Ontological Arguments

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In this paper I shall delimit an infinite class of valid arguments I shall call *ontic* arguments. These arguments proceed from a premise that asserts of a set of properties that it satisfies certain conditions, to the conclusion that there exists something that exemplifies that set of properties. If the conclusion of an ontic argument can be read as asserting the existence of a Deity, then I call that argument an *ontological* argument. In the present sense of this term, there are infinitely many ontological arguments, all of them valid. I shall devote special attention to one particular ontological argument, the most modest, since many of its features are shared by all other ontological arguments. I shall argue that anyone who wants to claim either that this argument is sound or that it is unsound is faced with grave difficulties.

I shall take it for granted that the connection between what I call ontological arguments and traditional presentations of "the" ontological argument (there is, of course, no one argument that can be called *the* ontological argument) is plain. I make the following historical claim without arguing for it: Every well-known "version of the ontological argument" is either, (i) essentially the same as one of the arguments called ontological herein, or (ii) invalid or outrageously question-begging, or (iii) stated in language so confusing it is not possible to say with any confidence just what its premises are or what their relation to its conclusion is supposed to be. I should myself be inclined to place all historical "versions of the ontological argument" in category (iii), but this is a function of the way I read them: I would place many of the arguments certain contemporary philosophers claim to see in the original sources in one of the first two categories. I shall examine one contemporary argument, that presented by Alvin Plantinga in

[9] (Ch. X) and in [8] (pp. 85-112). Plantinga's argument falls into category (i). I shall dispute Plantinga's contention that his argument can be used to show that belief in God is not contrary to reason.

I

We shall require several preliminary notions. I shall assume the reader is familiar with the notion of a *possible world*,[1] and understands locutions of the following forms:

(The proposition) p is true at (the world) w[2]

(The object) o exists at (the world) w[3]

(The object) o has (the property) r at (the world) w.[4]

If an object has a certain property at every world at which that object exists, then we say it has that property *essentially*. If an object has a property but fails to have it essentially, we say it has that property *accidentally*.

Now consider the property an object has just in the case that it exists at every possible world, or (what is the same thing) would have existed no matter *what* had been the case. I shall call this property 'necessary existence', 'N' for short. In giving this property this name, I am giving the words 'necessary existence' what might be called their *Leibnizian* sense. I distinguish Leibnizian from *Thomistic* necessary existence—I am thinking of the Third Way—which an object has just in the case that there is no world at which it is generated or corrupted. Note that N is not the same property as that of having existence essentially (cf. the familiar phrase 'a being whose essence involves existence'), for everything has existence (the property associated with such open sentences as 'x exists' or 'There is something identical with x' or 'x is identical with x') essentially.

Some philosophers have held that N is an *impossible* property, one that, like the property of being both round and square, could not possibly be exemplified by anything. But I have never seen a plausible argument for this view.[5] Moreover, I have seen plausible arguments for the conclusion that N *is* exemplified. Arguments for the existence of abstract objects are well known,[6] and many abstract objects seem to have N. I shall take an orthodox realist view of certain abstract objects, to wit, *mathematical* objects, such as numbers. I generally use mathematical objects rather than some other sort of necessary object in illustrating the application of a definition or concept involving necessary existence because the question whether a given mathematical object has or fails to have a given property is often uncontroversial.

II

An ontological argument may be looked upon as an argument for the conclusion that a certain concept is such that, necessarily, something falls under it. But since it is not altogether clear what "concepts" are, let us replace talk of concepts with talk of sets of properties. Is there any set of properties such that, necessarily, there exists at least one object that has every member of that set? Or, as we shall say, is there any set of properties that is necessarily *instantiated*?[7] Well, yes; {being prime} for example. But let us attempt a more general answer to this question. Consider the following two conditions on a set of properties:

(a) It contains N

(b) It is possible that there be something that has all its members essentially.

(Let us call a set *ontic* if it satisfies these conditions.) The set {N, the property of being the square of three} is ontic, since there is in fact, and therefore could be, an object that has both its members essentially. But the set {N, the property of numbering the planets} is not ontic, since whatever number has the property of numbering the planets has this property only accidentally. Moreover, it is obviously impossible for anything to have this property essentially.

It can be shown that any ontic set is instantiated. Consider an ontic set whose members are N and P. (The generalization of the following argument to the case of an ontic set containing any finite number of properties is trivial; we shall not consider infinite ontic sets, which play no part in the argument of this paper.) Since this set is ontic, there exists a world W at which

Something has N and P essentially

is true. Therefore, the following argument, which is manifestly valid, is sound at W:

> At least one thing has N and P essentially. Let O be any of these, and let W' be any world. Since O has N, O exists at W'. And since O has N and P essentially, O has N and P at W'. Therefore, at W',
>
> ($\exists$) Something has N and P
>
> is true. But since W' was chosen arbitrarily, ($\exists$) is true at just any arbitrarily chosen world. Hence, we have:
>
> Necessarily, something has N and P.

