

## The Modal Ontological Argument

R. KANE

We know more today about the second, or so-called 'modal', version of St. Anselm's ontological argument than we did when Charles Hartshorne and Norman Malcolm brought it to the attention of philosophers some years ago.<sup>1</sup> But there is still much to be learned. Criticisms of the modal ontological argument focus on its premises, namely (i) the claim that perfection, or maximal greatness, implies necessary existence, and (ii) the claim that the existence of a perfect being is logically possible. Less attention has been given by the critics of the argument to the modal principles that allow one to get from these premises to the conclusion that a perfect being exists. The modal ontological argument is valid in some standard systems of alethic modal logic, e.g., S<sub>5</sub> (which is assumed by advocates of the argument like Hartshorne and Plantinga), and in at least one weaker system. But it is not valid in all. For example, it is not valid in T (Von Wright's M) or any Lewis system weaker than S<sub>5</sub>, including S<sub>4</sub>. What should all this mean for our assessment of the argument? Is choosing a modal system in theological contexts as innocent as choosing *hors d'oeuvres*? Can it be so with a proof for the existence of God at stake?

Reflecting on these questions leads to two important, though often neglected, objections to the modal ontological argument (hereafter the 'modal OA'). The narrower aim of this paper is to explore these two objections; the wider aim, continuous with the narrower one, is to describe the present *status quaestionis* concerning the argument. As I see it, there are three central, as yet unresolved, problems that stand in the way of accepting the modal OA. Two of these problems are associated with the two objections just mentioned. The third problem will be mentioned here, but not discussed at length, because it is better understood than the two problems I shall discuss and has been widely discussed in the literature. I am not myself sure how to respond to all of these

1 Hartshorne, *Man's Vision of God* (New York: Harper and Row, 1941) and *Anselm's Discovery* (LaSalle, Illinois: Open Court Publishing Co., 1965). Malcolm, 'Anselm's Ontological Arguments', *The Philosophical Review*, Vol. lxix (1960), pp. 41-62.

problems, but I hope to convince readers that, as things now stand, they are the main stumbling blocks to acceptance of the modal OA.

## I

Let us begin with a formulation of the modal OA adapted from Hartshorne's *The Logic of Perfection and Other Essays*.<sup>1</sup> In a recent unpublished note, Hartshorne indicates that a simplified version of the 'The Logic of Perfection' argument like the one that follows remains his preferred formulation. Later I shall compare this version to others. The two premises are common to most versions of the modal OA, and are as follows. ('L' and 'M' are operators for logical necessity and possibility respectively (their exact interpretation yet to be discussed); ' $\supset$ ' stands for material implication, and 'g' for the proposition 'a perfect being exists', or, if you prefer, 'there exists a perfect being'.)

- (1)  $L(g \supset Lg)$
- (2)  $Mg$

The first of these premises ('Necessarily, if a perfect being exists, then necessarily a perfect being exists') is assumed by Hartshorne and others to follow from the principle (N), 'By definition, anything which is perfect is such that, if it exists, it exists necessarily.' (The first 'L' in (1) corresponds to the 'by definition' of (N).) (1) does not say what (N) says, but it is reasonably assumed by Hartshorne and others that (1) follows from (N). To say what (N) says, one would need the resources of quantified modal logic. The argument can be stated in quantified form, but both its virtues and problems are evident in the simpler propositional form. So in the interests of not missing the forest for the trees, we shall stick with Hartshorne's propositional version.

(1) is a weak premise. Malcolm points out that even the most well known critics of the OA, like Caterus and Kant (and he could have added Aquinas), would have accepted (N), and hence (1).<sup>2</sup> In fact, one of the chief criticisms of Anselm's original argument involves pointing out the weakness of (1). Critics like Aquinas, Caterus and Kant argue that the OA does not yield the conclusion 'God

1 Hartshorne (LaSalle: Open Court, 1962), ch. 2. I am indebted to discussions with Charles Hartshorne during the writing of this paper. Others to whom I owe a debt are C. Anthony Anderson, Bill Lucas and Norman Martin.

2 Malcolm, *ibid.*, pp. 56-57.

necessarily exists', but only the weaker hypothetical claim 'if God exists, then God necessarily exists'.<sup>1</sup> And while they concede that this hypothetical claim is true (indeed it is necessarily true if God is by definition a perfect being), one cannot derive from it the conclusion 'God exists' without begging the question. The OA seems to prove that God necessarily exists, say these critics, but all it does prove is that if God exists, God necessarily exists.

