

REVIEW ARTICLE

LOGIC AND THEISM: ARGUMENTS FOR AND AGAINST BELIEFS IN GOD, BY JORDAN HOWARD SOBEL (CAMBRIDGE: CUP), XIX+652 PP. HARDBACK.

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Logic and Theism is a very fine book, crammed with detailed analyses of arguments for and against belief in God. It is not a book that can be read quickly; but it is a book that repays effort invested in it by readers.

Despite the fact that it is a very large book, and despite the wide range of the arguments that are considered, the book is not intended to be a comprehensive assessment of arguments for and against belief in God. This is one way in which it contrasts with, say, John Mackie's *The Miracle of Theism* or Michael Martin's *Atheism: A Philosophical Justification*. There is no serious discussion in Sobel's book of, for example, arguments from religious experience, arguments from consciousness, arguments from morality, arguments from the natural history of religion, and sundry other minor arguments for the existence of God. Moreover, the book contains no serious discussion of, for example, the meaningfulness of religious talk, anti-realist construals of religious talk, the critiques of religion offered by Feuerbach, Marx, Engels, Freud, and Nietzsche, and so forth.

The book makes considerable use of technical logical and mathematical machinery. Arguments are frequently given symbolisations in first-order predicate calculus or extensions thereof; and, where these symbolisations correspond to valid arguments in the relevant logical systems, detailed derivations are supplied. Several chapters make use of the mathematics of probability, in ways that require more than just nodding acquaintance with standard formulations of Bayes' Theorem. While much of the technical material is located in appendices—and thus does not interrupt the flow of the text for those already well-versed in these matters—I suspect that the book would be a rather difficult read for those who do not have graduate training in philosophy.

In what follows, I shall begin by describing in a little more detail the content of the various chapters in the book. Then I shall make a tour through the book, commenting on matters as I see fit. Of course, there is much that I shall ignore during this tour: but there is far too much in the book for me to comment on all of it in the compass of this review.

1. Layout

The book is divided into five major sections.

The first section—Divinity—consists of a single chapter, entitled “‘God’, ‘god’ and God”. This chapter begins with some semantic considerations, and a defence of the semantic proposal that the name ‘God’ expresses the concept of a unique god. It then moves to a defence of the claim that the core of the common conception of God is of a being that is, in an objectively normative manner, a proper object for religious attitudes and behaviours,

including, centrally, the attitudes and behaviours of worship. After some consideration of the ways in which a being that conforms to the core of the common conception of God would be great, attention turns to the philosophical conception of God, according to which God possesses essentially those properties that would be possessed by a proper object for religious attitudes and behaviours. Sobel argues that the common conception of God and the philosophical conception of God are distinct: there might be a God even if there is no perfect being, and there might be a perfect being even if there is no God. Finally, Sobel concludes with the observation that, in his opinion, ordinary God-talk and God-thought of believers and non-believers alike involves an undermining error, namely that there could be anything that is, in an objectively normative manner, a proper object for worship.

The second section—Arguments for the Existence of God—consists of seven chapters: “Classical Ontological Arguments” (including appendices on “symbols and symbolisations”, “derivations and models”, and “rules of inference and forms of derivation”), “Modern Modal Ontological Arguments” (including appendices on “possible worlds” and “modal logic”), “Kurt Gödel’s *Ontologischer Beweis*” (including appendices on “notes in Kurt Gödel’s hand”, “notes in Dana Scott’s hand”, and “mainly derivations”), “First Causes: ‘The Second Way’” (including appendices on “notes on Aquinas’ other ways” and “bangs and infinite regresses of causes”), “Ultimate Reasons: Proofs *a contingentia mundi*” (including appendices on “Leibniz’s problem with necessity”, “contingency in John Leslie’s axiarchism”, and “Robert C. Koons’ ‘New Look’ cosmological argument”), “Look ‘Round!—Arguments from Design” (including an appendix on “Swinburne’s teleological argument and his cumulative argument for the existence of God”), and “Clouds of Witnesses: ‘Of Miracles’” (including appendices on “Hume’s theorem” and “Condorcet’s Rule”). The nature of the content of these chapters is readily inferred from the chapter titles.

The third section—On Two Parts of the Common Conception—consists of two chapters: “Romancing the Stone” and “God Knows (Go Figure)”. The first of these chapters is about the analysis of omnipotence; the second is about the analysis of omniscience.

The fourth section—Arguments against the Existence of God—consists of two chapters: “Atheologies, Demonstrative and Evidential” and “The Logical Problem of Evil”. Again, the nature of the content of these chapters is readily inferred from the chapter titles.

The final section—Practical Arguments for and against Theistic Beliefs—consists of a single chapter: “Pascalian Wagers” (including an appendix on “hyperreals and decision theory”).

The 537 pages of main text are followed by 90 pages of notes, and a healthy collection of references. As I said initially, it’s a big book. But, with this overview behind us, we’re ready to take a closer look at some of the material that is contained in it.

2. Arguments for the Existence of God

I divide my comments on the second section of the book into four parts.

Ontological arguments: Sobel discusses the ontological arguments to be found in Descartes' *Meditations*, Spinoza's *Ethics*, St. Anselm's *Proslogion*, the various writings of Charles Hartshorne and Alvin Plantinga, and the notebooks of Kurt Gödel (and Dana Scott).