Now since this argument is, at W, a sound argument, it follows that its conclusion

> Necessarily, something has N and P

is true at W. But since the modal status of a proposition does not change from world to world (see note 2), it follows that

> Something has N and P

is necessary (and hence true) at every world, including the actual world. Therefore, something has N and P. Therefore, since we have derived this conclusion from a single premise, that the set of properties {N, P} is ontic, it follows that any two-membered ontic set is instantiated.

Let us call any argument having as its single premise ⌜s is an ontic set⌝, and as its conclusion ⌜s is instantiated⌝, where s is a term, an *ontic argument*. It is evident from the foregoing that all ontic arguments are valid. The referent of the term that occurs initially in the premise and in the conclusion of an ontic argument, we call the *set of* that argument. To save space, we shall, instead of writing out in full an ontic argument, write only the initial term of its premise and conclusion. Thus, for example, "'{N, omnipotence}'" names the ontic argument whose set is {N, omnipotence}.

Before we turn to the consideration of ontological arguments, we shall briefly consider *mathematical* ontic arguments. Mathematical ontic arguments are both interesting in their own right and similar in an interesting respect to the modest ontological argument we shall examine in Part III: in the case of mathematical ontic arguments and in the case of the modest ontological argument, a question of existence is reduced to a question of consistency.

Let us call any property *essential* that is possible (is exemplified at some possible world) and cannot be had accidentally.[8] For example, N is essential. (I think we may take it as intuitively obvious that no object can have at some world the property of existing at all worlds, and lack that property at another world, given our assumption that every world is possible relative to every other world.)

Let us call an object *mathematical* if it is the sort of object whose existence might be proved or assumed in a piece of pure mathematics. For example, integers, real numbers, operations on complex numbers, and the like, are mathematical objects. Sets containing nothing other than mathematical objects are themselves mathematical objects, but not just any set is a mathematical object. For example, {Napoleon} is not. Now let us say of property A and property B that A *entails* B if, necessarily, whatever has the former has the latter. Let us call a property *mathematical* if it is an essential property that entails the property of being a mathematical object. For example, being prime, being a set of reals, and being everywhere continuous and nowhere differentiable are mathematical properties; numbering the planets is not. It seems a reasonable conjecture that, among possibly exemplified properties, all properties that would be of interest to the pure mathematician are "mathematical" in this sense. Moreover, it seems a reasonable conjecture that the property of being a mathematical object entails N (though it is not the case that being an abstract object entails N; for example, {Napoleon} fails to have N). And if this is the case, then all mathematical properties entail N.

Now let S be any consistent set of mathematical properties. Since every mathematical property entails N, it follows that $S \cup \{N\}$ is consistent. Moreover, if S' is a set of essential properties, then (since N is an essential property) if $S' \cup \{N\}$ is consistent, it is ontic. Therefore, if S'' is a consistent set of mathematical properties, then (since all mathematical properties are essential) $S'' \cup \{N\}$ is ontic. And, therefore, if S'' is a consistent set of mathematical properties, S'' is instantiated.

Hence, if we call an ontic argument *mathematical* if its set contains (besides N) only mathematical properties, a mathematical ontic argument whose set is S is sound if and only if $S - \{N\}$ is consistent. (Cf. Poincaré's remark that existence in mathematics is freedom from contradiction.[9])

III

Let us now turn to *ontological* arguments. We said that these were ontic arguments that could be regarded as arguments for the existence of a Deity. But this is vague, since it is not clear in the case of every set of properties whether it could be instantiated only by a Deity. For example, could something that is not a Deity instantiate the set {N, being the maker of the world}? It seems (epistemically) possible that, if there were a necessary being who was the maker of the world, this being might also be rather limited in power and knowledge, indifferent to the sufferings of its creatures, and perhaps even have made the world out of some inchoate stuff that existed independently of its will. Should we be willing to apply the term 'Deity' to such a being? Perhaps some would and some wouldn't, and this indicates that the concept of a Deity (and hence our concept of an ontological argument) is vague.

Let us therefore replace this vague idea of an ontological argument with a more precise one. It is clear that, whatever 'Deity' might reasonably be supposed to mean, any Deity must be a non-abstract object. (I shall call non-abstract objects *concrete* without regard for the etymology or philosophical history of this word.)

I am not sure how to go about analyzing the notion of an abstract object, but I think it is an important and intelligible notion. There are things we can see, hear, be cut or burned by, love, hate, worship, make, mend, trust in, fear, and covet. These are the sort of thing I mean by "concrete object." And there are things we could not possibly stand in any of these relations to—for example, numbers, properties, propositions, sentence-types, sets, and systems of natural deduction—and these I call "abstract objects."[10]

Let us suppose that the distinction between abstract and concrete objects is clear enough to go on with if we exercise reasonable caution, and let us use 'C' to stand for 'the property of being a concrete object'. Now consider the ontic argument '{N,C}'. Perhaps the conclusion of this argument is sufficiently weak that some people would be unwilling to regard it as an argument for the existence of a Deity. (It is certainly much weaker than the argument whose set we considered at the beginning of this section.) And yet '{N,C} is instantiated' does entail 'There exists a (Thomistically) necessary concrete thing whose necessity is not caused by another', which is the conclusion of the Third Way.[11] And the Third Way is generally regarded as an argument for the existence of a Deity. Therefore, we shall be doing nothing radically contrary to tradition if we regard '{N,C}' as a *theistic* ontic argument, and hence as an ontological argument.