Now the beauty of the *modal* OA is this. It interprets this hypothetical statement, 'if God exists, then God necessarily exists' (which is conceded by the major critics) as a *premise* of the argument, not as its question begging conclusion. To get the desired conclusion 'a perfect being (actually) exists' from (1), you do not have to beg the question and assume the actual existence of such a being. All that must be assumed, besides (1), is premise (2) ('Mg'), 'it is *logically possible* that a perfect being exists', a premise that is also weaker than the desired conclusion. Given certain modal principles, the conjunction of (1) and (2) will yield the conclusion that a perfect being actually exists, a considerably stronger conclusion than either (1) or (2) alone.

Premise (2) is more controversial. Proponents of the modal OA insist that to support (2) one has only to show that the concept of a perfect being is logically coherent, i.e., not self-contradictory. This is no easy task, in view of the many different and potentially conflicting concepts (omniscience, omnibenevolence, etc.) involved in the concept of perfection. Moreover, it has recently become a matter of controversy as to whether merely showing logical coherence is all that need be done to establish (2).<sup>2</sup> Be that as it may, proponents like Hartshorne concede that establishing (2) is the major problem to be solved by advocates of the modal OA. Indeed, they see it as the only problem standing in the way of acceptance of the argument. And the task of constructing a coherent conception of perfection becomes a challenge to be met. This is sometimes expressed by saying that what the modal OA establishes is that *if* the existence of a perfect being is logically possible, then such a being actually exists. The task is then to show that the antecedent is true.

- 1 Thomas Aquinas, *Basic Writings*, ed. by Anton Pegis (New York: Random House, 1945), vol. I, p. 20. Caterus, in *Philosophical Works of Descartes*, ed. by Haldane and Ross, Dover, 1934, vol. II, p. 7. Kant, *Critique of Pure Reason*, trans. by N. K. Smith (London: Macmillan, 1958), pp. 501-502.
- 2 See, e.g., W. L. Rowe, *Philosophy of Religion* (Encino, California: Dickenson Publishing Co., 1978), ch. 3.

## II

But I think there is more to it than this. I said at the beginning that there were *three* problems standing in the way of accepting the modal OA. Establishing premise (2) is one of these problems. But it is the well known one. The other two problems are the ones I want to consider; and they emerge when we look at the argument from premises to conclusion.

- (1)  $L(g \supset Lg)$
- (2)  $Mg$
- (3)  $(L(g \supset Lg)) \supset (Mg \supset MLg)$
- (4)  $Mg \supset MLg$
- (5)  $MLg$
- (6)  $MLg \supset g$
- (7)  $g$

Apart from the premises, the two key steps here are (3) and (6). They are the modal principles that carry the burden of the argument. Now (3) is a substitution instance of the principle ' $(L(p \supset q)) \supset (Mp \supset Mq)$ ', a reasonably non-controversial modal principle, valid in all the Lewis' systems as well as in T and B. It is (6) that poses the real problem. It is a substitution instance of ' $MLp \supset p$ ', the so-called 'B-principle' which, when added to the standard modal system T (Von Wright's M) yields the so-called 'Brouwerian system', or system B, of modal logic. Such problems as there are with the logic of the modal OA are connected, I believe, with this interesting principle. But before turning to these problems, let me anticipate a few questions about the above argument.

I said the formulation of the modal OA would be adapted from Hartshorne's *The Logic of Perfection and Other Essays*. Readers of that work and subsequent journal literature on the modal OA may not recognize the adaptation. In fact, the argument from (1)–(7), which we shall call 'the main argument', is a simplified version due to C. Anthony Anderson of Hartshorne's original argument.<sup>1</sup> Hartshorne himself did not use the B principle (' $MLp \supset p$ ') but rather the stronger S<sub>5</sub> principle (' $MLp \supset Lp$ '), called Becker's hypothesis by him. This would lengthen the main argument as

1 In an unpublished note.

follows. For steps (6) and (7) we would have

(6')  $MLg \supset Lg$

(7')  $Lg$

(8)  $Lg \supset g$

(9)  $g$

using as step (8) an instance of the non-controversial axiom of necessity. It is evident that this argument can be shortened to the main argument by using the weaker B-principle supporting (6), rather than the S5 principle supporting (6'). One of the consequences of this simplification is that, while proponents of the modal OA like Hartshorne and Plantinga assume its validity in S5, it is in fact valid in S5 and the weaker system B (the Brouwerian system).<sup>1</sup> But it is not valid in T, or any of the Lewis systems weaker than S5, including S4. Indeed, it is not valid in any system not containing the B-principle.