01. Sobel begins by claiming that Descartes' ontological argument is vitiated by a simple ambiguity in the use of the existential quantifier (and a consequent amphiboly in the key premise in Descartes' argument). The argument that Sobel criticises runs thus:

1. A supremely perfect being has every perfection.
2. Existence is a perfection.
3. (Therefore) A supremely perfect being does exist.

As Sobel points out, this argument is subject to a question about the use of the indefinite article. If the conclusion is existential, then the first premise must be so as well. But, in that case, the argument has a premise that no non-theist will accept. If, on the other hand, the premise is universal, then the conclusion is so as well, and it is then a conclusion that non-theists can accept with equanimity.

I am not convinced that this criticism does justice to the text of the *Meditations*. The text says, for example, "I discover within me an idea of God, that is, of a supremely perfect being ...". On the evidence of the text, then, the idea of God is not quantificational: what Descartes has is an idea of a *particular* supremely perfect being. From the idea of God, we can immediately see that the claim that God is omnipotent is true. (And this is so whether or not God exists: it is just 'part of the idea of God' that God is omnipotent.) But, thinks Descartes, we can see no less immediately that the claim that God exists is true: existence belongs to the true and immutable nature of God no less than does omnipotence. An encapsulation of this argument might run as follows:

1. The true and immutable nature of God includes supreme perfection. (Premise)
2. If a property P belongs to the true and immutable nature of N, then the sentence 'N is P' expresses a truth. (Premise)
3. (Therefore) The sentence 'God is supremely perfect' expresses a truth. (From 1, 2.)
4. (Therefore) God is supremely perfect. (From 3, disquotational property of truth)
5. Supreme perfection includes existence, i.e. existence is perfection. (Premise)
6. (Therefore) God exists. (From 4, 5)

4.-6. in this formulation is the argumentative core that parallels 1.-3. in Sobel's formulation of the core of the argument. But it is clear that 4.-6. cannot be faulted on the grounds that it involves a quantificational ambiguity and a consequent amphiboly. Note that I am not claiming that the above argument really does justice to Descartes' text; as I said in Oppy (1995:21), the argument in that text is rather elusive. However, I think that

the encapsulation above does not do less justice to the text than the encapsulation that Sobel gives; and yet it clearly evades what Sobel takes to be the central, simple, logical objection that vitiates the Cartesian argument. (It is true that, in the Cartesian text, there is some talk of ‘a God’ as well as talk of ‘God’. But consider, for example: ‘Because I cannot conceive God without existence, it follows that existence is inseparable from him, and hence that he truly exists.’ Not ‘a God’. Just ‘God’. Sobel claims that ‘English translations of Descartes’ .. argument ‘work’ neither the name ‘God’ nor related definite descriptions’ (40), and goes on to add that ‘no ontological argument of significance ... exploits possible conditions for the use of the name “God”’. I’m not convinced.)

O2. Next, Sobel argues that Spinoza’s argument is vitiated by an amphiboly of scope. To this argument he gives the following formulation:

1. If a thing can be conceived not to exist, its essence or nature does not involve existence.
2. Existence belongs to the nature of substance
3. (Therefore) The infinite substance cannot be conceived not to exist.
4. If an infinite substance exists, then God exists.
5. What cannot be conceived not to exist, exists necessarily.
6. (Therefore) God, the infinite substance, necessarily exists.

On Sobel’s account, 3. is amphibolous between:

- 3a. It is not the case that there is a thing such that: (i) it and only it is an infinite substance, and (ii) it can be conceived not to exist

and:

- 3b. There is such a thing that (i) it and only it is an infinite substance, and (ii) it is not the case that it can be conceived not to exist.

Sobel’s analysis of the argument 1.-6. is subtle and convincing. However, as in the case of Descartes, I am not sure that Sobel’s encapsulation really does justice to the text. In his definitions, Spinoza writes: ‘By *God*, I mean a being absolutely infinite’. Then, at the key Prop XI, he writes: ‘Conceive, if possible, that God does not exist: then his essence does not involve existence. But this (by Prop. VII.) is absurd. Therefore God necessarily exists.’ Sobel claims that Spinoza merely uses the word ‘God’ as an abbreviation for a very long description—‘the substance consisting of infinite attributes, each of which expresses eternal and infinite essence’—introduced at Definition VI and the statement of Prop IX. (46). But—to consider one possible alternative suggestion—it might be that Spinoza instead took it that that long description does no more than to fix the referent of the name ‘God’; and, in that case, it is by no means obvious that the replacement of the name, by the associated description, in the scope of an intensional operator, is legitimate. Sobel *may* be right that Spinoza and Descartes tripped up on amphibolies of scope and article ambiguity; but the suggestion that they tripped up on subtleties in the use of the name ‘God’ is not, I think, as readily discounted as Sobel seems to suppose.

03. In his discussion of Anselm's *Proslogion II* argument, Sobel supposes that the aim of the argument is to establish the existentially quantified conclusion that there is at least one being than which no greater can be conceived. Once again, I'm not sure that this is *evidently* the best way to read the text. Anselm writes: "Now we believe that You (i.e. God) are something than which nothing greater can be thought. . . . But surely when this same Fool hears what I am talking about, namely 'something-than-which-nothing-greater-can-be-thought', he understands what he hears, and what he understands is in his mind." So what *is* it that is here asserted to be in the mind of the Fool? I suspect that Anselm would have been happy with the answer that it is *God* that is in the mind of the Fool. (Talk of 'that-than-which-no-greater-can-be-conceived' and 'something-than-which-no-greater-can-be-conceived' might be construed on the same lines as 'she-who-must-be-obeyed' or 'you-know-who': in context, these expressions can actually function as (descriptive) *names*. At the very least, it is worth observing that, at least in Charlesworth's translation, the hyphens do real work, however that work is to be understood.) Consequently, I'm not convinced that the argument that Sobel analyses is a faithful representation of the argument in (what he takes to be) Anselm's text.