But if '{N,C}' can properly be called an ontological argument, it would be hard to think of a weaker or more modest ontological argument. Any ontic set must contain N, and every interesting property anyone might want to ascribe essentially to a Deity (other than N itself) entails C.[12] We may therefore plausibly define an ontological argument as an ontic argument such that whatever instantiates its set is concrete.[13] Thus,

{N, omniscience, perfect goodness}

and

{N, not being a number, being worthy of worship}

are distinct (and, of course, valid) ontological arguments.

If we wish to answer the question, Which ontological arguments are sound?, the best strategy would seem to be to examine the most modest of them first. The most modest ontological argument is by definition '{N,C}', which we shall call 'M' for short.

Is M sound? That is, is {N,C} ontic? This question can be reduced to a simpler question, since the property C seems to be *essential* in the sense defined in Part II: it does not seem to be a coherent supposition that there is or could be an object that is concrete at some world and abstract at another. In our discussion of mathematical ontic arguments, we saw that if S' is a set of essential properties, then $S' \cup \{N\}$ is ontic if it is consistent. It follows that {N,C} is ontic if it is consistent. Thus the question whether there exists a necessary concrete being is in one respect like a mathematical existence question, such as the question whether there exists an even number greater than two that is not the sum of two primes. If the property of being an even number greater than two and the property of not being the sum of two primes are compatible, there exists an even number greater than two that is not the sum of two primes; if necessity and concreteness are compatible, there exists a necessary concrete being.

How shall we discover whether N and C are compatible? Well, how, in general, do we go about trying to find out whether two properties are compatible? Sometimes we may settle such a question decisively by exhibiting an object that has both properties. But this method will not help us in our present inquiry. Clearly we shall have to find an argument for the compatibility of N and C that does not have 'Something has both N and C' among its premises, or else we shall have to find an argument for the incompatibility of N and C. Finding a plausible argument of either sort may be no easy task. Leibniz thought he had a way of showing that any two perfections are compatible,[14] and perhaps it is arguable that N and C are perfections, albeit C is a less impressive perfection than N or omnipotence. Or, if C is *not* a perfection, many perfections (e.g., omnipotence) *entail* C. Therefore, if N is a perfection, which we may grant, and if any two perfections are compatible, then N and C are compatible. But Leibniz's argument makes essential use of the notion of a simple, positive property. And this notion makes no sense, or, better, there is no such notion: there are only the *words* 'simple, positive property' (or '*qualitas simplex quae positiva est*'), words that make no sense because they have never been given a sense. At any rate, I have never seen a definition of 'simple, positive property' that is both intelligible and avoids the consequence that *every* property is simple and positive. (Definitions of 'simple, positive property' usually involve some confusion between what a thing is and how it is referred to: properties may have *names* that are simple and positive or *names* that are conjunctive or negative, but, of course, one and the same property may have names, even customary and idiomatic names, of both sorts.) Leibniz's "demonstration," therefore, is simply incoherent.[15]

Is there any good reason for thinking that N and C are compatible or that they are incompatible? I shall make a rather bold statement: we *cannot* find out whether N and C are compatible. (Or, at least, not without prior knowledge of God. For all I know, God may exist and may have revealed His existence and something of His nature to certain people. Perhaps such people could demonstrate to one another that God has N—and, *a fortiori*, that N and C are compatible—using as premises in their arguments propositions known on the basis of divine revelation. When I argue in this paper that various questions can't be answered, I don't mean to rule out cases of this sort.) I shall try to explain why I think this. N and C are compatible or they are incompatible. If they are incompatible, then to show they are incompatible we should have to do the following, or something equivalent to it. We should have to construct a formally valid argument having 'Something has both N and C' as one of its premises and an explicit contradiction as its conclusion; and we should have to show that the conjunction of the remaining premises of the argument is a necessary truth. On the other hand, if N and C are compatible, then, to show they are compatible, we should have to construct a formally valid argument having 'Something has both N and C' as its conclusion and show that the conjunction of the premises of the argument is possibly true.

I think we cannot show that N and C are compatible or that they are incompatible because I think the task of finding the required ancillary premises and of demonstrating that they have the required modal status is (in both cases) impossible. It is not, of course, hard to find *candidates* for such premises. For example, if 'Whatever has N does not have C' is conjoined with 'Something has both N and C', a contradiction follows. But how should we go about showing that the former sentence expresses a necessary truth? One might argue that if this sentence expresses a truth at all, it expresses a necessary truth, and that it would be unreasonable to believe that anything concrete is necessary, since all the (relatively) uncontroversial examples of necessary objects are abstract. Alternatively, one might employ as premises, 'Whatever is concrete is material' and 'Whatever is material does not have N', arguing that the latter is a conceptual truth (since it is conceptually true that whatever is material is separable into parts, and any assemblage of parts is a contingent object since its parts might not have come together, in which case it would not have existed), and that it would be unreasonable to deny the former, owing to the fact that all the uncontroversial examples of concrete objects are material, or, at least, depend for their existence on material objects. But such quasi-inductive arguments are remarkably weak. Neither of these arguments seems to me to have any more power to compel rational assent than the following argument: All the infinite sets whose cardinality we know are either denumerable or have the power of the continuum or else have some higher cardinality; therefore, it is unreasonable not to believe that the continuum hypothesis is true.