Now all this is interesting because we know that in a Kripkean semantics for modal systems, the B-principle is associated with the *symmetry* condition on the accessibility relation between possible worlds: if a possible world  $w_i$  is accessible to another  $w_j$ , then  $w_j$  is also accessible to  $w_i$ .<sup>2</sup> This condition is the semantical key to the modal ontological argument. If the existence of a perfect being is logically possible (premise (2)), then there is a possible world,  $w_1$ , accessible to the actual world,  $w_a$ , in which a perfect being exists. But given premise (1), a perfect being is such that if it exists in any world, it is necessary that it exists in that world. Thus, it is necessary that a perfect being exists in  $w_1$ ; and, as a consequence, a perfect being exists in every world accessible to  $w_1$ . But if the symmetry condition holds, the actual world,  $w_a$ , would be one of the worlds accessible to  $w_1$ , and so a perfect being would exist in the actual world. The symmetry condition allows one to postulate the necessary existence of something in merely possible world and thereby to establish its existence in the actual world ('MLp  $\supset$  p').

1 An even slightly weaker system than B will do the job. Called B-, it is developed by Bill Lucas in *The Logic of Omniscience* (Unpublished dissertation, The University of Texas at Austin, 1981). But it also contains the B-principle.

2 A clear account of accessibility relations is provided by G. E. Hughes and M. Cresswell, *An Introduction to Modal Logic* (London, Methuen, 1968), ch. 4. I rely on their terminology throughout this paper.

## III

Given this pivotal role in the argument, one could reasonably expect critics of the modal OA to question the symmetry condition and the B-principle associated with it. In fact, there has been little explicit discussion of the matter.<sup>1</sup> Most criticisms of the modal OA focus elsewhere, for example, on premise (2). But the symmetry condition and B-principle clearly require discussion in this context. The latter involves iterated modalities and these notoriously challenge our intuitions. Possible objections to the symmetry condition and the B-principle, therefore, represent the first of the two problems with the modal OA that I want to discuss.

First, let us put the discussion in perspective. A person who objects to the B-principle is making an objection to the modal OA that is an analogue of a familiar objection to Anselm's first, or original, ontological argument. (As Hartshorne, Malcolm and others see it, the first, or original, argument relies on the claim that perfection implies existence, rather than on the claim that perfection implies *necessary* existence.<sup>2</sup>) Against Anselm's original argument it has often been said that one cannot reason from the mere idea or concept or definition of something to its actual existence. In response to this, defenders of Anselm say that while the claim is true for most things, it is not true for a perfect being whose *essence implies existence*.

Now a critic of the B-principle would be making the analogous claim that one cannot reason from the mere (logical) possibility of something to its real existence. And the response would be similar. Defenders of the modal OA would respond that, while for most things one cannot reason from their mere possibility to their actual existence, one can do this for a being whose *essence implies necessary existence*. In other words, one cannot generally argue from possibility to existence ( $Mp \supset p$ ), but one can argue from the possibility of necessary existence to actual existence ( $MLp \supset p$ ). The B-principle embodies that move from mere possibility, or conceivability, to existence that distinguishes every ontological argument, but it does so at one step removed, not ' $Mp \supset p$ ', but ' $MLp \supset p$ '.

But *can* one argue in this way from the possibility of necessary

1 Plantinga constitutes an exception to this claim. While he does not discuss the B-principle explicitly, a number of discussions in *The Nature of Necessity* (Oxford: Clarendon Press, 1974) are relevant to it, as we shall see.

2 I am ignoring here the difficult exegetical questions about whether Anselm himself formulated two separate arguments, or thought he was doing so.

existence to actual existence? What can be said *for* the B-principle? I know of only three arguments in its favour, each a variation on a common theme.