Sobel's formulation of the argument goes something like this. (I hedge because Sobel doesn't give a fully explicit formulation in which the key premises are all identified):

1. At least one thing than which nothing greater can be thought exists in the mind.
(Premise, justified by preliminary argument.)
2. Whatever exists solely in the mind can be thought to exist in reality too. (Premise)
3. It is greater to exist also in reality than it is to exist merely in the mind. (Premise)
4. Nothing can be thought that is thereby thought to be greater than something than which nothing greater can be thought. (Premise)
5. (Hence) At least one thing than which nothing greater can be thought exists both in the mind and in reality. (From 1, 2, 3, and 4.)

About *this* formulation of the argument, Sobel says that the fatal flaw occurs in the preliminary argument for the first premise. Given the requirements for being 'that than which nothing greater can be thought', whether or not there is something in the mind that corresponds to these words depends upon whether or not there is such a thing in reality. '[The Fool] cannot deny that he has in mind the words, or that he has in mind what they mean, for he understands them. But he can wonder whether he has in mind a thing described by them, for he can understand that he does have a thing in mind, given how these words describe things, if and only if such things exist in reality.' (65) Sobel adds that this objection is to be found in the work of Gaunilo, and that it is 'deeper and more important than the 'perfect island objection' for which he is famous' (66).

I think that there is something more to be said here on behalf of the 'perfect island objection'. It isn't obvious that the objection upon which Sobel relies is the only one that should be lodged against his formulation of Anselm's argument. (Indeed, until we are given a theory about existence in the mind, it isn't entirely clear that it is even a successful objection.) Moreover, it is far from clear that Sobel's formulation of the argument is the best that can be done for Anselm's argument. However, there is good

reason to think that the ‘perfect island objection’ shows that there is something wrong with Anselm’s argument regardless of the details of the proper formulation of that argument. That the objection doesn’t tell you exactly *where* the argument fails—invalidity? unacceptability of a premise? circularity?—is a weakness, but it is also a strength. In particular, if there are many different readings of the text that yield arguments that go wrong in very different ways, then there are surely grounds for saying that it is actually the perfect island objection that is deepest and most important. (Sobel is perhaps right that critics cannot be content with putting ontological arguments in bad company. (33): philosophers worth their salt will want more than that. But putting ontological arguments in bad company might nonetheless be a significant philosophical achievement.)

O4. In his discussion of modern modal ontological arguments, Sobel discusses the following argument (due, essentially, to Hartshorne):

1. It is possible that there exists a perfect being. (Premise)
2. It is necessarily the case that, for all x , it is necessarily the case that, if x is perfect, then it is necessarily the case that x exists and is perfect. (Premise)
3. (Therefore) There exists a perfect being. (From 1, 2)

and many variants thereof. About all of these arguments, he observes that the crucial difficulty lies in the first premise: because conceivability does not entail possibility, there is no non-question-begging justification that can be offered for this premise. Moreover, he is rightly sceptical of Plantinga’s claim that, even if none of these arguments is a proof of the existence of God, these arguments are at least proofs of the rational acceptability of theism. Finally, Sobel says that ‘Necessary existence, even if it had the philosophical advantages that some claim for it, far from contributing to proper greatness and worshipfulness, is *prima facie*, and, I think, not only *prima facie*, at odds with that, and disadvantaged in the extreme religiously. ... There are limits to non-absurd orientations of religious attitudes and behaviour, and ... all necessarily existent things certainly seem to lie beyond.’ (138) (Also: ‘Necessary Existence is not a possible property of a god. It is, in my modal opinion, not a possible property of a being who could ‘make a difference’, to whom one could reasonably be grateful, to whom one could reasonably turn for assurance, assistance, or guidance. It is not, to cut to the main thing, a possible property of a being whom one could without absurdity worship.’ (137))

I’m not sure that this last point is right. I am sceptical of the idea that a necessarily existent being could be worthy of worship; but that is because I am sceptical of that idea that there could be *any* proper object of worship. If we suppose that there could be proper objects of worship, then I’m not sure why necessarily existent objects should not be amongst them. At the very least, this matter deserves further serious investigation.

O5. Sobel’s very nice discussion of Gödel’s ontological argument also makes play with the claim that Necessary existence is not a possible property of a God. Even in suitably tidied-up versions of Gödel’s argument—such as the one provided by Anthony Anderson—the question arises whether it is really enough to establish that the positive* properties are compossible. According to Sobel, given the religious and/or spiritual

aspirations of the proof, we need some kind of substantive guarantee that the object whose existence is (allegedly) established by Gödel's ontological argument is indeed a being that is worthy of worship.