Some philosophers might argue that the question whether N and C are compatible is, after all, a *conceptual* question, and that there *must* therefore be something that we philosophers, who are conceptual analysts, can say in response to it. But this reasoning is of doubtful validity. In whatever sense the question of the compatibility of N and C is a conceptual question, the question whether there occurs a run of four sevens in the decimal expansion of π is a conceptual question.[16] But, for all I know, there is no argument any human being could devise that would give us the least reason for thinking that there is or that there is not such a sequence of sevens. And, without venturing into the realm of abstract objects, we can find examples of "conceptual" questions that cannot be resolved through conceptual analysis. Consider Hume's story about an Indian potentate who refused to believe that under certain conditions water changes into a translucent solid. Suppose a philosopher, a conceptual analyst, who was a retainer in that prince's court, heard the stories about water "turning solid," and, while doubting the *truth* of these stories, began to wonder if they were *possible*. What might he do to settle this question? He could, of course, visit colder climes to see whether the stories were true, but this would not count as a resolution of his question through conceptual analysis. Or perhaps he might try to see whether he could *imagine* water turning into a translucent solid: that is, he might try to form a mental image of, say, a goblet of water and then try to replace this image with an image of that same goblet filled with a translucent solid. If he had any power of imagination at all, he would succeed if he tried this. But what would his success prove? What would he say to the critic who said, "You didn't imagine water *turning into* a solid; you merely imagined water disappearing and being *replaced by* a solid"? I see no satisfactory reply to this. In fact, the "try-to-imagine-it" test for possibility is quite useless. I can *imagine* what it would be like to discover that '7777' occurs in the decimal expansion of π, but this feat of imagination would not support the hypothesis that such a discovery is possible.

If imagination fails our Indian philosopher as an instrument for investigating possibility, he might, to use a term favored by some philosophers, see whether he could *conceive* of water becoming a translucent solid. But what exactly does this mean? I do not know and I think no one else knows.

If our philosopher knew what we, or the scientists among us, know about water and heat (if he knew about the atomic constitution of matter, the electronic properties of the water molecule, hydrogen bonding, van der Waals' forces, the kinetic nature of heat, and a host of other things, and knew the correct mathematical descriptions of the relations that hold among them), then he might be able to determine by calculation that water has various solid phases. But of course the knowledge necessary for such calculation could not be got by analysis of the *concept* of water, but only by empirical investigation into the *nature* of water.

There are theories of necessary truth according to which, since the *meanings* of the words 'water' and 'solid' cannot, when taken together with the principles of formal logic, be used to show that 'Water sometimes turns solid' expresses a false proposition, it follows that the proposition it does express is *possibly* true, is true at some possible world. But I think that such "linguistic" or "conventionalistic" theories of modality have very little to recommend them, and that *how* little they have to recommend them has been adequately (in fact, brilliantly) revealed in various recent publications.[17] A related thesis is this: the proposition that the water in a certain glass will someday turn into a translucent solid is an empirical proposition, and all empirical propositions are possibly true. I am not sure I fully understand the term 'empirical proposition', but I think I understand it well enough to see that this claim is very doubtful. Consider the proposition that some three-inch-thick sheets of iron are transparent to visible light. This, I suppose, is an empirical proposition; at least we know empirically that it is false. Is it possibly true? I don't know and neither does anyone else. Perhaps some people know (I don't) that the laws of nature (as we now conceive them) entail the denial of this proposition. But perhaps some possible sets of laws don't entail its denial. Perhaps if the charge on the electron were not 1.6×10^{-19} coulombs but, say, two-thirds that, the crystalline structure of iron would be altered in such a way that a beam of photons could pass through a sheet of iron without melting or vaporizing it. But, for all I know, there is *no* coherent set of laws of nature that would allow this: perhaps the electronic structure of the iron atom is such that, no matter what the charge on the electron was, iron atoms would have to fit together in such a way as to bar the passage of radiation in the visible frequencies. Or, for all *anyone* knows, perhaps the value the charge on the electron has in the actual world is the only value it *can* have. I think, therefore, that no one has any good reason to believe that the proposition

> Some three-inch-thick sheets of iron are transparent to visible light

is possibly true. And thus there is no reason to think that just any "empirical proposition" is possibly true.