The first argument concerns the contrapositive of the B-principle. Most persons would say that the B-principle itself was not obviously true (or false) according to their intuitions. Intuitively, it is simply puzzling. But the same cannot be said for its contrapositive, ' $\neg p \supset \neg MLp$ ' (' $\neg$ ' signifying negation). Many of those puzzled by the B-principle would be inclined to say that the contrapositive was true: if something is not actually the case, then it is not possible that it necessarily be the case. There is no doubt that this claim has intuitive appeal. But we do well to ask why it has such appeal. I think it is because we assume that the actual world would be one of the possible worlds *under any conceivable circumstances*, or from any conceivable perspective. So that if a proposition were not true in the actual world, it could not be true in every possible world, and hence could not be necessarily true. This is to assume that the actual world is accessible to every possible world that is accessible to it—in short, it is to assume the symmetry condition, at least insofar as the actual world is concerned. Now defenders of the modal OA may argue that this shows we do intuitively pre-suppose the symmetry condition when we are thinking about logical possibility in the broadest, unconditional sense, where the logically possible is that which is not self contradictory, and the logically necessary is that whose negation is self contradictory. And this, they might add, is the sense of possibility and necessity intended in the model OA.

The last remark leads directly to the second argument for the B-principle. The B-principle is contained in the modal system S<sub>5</sub>; and a case can be made for saying that S<sub>5</sub> expresses our intuitive idea of logical possibility in the broadest, unconditional sense.<sup>1</sup> In the semantics of S<sub>5</sub>, every possible world is accessible from every other, so that a necessary proposition in any world is true in every possible world without restriction. By contrast, where restrictions are placed on the accessibility relation, a necessary truth in some world  $w_1$  need not be true in all possible worlds, but only in a proper subset of possible worlds accessible to  $w_1$ . Whatever we may want to say of our own intuitions about this, it seems clear that traditional thinkers like Anselm, *and his critics*, would have agreed that they were

1 Hughes and Cresswell make this point, *ibid.*, p. 76, as does Plantinga, *ibid.*, pp. 51–54.

talking about logical necessity and possibility in this broadly logical or unconditional sense. Of course, they knew nothing of accessibility relations and restrictions on accessibility relations. But had they understood this terminology, they would have understood, as we do, that the restrictions define *conditional* or *relative* senses of necessity and possibility, and they were clearly concerned with the unconditional sense of these terms. Thus, Anselm would have a point against his critics. If they concede that the logical necessity they are talking about is unconditional S<sub>5</sub> necessity—truth in all possible worlds without restriction—they must concede him the B-principle. And anyone who concedes that the necessity and possibility involved in premises (1) and (2) of the main argument have this unconditional sense must concede the B-principle. Note that this concession would make (2) a very weak premise—the existence of a perfect being would be assumed possible only in the broadly logical sense that the conception was not self contradictory. But the concession would also make the argument work.

A third argument for the B-principle involves another equivalent formulation of it, namely 'p  $\supset$  LMp'. Call this B\*. The gist of B\* is that the actual must be at least possible, or cannot have been unconditionally impossible. To test our intuitions about B\*, we should ask the question, 'Could the actual world have been, not merely *non-actual*, but *impossible*?' Plantinga is one who thinks the answer to this question must be negative. In a slightly different context, discussing relative possibility in general, he asks, 'Are there propositions that *in fact* are possible, but would have been impossible had things been different in some way?' For example, '(15) "Socrates never married" and (16) "Socrates was a carpenter" are false but possible propositions; could they have been impossible?'<sup>1</sup> One argument considered by Plantinga for an affirmative answer would appeal to the notion that the meanings of terms are conventional and can change over time. Thus it is a contingent fact that we use 'married' and 'carpenter' to mean certain things. We could have used them to mean something else; and it is at least possible that we could have so used them that (15) and (16) became self contradictory, hence logically impossible.

But Plantinga thinks such an argument betrays 'deplorable

1 Plantinga, *ibid.*, pp. 53–54. This discussion occurs comparatively early in *The Nature of Necessity*, not in the discussion of the ontological argument itself. But the results are used at several crucial points in the later statement of the ontological argument (pp. 213–217).



confusion'. If we used 'married' and 'carpenter' with different meanings so that (15) and (16) became self contradictory, then the propositions these sentences *would then* express would be logically impossible. But it does not follow that the propositions which (15) and (16) *do* express, with our current meanings of 'married' and 'carpenter', are logically impossible. Given the intended meanings the propositions are logically contingent and could not have been impossible. With a change of meaning, the same words, or sounds, would express different propositions.

