonal 'organic' cosmogonies. Finally, GP's argument that the creator G is a *necessary being* is flawed in several ways. This should not be surprising. Theism sets a very high bar and it should not be easy to meet it. Even so, GP employs an ingenious new strategy that, even where it is unconvincing, sheds considerable new light on the issues.[7]

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Notes

1. Pruss (2010) defends S5 but only purports to provide reason to believe that it is *probably* true. See note 6.
2. One readily understands what it means for a person to 'create/design' something from certain materials, but what does it mean to create/design a world with certain laws, physical constants, etc.? Where does the creator even begin to create a universe in which the actual fundamental physical constants in our universe are replaced by different values and by what means does it achieve its goal? See note 5.
3. The problem is analogous to the problem intuitionists have with non-constructive proofs in mathematics where the object 'proved' to exist cannot be exhibited (Dummett (2000), 7). See note 5.
4. Indeed, Gale (1986) has argued that there are independent reasons to think it false that it is necessary that God exists and, therefore, that there are reasons to suspect any argument that has this as its conclusion.
5. This view also resembles those of non-constructivists in mathematics who purport to prove the existence of something without being able to display it – except that the present case is even more problematic because no finite human being could possibly understand the tremendously complex intentions of a world-creating *supernatural* deity. See note 3.
6. Kant's (1996, A592/B620) observation that people have always been more interested in proving that a necessary being exists than in understanding 'whether and how such a being can even be thought' is still relevant today. See note 2.
7. This article is dedicated to the irreplaceable Richard Gale.