Let us return to our Indian philosopher. What can he do? Nothing, I think. The question he has set himself is unanswerable by means of conceptual analysis. And my suspicion is that the question of the compatibility of N and C cannot be settled by conceptual analysis. Note that the question our Indian philosopher asks, the question whether '7777' occurs in the decimal expansion of π, and the question whether it is possible that there be a three-inch-thick sheet of iron that is transparent to visible light, can all be rephrased as questions about the compatibility of properties. But while there are various methods of investigating these three questions, methods other than conceptual analysis, I see *no* way to approach the question whether N and C are compatible. It is, of course, inevitable that there be things we shall never know, though one can be mistaken about cases. But even if I *am* mistaken, and it is possible to find out whether N and C are compatible, no one *now* knows whether they are compatible, or even has any good reason for thinking that they are or that they are not, unless, perhaps, that person is the recipient (proximate or remote) of a divine revelation. Therefore, anyone who thinks he knows, or has good reason to believe, that there is *no* necessary concrete being is mistaken.

IV

I wish finally to examine an argument that is due to Alvin Plantinga. His argument (in its most modest form) is equivalent to the ontological argument

{N, omnipotence, omniscience, moral perfection },

which I shall call 'P'.[18] In the sequel, I shall attribute to Plantinga various assertions about P. These attributions are convenient fictions adopted for purposes of exposition. Plantinga's actual assertions, however, are logically equivalent to those I attribute to him.

Since the soundness of P entails the soundness of M, everything said above about the difficulty of showing M to be sound will apply *a fortiori* to the task of showing P to be sound. Of course, one reason it would be harder to show P sound than it would be to show M sound (assuming both arguments *are* sound) is that it would be harder to show P's set to be consistent. But there is a further difficulty. We have seen that M is sound if its set is consistent. There is, however, no reason to think that P has this property. Our demonstration that {N,C} is ontic if consistent depended on the premise that it contains only essential properties. But there seems to be no good reason to think that the set of P contains only essential properties. For example, couldn't there be a being that is morally perfect at some worlds and evil at others? To show that P's set is ontic, therefore, we must show not only that there is a possible world at which something *has* all its members, but that there is a possible world at which something has all its members *essentially*. A "consistency proof" alone would yield only the conclusion that there exists a necessary being who *might be* omnipotent, omniscient, and morally perfect. (Note that there exists a contingent being who *might be* the man or woman who proves or disproves Goldbach's Conjecture, solves the problem of nuclear structure, and deciphers Linear A. I, for example, or you.)

Plantinga is well aware of the difficulty of showing that P is sound, and admits that this argument is "not a successful piece of natural theology." ([9]: 219) (I shall say very little about the difficulty of showing P to be *unsound*. The most promising line of attack would probably be to try to show that the set {omnipotence, omniscience, moral perfection} is not instantiated, which it would be if P were sound. And the only way I can see to show this would be to employ some variant or other on the Argument from Evil. The major difficulty facing anyone who decides to employ this strategy is Chapter IX of *The Nature of Necessity*.) The argument P fails as a piece of natural theology, Plantinga says, because its premise is not "drawn from the stock of propositions accepted by nearly every sane man, or . . . nearly every rational man." ([9]: 219-220) Nonetheless, Plantinga argues, while P does not constitute a demonstration of the existence of God, it can be used to show that belief in God is rational, that is, not contrary to reason. For, Plantinga argues, while it is true that one who rejected the premise of P would not thereby violate any canon of reason, neither would one who accepted the premise of P violate any canon of reason. He compares the premise of P to Leibniz's Law:

(LL) For any objects x and y and property P, if x y, then x has P if and only if y has P

in the following passage:

> Some philosophers reject [(LL)]; various counter examples have been alleged; various restrictions have been proposed. None of these 'counterexamples' are genuine in my view; but there seems to be no compelling argument for [(LL)] that does not at some point invoke that very principle. Must we conclude that it is improper to accept it, or to employ it as a premiss? No indeed. The same goes for any number of philosophical claims and ideas. Indeed, philosophy contains little else. Were we to believe only [that] for which there are incontestable arguments from uncontested premisses, we should find ourselves with a pretty slim and pretty dull philosophy . . .
>
> So if we carefully ponder Leibniz's Law and the alleged objections, if we consider its connections with other propositions we accept or reject and still find it compelling, we are within our rights in accepting it—and this whether or not we can convince others. But then the same goes for [the proposition that {N, omniscience, omnipotence, moral perfection} is ontic]. Hence our verdict on these reformulated versions of St. Anselm's argument must be as follows. They cannot, perhaps, be said to *prove* or *establish* their conclusion. But since it is rational to accept their central premiss, they do show that it is rational to accept that conclusion. And perhaps that is all that can be expected of any such argument. ([9]: 220-221)

This seems to me to be wrong. The more modest argument that can be got by substituting the premise of M (or the logically equivalent 'N and C are compatible') for '{N, omniscience, omnipotence, moral perfection} is ontic' in the above quotation also seems to me to be wrong. If the latter is wrong, obviously the former is too. Let us examine the latter, more modest, piece of reasoning, which (another convenient fiction) I shall attribute to Plantinga. Plantinga's argument, if I interpret it correctly, is that we are in just the epistemic position with respect to the proposition that N and C are compatible that we are in with respect to (LL). And (LL) is a proposition it is epistemically permissible for a philosopher to take a stand on, even though the question whether (LL) is true cannot be settled by any known philosophical argument. Thus, though a philosopher may have no argument for the proposition that N and C are compatible, he could reasonably assent to it. And if he were asked to defend his belief that N and C are compatible, there would be no epistemic impropriety in his saying only, "I've thought the matter over carefully, and it seems to me that N and C are compatible, though I have no argument for this."