I think Plantinga is right about this, and if he is right, his remarks also apply to true propositions like (15') 'Socrates married' and (16') 'Socrates was a philosopher', as well as to false, but possibly true, propositions like (15) and (16). If (15') and (16') correspond to states of affairs in the actual world, one can say that these states of affairs may have been non-actual, but not impossible in the broadly logical sense. What is actual could not have been impossible in this sense.

These three arguments make a strong case for the B-principle, at least for necessity and possibility in the unconditional sense in which the possible corresponds to what is not self contradictory and the necessary to that whose negation is self contradictory. Surprisingly, however, this does not settle the issue about the B-principle in relation to the modal OA. The reason is that one has to establish that this necessity in the unconditional or broadly logical sense is the appropriate one *within the theological context* assumed by the argument. Now Anselm and others may in fact have assumed this. But there are other considerations that may call the assumption in question. And these take us to the second problem with the modal OA that I promised to discuss.

#### IV

Let us consider the possible existence of what might be called 'less-than-perfect necessary beings' (LPN's). I mean beings whose essence or definition is such that, if they exist, then necessarily they exist, but which lack some other attributes of perfection, e.g., they are less than omniscient or not omnibenevolent. Are LPN's possible in the broadly logical sense? Is it self contradictory to say that a being has necessary existence but is not all good or all knowing? If the answer is negative, then there might be an indefinite number of such beings, e.g., one which commits at least one evil act in every possible world, one whose acts are always evil

(a perfect devil? an evil god?), one which knows certain things, but not others, and so on.<sup>1</sup> Furthermore, it would be possible to use the principles of the modal OA to derive the actual existence of any such possible LPN. If the B-principle holds, and if an LPN exists in some possible world relative to the actual world, then it exists in the actual world. Moreover, the LPN would necessarily exist in the actual world because it is such that, in every world in which it exists, it necessarily exists.

Now just as the argument of the previous section against the B-principle was an analogue of a familiar objection against Anselm's original argument, so this argument about LPN's has a recognizable analogue among the familiar objections to Anselm. In this case the analogue is the celebrated objection of Gaunilo, that Anselm's reasoning would suffice to prove the existence of a perfect anything, a perfect island, a perfect mountain, etc. We might therefore call the above argument about LPN's 'the Gaunilogue argument'. There is a difference, of course, between it and Gaunilo's argument. Gaunilo talks about proving the existence of perfect beings of certain kinds, while the Gaunilogue argument talks about proving the existence of less-than-perfect beings of certain kinds. But the general idea is the same. The ontological argument, it is said, proves too much; so something must be wrong with it. The B-principle is too strong; so something must be wrong with its use in this context.

If the Gaunilogue argument parallels Gaunilo's, we should expect a response to it similar to traditional responses to Gaunilo. In his own answer to Gaunilo, Anselm bites the bullet: 'If any man shall devise anything existing either in reality or in concept alone (except that than which a greater cannot be conceived) to which he can adapt the sequence of my reasoning, I will discover that thing, and will give him his lost island, not to be lost again.'<sup>2</sup> In other words, if it can be shown that a perfect island, or a perfect anything, is in fact conceivable, he will grant its actual existence. But Anselm implies, without explicitly saying so, that he does not think that a perfect island, or a perfect anything of a finite kind, can be

1 To my knowledge, the first mention of anything like the problem of LPN's is in an essay by Paul Henle ('Uses of the Ontological Argument', *The Philosophical Review*, vol. lxx (1961)) Other discussions with some relation to the problem appear in Peter Van Inwagen, 'Ontological Arguments', *Nous* (November 1977), pp. 375-395, and Plantinga, *ibid.*, pp. 218-219.