Rather than taking up questions about Gödel's ontological argument here, I shall close this discussion with some remarks about the following ontological argument:

1. A (unique) perfect being would be deontically perfect.
2. (Hence) It ought to be the case that there is a (unique) perfect being.
3. (Hence) It is possible that there is a (unique) perfect being.
4. (Hence) It is the case that there is a (unique) perfect being.

In Oppy (1995:290) I claimed that this formulation is not marred by an equivocation in its use of indefinite descriptions. Sobel disagrees. (See 551n43.) Now, I agree that the formulation of 1. is unclear. My intention was something like this:

- 1.* If there were a (unique) perfect being, then *it*—i.e., that (unique) perfect being, the (unique) perfect being that there would be—would be deontically perfect, i.e. *it* would be something that ought to exist.

This sentence is neither a universal generalisation nor an existential generalisation; rather, it is subjunctive conditional with an existentially quantified antecedent, and a consequent of a kind whose analysis is a matter of considerable current controversy. While I can agree with Sobel that 'The inference from [1] to [2] is ... not immediate', I do think—as I originally asserted—that the problem here is *not* that there is an equivocation in the use of indefinite descriptions. Moreover, I do not think that it is obvious that the reformulation of the argument has a more serious flaw than the equivocation in the use of indefinite descriptions that Sobel identifies in Kordig's initial formulation of this argument. I think that what look like small changes in the formulation of an ontological argument can radically alter the kind of fault to which that argument is subject: and that, in the case of arguments that have received serious defence, it is almost always the case that it is not entirely clear what is the best way to interpret the offered argument. (Modern modal ontological arguments are the clear exception here: we do know how best to formulate the arguments of Hartshorne and Plantinga.)

Cosmological Arguments: Sobel discusses Aquinas' second way, and a Leibnizian cosmological argument.

C1. Sobel reconstructs the 'second way' argument as follows:

1. There exist sensible things that have efficient causes.
2. If a thing has an efficient cause, it has exactly one efficient cause.
3. Efficient causes of things are prior to them.
4. The priority relation is irreflexive.
5. The priority relation is transitive.

6. Every sensible thing that is an efficient cause of some sensible thing has itself an efficient cause.
7. In efficient causes it is not possible to go to infinity.
8. (Therefore) There is a first cause among efficient causes.

In his discussion of this argument, Sobel considers both interpretative difficulties and philosophical difficulties. The interpretative difficulties concern the notion of ‘efficient causation’ to which the argument appeals: do we mean familiar ‘generative’ efficient causes, or do we mean ‘sustaining’ efficient causes? If we mean the latter then, according to Sobel, it is clear that the argument is dead in the water, since none but those already committed to a God-centred world-view suppose that there are any ‘sustaining’ efficient causes. However, if we mean the former, then there are three compelling reasons why the argument is unacceptable: (i) there are no good reasons for thinking that there cannot be an infinite regress of ‘generative’ efficient causes; (ii) even if those things that have ‘generative’ efficient causes have unique first ‘generative’ efficient causes, there are no obvious reasons why all things must have the same first ‘generative’ efficient cause; and (iii) even if all things must have the same first ‘generative’ efficient cause, there is no obvious reason why that thing must still exist.

I think that there are more difficulties that face the argument that Sobel addresses than he is prepared to allow, and that some of these further difficulties are more important than the ones upon which Sobel focuses. I agree with him that it is controversial to claim that there cannot be an infinite regress of generative causes; and that it is controversial to claim that there can only be one first generative cause; and that is controversial to suppose that, if there were a first generative cause, then that first generative cause would still be in existence now. But I do not think that it should be supposed that the argument cannot be reasonably opposed by those who grant that there cannot be an infinite regress of causes, and that there could be at most one first generative cause, and that if there were a first generative cause, it would still be in existence now.

In particular, it seems to me that it highly controversial to suppose that every sensible thing that is an efficient cause of some sensible thing has itself an efficient cause, at least if it is allowed that states of the physical universe are ‘sensible things’. It seems to me that it is not a possibility to be lightly dismissed that the physical universe has no generative cause. If the physical universe has an initial state—as we must suppose if we suppose that there cannot be an infinite regress of generative causes—and if we suppose that states of the universe are generative causes of subsequent states of the universe—then, on the view that the physical universe has no generative cause, we shall be committed to the claim that the initial state of the physical universe is a ‘sensible thing’ that lacks a generative cause, and yet which is a generative cause of subsequent states of the physical universe.

Another point that should be insisted on in any discussion of this kind of argument is that there is a very large gap between the claim that there is a first cause amongst efficient causes and the claim that God—i.e. a normatively proper object of worship—exists. Perhaps there are successful ways to argue from the existence of a first cause amongst

efficient causes to the existence of a normatively proper object of worship—but, at the very least, it is far from obvious how any such argument might run. (It may also be worth noting that it is not at all clear that it must be conceded that efficient causes of things are *only* prior to them—as the combination of premises 3, 4, and 5 requires. It is not obvious that there cannot be a circle of efficient causes; it is not obvious that it is impossible for there to be backwards causation, and time travel into the past. Perhaps the claim that there can be a circle of efficient causes is more controversial than the claim that there can be an infinite regress of efficient causes—but, at the very least, it is not obvious to me that this is so.)

C2. Sobel’s reconstruction of the Leibnizian cosmological argument is as follows:

1. The universe exists.
2. The universe is a contingent entity.
3. For each entity that exists, and each fact that obtains, there is a sufficient reason.
4. The sufficient reason for the existence of any entity runs in the end in terms of an existent being.
5. (Hence) There exists an ultimate reason for the world, which reason is itself a necessary being.