I have several comments to make about this line of reasoning. First, Plantinga's choice of (LL) as an example of a proposition whose epistemic status is comparable to that of the premise of M is unfortunate. The sentence Plantinga uses to express (LL) is a free English translation of the symbolic formula

$$(x)(y)(z)(x = y \supset (Hxz \equiv Hyz)),$$

which is a theorem of the first-order predicate calculus with identity, on the basis of the scheme of abbreviation

H*ab*: *b* is a property and *a* has *b*.[19]

Thus, anyone who claims that (LL) is *false* is in the awkward position of denying the proposition expressed by an English translation of a theorem of standard logic. Of course, people who knew what they were doing have rejected various parts of standard logic. But since 'N and C are compatible' is not a translation of a theorem of standard logic, or, indeed, of any sort of logic—second-order, deviant, modal, or what have you—it hardly seems correct to say that (LL) and the proposition that N and C are compatible are on an epistemic par. That a principle is expressible by a translation of a theorem of standard logic is a *very* strong argument in its favor, an argument that can be overridden only by some extremely well-worked-out, clear, and fundamental consideration. (Certainly we have no such strong argument in favor of the proposition that N and C are compatible.) In fact, I very much doubt whether there has ever been any dispute about the truth-value of (LL). Anything in the history of philosophy that looks like such a dispute is almost certainly, when properly understood, a metalinguistic dispute; a dispute, say, about the principle 'In a natural language, singular terms denoting the same object can replace each other in any context, *salva veritate*',[20] or a dispute about whether the word 'property', as it is used in the sentence displayed to the right of '(LL)' above, does or could mean anything, or (assuming it does or could mean something) what it does or should mean.[21] The regrettable tendency of philosophers to talk in the material mode when arguing about words may often produce the *appearance* of a dispute about the truth-value of (LL). But metalinguistic disputes don't seem to be what Plantinga has in mind: he seems to assert that there is a *proposition* properly called 'Leibniz's Law' (this much I think is true), and that some philosophers have asserted of that very proposition that it is false, in opposition to other philosophers who have asserted of it that it is true. And this latter claim is, at best, extremely doubtful.

But if this much is correct, I have convicted Plantinga only of having chosen a bad example. It does seem reasonable to suppose that if two philosophers who disagree on some issue but more or less agree on philosophic method were carefully and patiently to debate that issue to the bitter end, they might come upon some proposition that one of them thought was true and the other thought was false, and which was such that neither had any non-question-begging argument to support his position. Arguments, like explanations, come to an end somewhere. And perhaps each of these philosophers would be reasonable in taking the position he did. At any rate, I see no reason to think this *could not* happen, though uncontroversial examples of it would be hard to come by: there will generally be a third party in any such debate who insist that the apparent disagreement is a pseudo-disagreement that has arisen because certain key terms in the debate have no clear sense. Still, perhaps in some cases the third party is wrong. Perhaps there is a philosophical proposition (that is, a proposition that many philosophers think is philosophically important—it needn't require for its statement any typically philosophical vocabulary) such that there are no cogent arguments for its truth or its falsity; and perhaps this proposition is such that any philosopher who considers it carefully, and thereupon forms an opinion about its truth-value, has an epistemic right to that opinion. Let us assume there are such propositions and let us pretend that 'φ' names one of them.

Plantinga's argument, then, could be replaced by an argument in which φ plays the role he assigns to (LL). But why should we think that the proposition that N and C are compatible is like φ? Certainly not just *any* proposition such that we have no cogent arguments for its truth or falsity has all the features ascribed to φ. For example, suppose we call a real number *septiquaternary* if '7777' occurs in its decimal expansion; and let us call a real number *perimetric* if it measures the circumference of a circle whose diameter measures 1. Then

Possibly, something is septiquaternary and perimetric

(or, alternatively,

Septiquaternity and perimetricity are compatible)

is obviously such that no philosopher has a "right to his opinion" about its truth-value.

Now it is possible to imagine a case in which this proposition figures in an interesting argument for the existence of God. Suppose we should meet a puckish, rather Kierkegaardian archangel who is amused by our desire to *know* whether God exists. And suppose we have good grounds for believing that an archangel says only what is true. The archangel speaks: "So you want to know whether God exists? Well, I know and I'm not telling. But I will tell you this much: *if* septiquaternity and perimetricity are compatible, then God exists." If this happened, then, possibly, we should find the following argument ("the angelological argument") for the existence of God to be of some interest:

(1) Whatever an archangel says is true

(2) An archangel says that if septiquaternity and perimetricity are compatible, then God exists

(3) Septiquaternity and perimetricity are compatible

hence,

(4) God exists.