2 *Anselm's Basic Writings*, trans. by S. N. Deane, 2nd edition (LaSalle, Illinois: Open Court Publishing Company, 1962), p. 154.

conceived. Modern defenders of the ontological argument, like Hartshorne and Plantinga, take the same line, but are more explicit about saying why such things cannot be conceived.<sup>1</sup> Thus Plantinga says: 'No matter how great an island is, no matter how many Nubian maidens and dancing girls adorn it, there could always be a greater—one with twice as many, for example. The qualities that make for greatness in islands—number of palm trees, amount and quality of coconuts, for example—most of these qualities have no *intrinsic maximum*. That is, there is no degree [of them] . . . such that it is impossible that an island display more of that quality. So the idea of a greatest possible island is an inconsistent or incoherent idea.'<sup>2</sup> One might think this argument, if it worked, could be turned against the idea of God as well. But Plantinga thinks not. He thinks the attributes of deity, like knowledge, power, and love, do have intrinsic *maxima*, omniscience, omnipotence and omnibenevolence. This suggestion opens up a Pandora's box of problems. But it is not our concern here to discuss Gaunilo's original argument and the responses to it. We are concerned with the Gaunilogue argument.

If responses to the Gaunilogue argument do parallel responses to Gaunilo's objection, we should expect defenders of the modal OA to grant that LPN's would exist in reality if they were conceivable, but to deny that they are conceivable or logically possible. The absence of omniscience or omnibenevolence, they might say, cannot be instantiated by something having necessary existence. But it is not clear how they would go about demonstrating this. The argument Plantinga uses against Gaunilo is not applicable because we are not talking about a *perfect* this or that. We are talking about beings that are admittedly *less* than perfect. Other familiar arguments are also not applicable. For example, Hartshorne argues against the conceivability of a perfect devil,<sup>3</sup> saying that such a being would have to attend with unrivalled care and patience to beings it must hate 'with matchless bitterness', and this he thinks is a contradiction in terms. Some might say this argument is question begging, since it assumes what is at issue, that perfection in the relevant sense involves a kind of moral goodness which is compatible with hate and other moral evils. But even if the argument

1 Hartshorne, *Man's Vision of God*, p. 303.

2 Plantinga, *God, Freedom and Evil* (New York: Harper and Row, 1974), pp. 90–91.

3 Hartshorne, *Man's Vision of God*, p. 303.

worked on its own turf, it would not be relevant to LPN's. If one imports moral goodness into the idea of perfection, as traditional theologians do, than a *perfect* devil is a contradiction in terms. But what about *less* than perfect devils? Can they have necessary existence? Our thoroughly devilish being is 'less than perfect', since it is not morally good. The question remains: are its traits compatible with necessary existence? I have, in fact, not seen or heard an argument for the claim that all LPN's are logically impossible that does anything more than express an intuition that a being having necessary existence must be perfect in all other respects; and I am far from sure this intuition is well grounded. At least, the burden of proof rests upon defenders of the ontological argument. Traditional arguments relevant to Gaunilo's objection do not touch the issue.

If arguments for the impossibility of LPN's are not forthcoming, the problem presented for the modal OA is more than merely a problem of proliferation of entities. In this respect, the Gaunilogue argument is even stronger than Gaunilo's. The B-principle will allow one to derive the actual existence of every being whose attributes are consistent with necessary existence. If it will also allow one to derive the actual existence of a perfect being, a contradiction arises. By definition, LPN's could not go out of existence; God could not therefore make them go out of existence. It may seem that this conflicts with divine omnipotence. But this is not quite the problem. For most, though not all, traditional theologians conceded that divine omnipotence does not extend to matters that are logically impossible. But there would be a problem with another feature traditionally assigned to God. Not only is it said that God exists *a se*, is *causa sui*, dependent on nothing else for existence, but it is said that God is the First Cause, in the sense that all other things are dependent on God for their existence. This would not be true of LPN's. Their existence is also *a se*. It does not come from God, but is from their own natures; and it cannot be taken away by God, unless (contrary to the common view) God can do what is logically impossible.

Now this might suggest to defenders of the modal OA an argument that LPN's are not in fact possible. Since the actual existence of LPN's is not compossible with that of a perfect being, and since a perfect being exists, LPN's are not possible. But this argument is clearly question begging, if the logical possibility of a perfect being has not been demonstrated. As we saw, even many

defenders of the modal OA concede that the truth of premise (2) of the main argument remains an open question. One should then say that *either* the existence of a perfect being or the existence of LPN's is not logically possible, though we do not know which one is not. But even this says too much. For the B-principle is also implicated in the Gaunilogue argument. Both LPN's and a perfect being might be logically possible—existing in different possible worlds accessible to the actual world, if these possible worlds were not accessible to each other, and there was no other world to which both were accessible. The contradiction arises when they exist in the same world, and it is the B-principle which places them in a same world, namely, the actual world.