The chief difficulty that Sobel finds for this argument is that the premises of the argument are inconsistent. To bring out the inconsistency, we need only note that, whatever else is to be required of sufficient reasons, sufficient reasons necessitate that for which they are sufficient reasons. Consequently, if everything is to have a sufficient reason, then nothing can be contingent.

I agree with Sobel that it is necessarily true that, if there is contingency, then there is brute contingency. So I agree with Sobel that the project of formulating arguments of this ilk is fatally flawed. However, I would insist that there are *other* reasons why the argument under examination is questionable, i.e. reasons that are independent of dispute about the ultimate bruteness of contingency. Even if there is a necessary being that is the ultimate reason for the world, it still requires work to establish that this necessary being is a normatively proper object of worship. Moreover, if we deny the mereological assumption that the sum of two contingent beings is itself a contingent being, then we can deny that claim that there is any such thing as ‘the universe’. If we then allow that it is possible to have an infinite regress of sufficient reasons, it seems that we can allow that it is possible that every entity is a contingent entity that has a sufficient reason for its existence in the existence of another being. Granted, it is controversial to suppose that there could be an infinite regress of sufficient reasons; and it is controversial to deny the mereological claim that the sum of two contingent beings is itself a contingent being. But it is far from clear that one could not reasonably hold such views.

Arguments for Design

Sobel’s discussion of arguments for design is constructed as a discussion of Hume’s *Dialogues Concerning Natural Religion*. The first half of the chapter aims to explain why

it was reasonable for Hume to conclude that biological evidence supports the bare conclusion that the world is the product of intelligent design (but no further conclusion about the nature of the intelligent designer). The second half of the chapter then undertakes to show that our doxastic situation is very different from that of Hume: "... from the vantage point of present evidence and theories unavailable to Hume, the facts now fail to support any sort of designer, ... and natural theology resolves itself into nothing" (239). The chapter concludes with an appendix in which Swinburne's 'cumulative argument for the existence of God' is given careful, critical scrutiny.

Some of the argument in the second half of the chapter focuses on 'fine-tuning' arguments for cosmic design. Sobel's assessment of these arguments is interesting. He claims that, in the contest between the hypothesis that there is a 'fine tuner' and the hypothesis that there are many universes, he would place hardly any credence in either hypothesis. If he were persuaded that there is no other way in which the 'fine-tuning' data can be grounded in a 'deeper theory', then he would put down the appearance of fine-tuning to chance. However, it is not impossible that we shall one day have a deeper theory that possesses the plausibility that the currently available alternatives lack. It is unclear how much credence should be placed in the hypothesis that there are deeper undiscovered scientific theories that can successfully explain the 'fine-tuning' data.

I am not sure that I agree with Sobel that, given the facts and theories known and available for consideration in 1776, the hypothesis of an amoral intelligence somehow responsible for appearances of design in nature was the best available hypothesis, and hence worthy of reasonable, albeit reluctant, assent on Hume's part. I do agree with Sobel that Hume was right in thinking that the possible explanations that Hume canvasses in the *Dialogues* are 'a poor lot'; however, I'm not sure that there is really good reason to think that the hypothesis of an amoral intelligence somehow responsible for appearances of design in nature is either sufficiently good, or sufficiently better than the competing hypotheses, to warrant even reluctant assent.

On the first point: if we recognise that the hypotheses that we have framed thus far are 'a poor lot', then there is no plausible principle of inference that supports the suggestion that we should accept the best of them. (A plausible formulation of a principle of inference to the best explanation will always include a clause to the effect that one infers to the best explanation only provided that one has at least one explanation that is sufficiently good.) Sobel himself notes that, at least sometimes, Hume was 'of a mind to draw no conclusions from natural theology' (268); if the hypotheses between which Hume could choose were all sufficiently poor, then that seems to me to be the uniquely reasonable response to make.

On the second point: while I'm inclined to dispute even the claim that the hypothesis of an amoral intelligence somehow responsible for appearances of design in nature is the best of the hypotheses that is explicitly countenanced in the *Dialogues*, I'd certainly want to insist that Hume had available to him the resources to frame hypotheses that are no worse than that one. Given Hume's ignorance of geology and biology, what *good* reason did he have for thinking that the hypothesis that current apparent design can be fully

explained in terms of replication from earlier apparent design is *much worse* than the hypothesis of an amoral intelligence somehow responsible for appearances of design in nature? Etc.

Arguments for Miracles

Sobel's discussion of miracles is also constructed as a discussion of Hume, but this time of his famous chapter "On Miracles". Much of the focus in this chapter is on the 'general maxim' that is the centrepiece of Hume's argument, viz. "...that no testimony is sufficient to establish miracle unless the testimony be of such a kind, that its falsehood would be more miraculous, than the fact which it endeavours to establish, and, even in that case there is mutual destruction of arguments, and the superior only gives us an assurance suitable to that degree of force, which remains, after deducting the inferior". On Sobel's account, the first part of this may be interpreted in such a way that it comes out as a theorem of the probability calculus; but, as is widely recognised, the second part is rather harder to vindicate. As with the discussion of arguments for design, Sobel's discussion of arguments for miracles is subtle and interesting; I do not have serious disagreements with the arguments and conclusions that are presented in this chapter of the book.