Quite possibly, we never shall and never *can* know whether septiquaternity and perimetricity are compatible. If so, then this argument would not serve as an instrument by means of which we could pass from ignorance to knowledge. But suppose someone were to argue as follows: "Since (3) is not drawn from the stock of propositions that nearly every rational man accepts, the angelological argument fails as a piece of natural theology. Nonetheless, one may rationally accept (3), and this shows that belief in God is rational." But one may *not* rationally accept (3). Perhaps there are propositions such that it would be rational to accept them or to accept their denials in the absence of any evidence or argument; if so, (3) is not one of them. And, it seems to me, 'Necessity and concreteness are compatible' is no different in this respect from 'Septiquaternity and perimetricity are compatible'. Therefore, Argument M, the modest ontological argument, can no more be used to show that belief in a necessary concrete being is rational than the angelological argument could (if its first two premises were known to be true) be used to show that belief in God was rational. But the angelological argument could not, even if (1) and (2) were known to be true, be used to show that belief in God was rational. Moreover, if the modest ontological argument cannot be used to show that belief in a necessary concrete being is rational then, *a fortiori*, P cannot be used to show that belief in a necessary, omnipotent, omniscient, morally perfect being is rational.

Of course, I may be wrong about the epistemic status of the premises of arguments M and P. But since Plantinga has not pointed out any epistemically interesting feature that these premises share with (LL)—or with whatever φ may be—and which they do *not* share with (3), his argument for the rationality of belief in God is, as it stands, no better than the argument involving (3) considered in the preceding paragraph; that is to say, it fails.

I should not want the reader to infer from the fact that I have attempted to refute an argument for the rationality of theistic belief that I think theistic belief is irrational. No argument I know of for the conclusion that it is irrational to believe that God exists has any force whatever. Moreover, many eminently rational people (Plantinga, for example) believe that God exists, and this fact, to my mind, tends to support the conclusion that it is *not* irrational to believe that God exists. But, of course, Plantinga's argument may fail to establish its conclusion even if that conclusion is true.[22]

NOTES

[1]For an extended discussion of "possible worlds" I would accept, see [9], Chs. IV-VIII. "Possibility," as I use the word, is what might be called "absolute" possibility. Absolute possibility corresponds roughly to what is traditionally called "logical possibility," but I dislike this term, since there are absolute possibilities and impossibilities whose status as such has no obvious connection with logic (see, e.g., [3] and [11]). I take it to be obvious that every absolutely possible world is abolutely possible with respect to any absolutely possible world. Thus, the modal logic that "captures" absolute modaltiy is S_5

[2]A *proposition* is a non-linguistic bearer to truth value. A proposition is *necessary* if true at all worlds, *possible* if true at some, *contingent* if true at some and false (not true) at others, and *impossible* if true at none. It follows from the fact that every world is possible relative to any world that the modal status (necessity, possibility, etc.) of a proposition is the same at every world.

[3]I am using 'object' as the most general count-noun: in the present vocabulary, everything is an object. Moreover, as I use the term 'object', it has no Meinongian overtones; 'Pegasus' and 'the golden mountain' do not denote objects, since they do not denote anything. I shall sometimes use 'thing' and 'entity' and 'being' as stylistic variants on 'object'.

[4]Among objects, there are abstract objects. Among abstract objects there are properties. As I use the term 'property', such properties as are expressible in a given language are defined by the "well-behaved" extensional one-place open sentences of that language. For example, associated with the sentence '*x* is red' there is a property, a non-linguistic entity, that we might call "the property of being an *x* such that *x* is red," or, for short, "being red" or "redness." Certain sentences, such as '*x* does not exemplify *x*', must be regarded as "ill-behaved" and thus as failing to define properties. I shall not discuss the problem of how to separate well-behaved from ill-behaved sentences. Two or more properties will be said to be *compatible* with one another just in the case that there exists a possible world at which some single object has all of them. A *set* of mutually compatible properties will be said to be *consistent*. I shall use certain familiar terms drawn from the traditional language of properties (e.g., 'exemplified', 'coextensive') without explanation. *A* is the same property as *B* if and only if *A* and *B* are coextensive at all possible worlds.

[5]For a typical implausible argument, see [13]: 38-39.

[6]For an extended argument for the existence of abstract objects see [10].

[7]Kant's famous dictum that "existence adds nothing to the concept of a thing," may be (I think) expressed in this terminology as: 'Every set of properties is such that, necessarily, it is instantiated if and only if its union with {existence} is instantiated'. This is true but is irrelevant to the task of judging the validity or soundness of the arguments called "ontological" herein. Cf. [7]: 32-37.

[8]There are properties that are had essentially by some things and accidentally by others. For example, it seems to me that I am essentially male, at least on the cellular level, and I think I essentially have parents. It follows that I have essentially the property of having parents who have a son; but my sister has this property only accidentally. Thus, this property is not essential, though *I* have it essentially. Cf. [9]: 61.

[9]This remark is attributed to Poincaré in [1], *ix*. I do not mean to imply that Poincaré would accept the realist view of mathematical objects presupposed herein.