What we must say to put the problem of LPN's in perspective is that one of the following *four* statements must be false:

- (i) God is the First Cause of all things (in the sense that the existence of all other things depends upon God's will or action).
- (ii) The B-principle is true (at least for notions of necessity applicable in traditional theological contexts).
- (iii) A perfect being is logically possible.
- (iv) LPN's are logically possible.

Defenders of the modal OA cannot very well deny (ii) or (iii). For (iii) is premise (2) of their argument and (ii) is the central modal principle required by the argument. Nor are they likely to deny (i), a move that would require a thorough-going revision of traditional theological notions. Moreover, the denial of (i), *without also denying (iv)*, would open the door to a proliferation of other necessary beings, including perhaps evil ones, bringing one to the edge of, if not all the way to, Manichaeism. So it seems that defenders of the modal OA must deny (iv), whatever else they do. If LPN's are logically possible, they are in trouble.

We can summarize their situation in an interesting way by returning to the *first* premise of the main argument. This first premise (' $L(g \supset Lg)$ ') rests on the principle (N), 'By definition, all perfect beings have necessary existence.' Now to deny (iv) and thus deny the possibility of LPN's, defenders of the modal OA must establish the converse of (N), namely, (N\*), 'By definition, all beings having necessary existence are perfect.' Defenders of the modal OA thought that all they had to show was the truth of (N), plus the logical possibility of a perfect being, and their proof would

be secured. But in fact they also have to establish the converse of (N). To show the soundness of the modal ontological argument one must show not only that *all perfect beings are necessary*, but also that *all necessary beings are perfect*. This additional requirement is not obvious when you first inspect the proof, but our argument shows that it is so. It also shows, as a consequence, that the question of the possibility of LPN's is tied up with questions about the nature of a perfect being itself and whether such a being is possible. I have already said that I know of no convincing argument for the claim that necessary existence implies perfection, and hence that LPN's are impossible. There may *be* arguments to show this. But one thing is clear: defenders of the modal ontological argument should be looking into the matter. Their position hangs in the balance.

## V

To summarize, I said there were three problems standing in the way of accepting the second, or modal, version of Anselm's ontological argument. Each of these problems corresponds to a familiar objection to Anselm's original ontological argument. The first is the problem of establishing the logical possibility of a perfect being, i.e., of establishing premise (2) of the main argument (which corresponds to Anselm's problem of establishing that God 'exists in the understanding'). This problem has been widely discussed and I did not deal with it, except indirectly, i.e., as it was implicated in the other two problems. The second problem concerns the admissibility of the B-principle, the most controversial modal principle involved in the modal OA. The problem with the B-principle corresponds to the familiar objection against Anselm that one cannot argue from the mere idea or conception of something to its actual existence. I presented three arguments that together make a strong case for the B-principle. But they were not conclusive because the B-principle is implicated in the third problem with the modal OA. The third problem has to do with the possibility of necessary beings that are less than perfect (LPN's). If the modal OA was valid one could similarly prove the existence of every less than perfect necessary being, including, perhaps, evil beings. I called this the Gaunilogue argument because of its similarity to yet another familiar objection to Anselm's original argument, the objection of Gaunilo. But it is stronger than Gaunilo's objection because the logical possibility of LPN's would lead to a contradic-

tion if the modal OA were sound. Thus, defenders of the modal ontological argument must show that LPN's are not possible. In other words, they must show not only that all perfect beings are necessary, but also that all necessary beings are perfect.

The three problems can be related by way of the four statements of section IV, (i) 'God is the First Cause', (ii) 'the B-principle is true', (iii) 'a perfect being is logically possible', (iv) 'LPN's are logically possible'. The first of the three problems has to do with statement (iii), the second with statement (ii), the third with statement (iv). The relation of the three problems is brought out by noting that the four statements form an inconsistent set. One of them must be false; and for defenders of the modal ontological argument who do not want to radically alter the traditional notion of God, the false one must be (iv).

DEPARTMENT OF PHILOSOPHY,  
WAGGENER HALL 316,  
UNIVERSITY OF TEXAS AT AUSTIN,  
AUSTIN,  
TEXAS 78712,  
U.S.A.