At the conclusion of this discussion of the second part of Sobel's book, it is worth returning to the observation that Sobel makes no attempt to provide a comprehensive assessment of arguments for the existence of God. There are many kinds of arguments for the existence of God that receive no consideration in this discussion. However, the arguments that are discussed are clearly amongst the best-known and most influential arguments for the existence of God, and they are all given clear, careful, and insightful discussion. I do not know of a better discussion of the collected arguments than the one that Sobel provides.

3. Two Parts of the Common Conception

P1. Omnipotence: Sobel provides the following definition of 'omnipotence':

A being *b* is *omnipotent* iff, for any universal action *a*, *b* can do *a* iff (1) someone can do *a*; and (2) *b*'s doing *a* would not be a case of *b*'s doing *a*', where *a*' is a universal action such that, for every being *c*, even if *c* does not have a distinctive essential nature and is not a necessary existent, *c* cannot do *a*'. (Here, a *universal action* is an action performance of which does not essentially involve any particular person as its agent, as its subject, or in any other way. And a being has a *distinctive essential nature* iff there is a universal property such that it has this property essentially, and not every being has this property essentially.)

Put roughly, a being is omnipotent iff it is capable of doing any generally possible universal action. According to Sobel, it is possible that there is an omnipotent being; but it is not possible that there is an essentially omnipotent being. Moreover, according to Sobel, many theists who suppose that God is omnipotent really only mean to say—or

perhaps ought really only mean to say—that God is an *only necessarily self-limited power*, i.e. a being which is such that:

It is capable of each task *t* that it is logically possible that some being should do, which is such that (1) for each attribute, if any, that *x* has essentially, *x*'s performing *t* is consistent with its having this attribute; and (2) if *x* has necessary everlasting existence, then performing *t* is consistent with its continuing to exist.

So, on Sobel's account, while it is logically possible for there to be an omnipotent being, God is not an omnipotent being, but rather a necessarily self-limited power.

I think that Sobel is right to distinguish between omnipotence and the powers that would be possessed by God if God existed. If God existed then, on plausible views of the divine attributes, God would be a necessarily self-limited power. In particular, I think, God's powers would be constrained by God's essential goodness, in such a way that God's powers could be surpassed by the powers of an otherwise similar being that was not essentially good.

P2: Omniscience: Sobel's discussion of omniscience addresses Patrick Grim's Cantorian arguments for the impossibility of omniscience. Sobel spends most time considering Grim's claim that omniscience is impossible because it is impossible for there to be a set that contains everything that an omniscient being would need to know. In response to this claim, Sobel suggests various ways in which a defender of the possibility of omniscience might get by without the assumption that there is some kind of collection or totality of all the things than an omniscient being would need to know. Sobel also spends some time analysing—and rejecting—Grim's argument for the radical conclusion that there can be no proposition that is *about* all true propositions. Here, again, Sobel finds reasons for saying that Grim's argument is unconvincing. In the end, Sobel says:

Regarding what would be Divine Knowledge, it is reasonable to say, as has traditionally been said, that it would in one way or another include knowledge of every true proposition. We should allow that it may amount to even more than that, to some of which more we may be able at least to advert, and regarding the rest, if any, rather than emulating Kant, we should say no more. (393)

I think that Sobel's criticisms of Grim are cogent: there is no good argument for the impossibility of omniscience from the kinds of Cantorian considerations adverted to in the arguments just mentioned. However, there is something of a jump in the move from the failure of those particular arguments for the impossibility of omniscience to the conclusion that omniscience is possible. There are other arguments that have been put forward for the conclusion that omniscience is impossible—e.g. Grim's arguments from the nature of essential indexicals—and those arguments should also be given their due. (My own view is that these arguments also fail to establish that omniscience is impossible. The only point to be registered here is that Sobel's discussion is incomplete; it is premature to move to the conclusion that omniscience is possible when not all of the known arguments for the conclusion that it is not possible have yet been defeated.)

4. Arguments against the Existence of God

E1 Evidential Arguments from Evil The bulk of the chapter on evidential arguments from evil is concerned with a careful assessment of some of the different formulations that Bill Rowe has given of arguments of this kind. Sobel finds faults of various kinds in these formulations. However, Sobel also goes on to insist that there is something right that lies behind the different formulations of evidential arguments from evil, something that was recognised by Hume in the *Dialogues*, but that has not received sufficient attention in contemporary discussions.

According to Sobel, the claim that *as far as we can see there has been and is evil and suffering that could have been avoided by an omnipotent being, and is such that, if it had been avoided, the world would have been better for it* is sufficient to establish (for a particular person) that *there is no omnipotent, omniscient and perfectly good being* iff the conditional probability that that person would attribute to the claim that *there is no omnipotent, omniscient and perfectly good being* conditional on the claim that *as far as we can see there has been and is evil and suffering that could have been avoided by an omnipotent being, and is such that, if it had been avoided, the world would have been better for it* is greater than 0.5, given that this person's total evidence was weakened by disjunction on the claim that *as far as we can see there has been and is evil and suffering that could have been avoided by an omnipotent being, and is such that, if it had been avoided, the world would have been better for it*.