[10] It may be objected that we can say that Tom loves poetry, hates mathematics, worships beauty, trusts in the law, fears the truth, and covets admiration. But it is not at all clear that in the preceding phrases the abstract nouns in the direct-object position are functioning as names of abstract objects. If they were, it seems to me, then we could express the same facts by saying, e.g., "Tom covets the abstract object admiration." But this, I think, is nonsense: a person who covets admiration does not want to become the owner of a certain abstract object called 'admiration' (whatever that might mean); rather, he wants people to admire him.

Alvin Plantinga has reminded me that the Pythagoreans are said to have worshiped numbers. I am afraid my response to this is what Antony Flew has called a "conceptual sulk": the Pythagoreans could not have done anything properly called 'worshiping numbers' because nothing is properly so called.

[11]At least assuming Leibnizian necessity entails Thomistic necessity. There does exist the formal possibility that there is a being that exists at all possible worlds but which is, at some worlds, generated or corrupted. But I do not find this idea coherent. If a being is subject to corruption (might "come apart"), or was at one time generated, then, it should seem, there is a world at which it is never generated and hence does not exist, since its parts never, at that world, come together.

[12]There are, of course, *uninteresting* properties that any Deity has essentially, and which do not entail C. For example, not being a number, and being either necessary or contingent.

[13]By this definition, '{N, not having N}', '{N, being the greatest prime}', '{N, being nonexistent}', and '{N, being a chair}' are ontological arguments. This consequence will do no harm that I can see, however, since no argument with an impossible premise is sound. It would not do simply to stipulate that no argument with an impossible premise is an ontological argument, since, for all anyone knows (divine revelation aside), *no* valid argument for the conclusion that a Deity exists lacks an impossible premise-set. This would be the case if various properties that are indispensable components of the idea of a Deity were (in some way we don't see) incompatible. Nor would it do to say that an argument fails to be an ontological argument if its premise is *known* to be impossible: "ontological argument" is not supposed to be an epistemological category. At any rate, the premise of each of these "odd" arguments does entail that God exists, and it seems simplest to leave them in the category of ontological arguments.

A more interesting case of an ontological argument that it seems odd to call "ontological" is this: '{N, C, not being the greatest being possible}'. Traditional "versions of the ontological argument" are attempts at proving the existence of a greatest possible being; but this seems to me to be logically adventitous. Suppose there is both a greatest possible being and a lesser but nonetheless necessary being. Then, I should say, the lesser being as much as the greater has the single ontological feature—an absolute incapacity to fail to exist—that is the ground for a thing's being liable to have its existence proved by an argument *a priori*.

[14]See [4] II, i: 271-272. A.G. Langley's translation of this important passage (which Leibniz wrote to show to Spinoza) is reprinted in [6]: 55-56, under the heading, "That The Most Perfect Being Exists." A translation by Bertrand Russell, containing some material omitted in [6], can be found at [12]: 287-288.

[15]For another argument for this conclusion, see [5]: 59 (or [6]: 156-157).

[16]I assume that either such a run occurs or no such run occurs. I have never been able to understand the arguments for the denial of this assumption. But anyone who denies it may concentrate on the other examples.

[17]See [3] and [11] .

[18]See [9] Ch. X, or [8]: 85-112. The central premise of Plantinga's argument is

There is a possible world in which maximal greatness is instantiated.

The property of maximal greatness is the property of having *maximal excellence* at every possible world. Maximal excellence is not fully explained, but it is held to entail omniscience, omnipotence, and moral perfection. If we identify maximal excellence with the conjunction of these three properties (thus obtaining the most modest possible interpretation of Plantinga's argument), then the above premise is easily seen to be equivalent to the premise of P.

[19]The notion of a (free) English translation of a symbolic formula on the basis of a given scheme of abbreviation is that of [2]. In order for the claim made in the text to be true, it must be the case that '*b* is a property and *a* has *b*' be an extensional open sentence. But this certainly seems to be the case, at least if this sentence is meaningful at all. Suppose, e.g., that 'whiteness is a property and the Taj Mahal has whiteness' expresses a truth. And suppose that 'whiteness' and 'the color-property that Klan members like best' co-refer, as do 'the Taj Mahal' and 'the most famous building in Agra'. It certainly seems to follow that 'the color-property that Klan members like best is a property and the most famous building in Agra has the color-property that Klan members like best' expresses a truth. Moreover, I cannot see how any such inference could fail.

[20]Cf. [9]: 15 *n*.

[21]Plantinga says little enough about *who* it is that rejects (LL). In a footnote to the passage quoted above he says, "Geach and Grice, for example" and leaves it at that. But the objections these two philosophers have to (LL) are metalinguistic. Geach, for example, thinks that the expression '$x=y$', which occurs in the sentence displayed to the right of '(LL)' in the text, is incomplete, and thus that that sentence fails to express a proposition (or so I would describe his doctrine).

[22]Though I have been critical of a particular conclusion of Plantinga's, this paper could not have been written without the aid of his insights in the general area that might be called "the metaphysics of quantified modal logic." A careful reading of *The Nature of Necessity* is a *sine qua non* for anyone interested in this subject. I should like to thank Professor Plantinga for his careful comments on a draft of this paper, which have led to changes, particularly in Part IV, that I hope he regards as improvements.

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Notes

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