Moreover, Sobel also insists that, for almost any person, the conditional probability that that person would attribute to the claim that *as far as we can see there has been and is evil and suffering that could have been avoided by an omnipotent being, and is such that, if it had been avoided, the world would have been better for it* conditional on the claim that *there is no omnipotent, omniscient and perfectly good being* is greater than the conditional probability that that person would attribute to the claim that *as far as we can see there has been and is evil and suffering that could have been avoided by an omnipotent being, and is such that, if it had been avoided, the world would have been better for it* conditional on the claim that *there is an omnipotent, omniscient and perfectly good being*, all again given that this person's total evidence was weakened by disjunction on the claim that *as far as we can see there has been and is evil and suffering that could have been avoided by an omnipotent being, and is such that, if it had been avoided, the world would have been better for it*.

However, Sobel goes on to point out that, while there may be some interest that attaches to this way of framing evidential arguments from evil, it would be better to turn to a formulation in which all of the relevant evidence is given explicit treatment, and none of that relevant evidence is buried in the 'background information' (from hence it has only an indirect consequence for prior probabilities and likelihoods).

In a Bayesian framework, the key claim from three paragraphs back amounts to the observation that the claim that *as far as we can see there has been and is evil and*

suffering that could have been avoided by an omnipotent being, and is such that, if it had been avoided, the world would have been better for it is sufficient to establish (for a particular person) that *there is no omnipotent, omniscient and perfectly good being* **iff** the ratio of the conditional probabilities of the claim that *as far as we can see there has been and is evil and suffering that could have been avoided by an omnipotent being, and is such that, if it had been avoided, the world would have been better for it*, conditional on the claims that *there is no omnipotent, omniscient and perfectly good being* and that *there is an omnipotent, omniscient and perfectly good being* is greater than the ratio of the prior probabilities that *there is an omnipotent, omniscient and perfectly good being* and that *there is no omnipotent, omniscient and perfectly good being*. This formulation makes it clear that anyone who gives a sufficiently high prior probability to the claim that *there is an omnipotent, omniscient and perfectly good being* will be able to resist the evidential argument from evil—and that seems to be the right outcome. But, on the other hand, this formulation also makes it clear that, unless one makes quite implausible sceptical assumptions, then—as, following Hume, Sobel emphasises—we should agree that the *likelihoods* of evil and suffering on traditional theism do indeed tell against traditional theism in the absence of substantial counterbalancing prior probabilities.

E2 Logical Arguments from Evil Sobel discusses a series of “logical” arguments from evil, each of which is designed to overcome a potential objection that might be lodged against its predecessor in the series. The potential objections in questions are not such that Sobel supposes that it is evident that they succeed; on the contrary, in some cases, Sobel is inclined to judge that these objections fail. However, he supposes, the concession that he does not *know* that these objections fail is sufficient justification to motivate the decision to “move on” to the next argument in the series.

Sobel’s discussion begins with an argument from the existence of evil. Perhaps this argument can be met by the objection that a best of all possible worlds would have some evil in it. (If we distinguish between natural evil and moral evil, we might concede that a best of all possible worlds would have some natural evil in it. It is much less clear that we might concede that a best of all possible worlds would have some moral evil in it.)

Next, Sobel considers an argument from the world’s not being a best world. Perhaps this argument can be met by the objection that it is possible that all creatures suffer from transworld depravity. (Sobel thinks that, when we get “real and reasonable” (459), we cannot believe in the possibility of universal transworld depravity—except, perhaps, for those of us who are already perfect-being theists. Put another way, Sobel is only “nearly sure” (460) that universal transworld depravity is not possible.)

Third, Sobel considers an argument from the world’s not being a best divinely creatable world. Perhaps this argument can be met by the objection that even an omniscient being would have limited middle knowledge, i.e., limited knowledge of “would-counterfactuals of freedom”. (Once again, Sobel is happy to allow that it is “not obvious” (465) that the key assumption in this possible objection is false, even though—I think—he is inclined to suppose that the key assumption is, indeed, false.)

Fourth, Sobel considers an argument from the world's not being a best divine bet world, i.e. not being the kind of world that could result from the making of an "educated guess" by a divine being with limited middle knowledge. Perhaps this argument can be met by the objection that there is no best divine bet world—and, we might add, no best divinely creatable world, and no best world. (The point of the two additional observations is that these considerations might also serve to defeat the arguments considered previously.)

Finally, Sobel considers an argument from the existence of a better world—or a better divinely creatable world, or a better divine bet bound to result in a world other—than ours. According to Sobel, this claim is not met either by the suggestion that God might resort to a mixed creation strategy, or by the suggestion that God might create the worse because motivated by love for that outcome. But, if that's right, then it's not at all clear how this argument might be successfully defeated.

This final argument might be cast as follows:

1. If there is a best possible bet w.r.t. the creation of a world, then our world could not be the result of such a bet on the part of a perfect being.
2. If there is no best possible bet w.r.t. the creation of a world, then our world could not be the result of such a bet on the part of a perfect being.
3. (Therefore) Our world could not be the result of a bet w.r.t. the creation of a world on the part of a perfect being.

About this argument, Sobel suggests that it—or something rather like it—suffices to refute perfect-being theism (479). However, he holds that, for believers in God who are not perfect-being theists, there is no *logical* problem of evil; and moreover, he holds that the vast majority of believers are not perfect-being theists. But he does not suppose that these observations amount to a disparagement of logical arguments from evil: these arguments are "very interesting for those who are interested" (479).

Sobel's chapter concludes with an appendix in which he argues that there are no good reasons for supposing that there is a logical incompatibility between the claim that our world features free agents who exercise that freedom from time to time, and the claim that there is an omniscient being. The appendix proceeds by considering—and objection to—four arguments for the conclusion that there is a logical incompatibility of the kind in question. I think that Sobel's scepticism about these arguments is justified; and I know of no better arguments for the conclusion in question.

(Let me make one last, brief comment, on an issue that arises in the course of the discussion of the 'no best world' objection. At p.619n35, Sobel claims that one of the lessons of the St. Petersburg game is that the infinite expected value of this game is *prima facie* not relevant to what an agent should be prepared to pay to play it, since such an agent knows that she is bound to be returned a finite sum. While I agree with the spirit of this remark, I think that it is not exactly right. If I agree to play the St. Petersburg game, I do not *know* that I am *bound to be* returned a finite sum; it is not *impossible* that I shall receive no return because the coin *never* comes up tails. What I do know is that, if I

receive a return, then that return will be finite; but that's enough to show that the infinite expected value of the game is *prima facie* not relevant to what an agent should be prepared to pay to play it.)

5. Arguments For and Against Theistic Belief

Sobel's discussion of Pascalian Wagers begins with a defence of the claim that someone who lacks—or thinks that she lacks—intellectual grounds sufficient to justify an answer to the question *Does God exist?* may nonetheless have—and recognise that she has—sufficient practical grounds to answer the question *Should I believe that God exists?* Sobel's defence of this claim begins with a consideration of the responses that one might make to the theoretical question of whether one's lover is trustworthy and the practical question of whether one should trust one's lover. In his view, one could permissibly respond to the pair of questions about one's lover in any of the following ways: (yes, yes), (no, no), (yes, no), (no, yes), (don't know, yes), (don't know, no), (yes, it doesn't matter), (no, it doesn't matter). "There are no restrictions on the ways in which a person's intellectual and practical reasons for or against a belief can fall out." (501) Sobel then goes on to add that *the case for beliefs in God is similar*.

Contra Sobel, it seems to me that one might wonder just how similar the case of belief in God is to the case of trust in one's lover. It does seem right to say that it is one question whether one judges that one's lover is trustworthy and a more or less independent question whether one should trust one's lover. (Maybe that's too strong. At any rate: it *could* be reasonable to trust someone even if you judge that that person is not trustworthy.) But it doesn't seem right to say that it is one question whether one judges that God exists, and a more or less independent question whether one judges that one should believe that God exists. It simply *isn't* plausible to claim that the relationship that holds between the judgment that God does not exist and the judgment that one ought (nonetheless) to believe that God exists precisely mirrors the relationship that holds between the judgment that one's lover is not worthy of trust and the judgement that one ought (nonetheless) trust one's lover. Practical—non-evidential, non-theoretical—reasons can impact on the question whether one ought to *trust* one's lover; but only intellectual—evidential, theoretical—reasons can impact on the question whether one ought to *believe* that God exists. (Doubtless there is much more to say here; but let's move on.)

The bulk of Sobel's discussion is taken up with consideration of a series of different "Pascalian" wagers. In short, the distinguishing features of these different wagers are, in turn: (i) that gain is anticipated even in the present life; (ii) that believing would have only other-worldly rewards; (iii) that belief is not considered to be cost-free; (iv) that alternative reward-policies for salvation are taken seriously; (v) that competing God-hypotheses are taken seriously; (vi) that alternative policies for punishments, as well as for rewards, are taken seriously; (vii) that reason itself is considered as something great (so that the cost of belief turns out to be infinite); (viii) that all goods and evils are considered to be commensurable; and (ix) that God would frown upon wilful believing. Consistent with Sobel's claim that "what people should believe ... depends upon their credences and preferences, their values and probabilities" (532), Sobel finds that different

wagers are rationally suited to different patterns of credences and preferences: different reasonable theists will (and should) find different wagers on God rationally compelling; but reasonable atheists find (and should find) no wagers on God rationally compelling.

Perhaps the most interesting feature of Sobel's treatment of the various wagers is the use that he makes of non-standard arithmetic in his analyses. In the appendix to this chapter, Sobel discusses both Robinson's hyper-real numbers, and Conway's surreal numbers, and notes reasons for preferring (and dispreferring) each of these extensions of standard arithmetic. Sobel claims that there is no reason for eschewing the use of non-standard arithmetic in decision theory (and hence, for example, he is able to claim that Duff's well-known objection to Pascal's wager fails on technical grounds). I think that there is at least one significant reason for eschewing the use of non-standard arithmetic in decision theory that Sobel fails to consider: namely that, while there are *canonical* models for the standard numbers, there are no canonical models for the non-standard numbers. The fact that there are no canonical models for the non-standard numbers seems to me to be a reason for thinking that these numbers cannot be used to "measure" reality. (It makes *no sense* to suppose that I might have $\omega+2$ marbles; or that the value of heaven might be $2\omega+3$ utils.)

Concluding Remark

As I noted at the outset, there is much more that is worthy of comment in this book, but upon which I have made no comment in the present review. Let me end by endorsing the dust jacket comment attributed to Robert Koons: "Sobel's book is the best [book on philosophy of religion from a sceptical point of view] since Mackie's [*The Miracle of Theism*], and in many respects it's better than [that book]." Indeed.