Maydole's 2QS5 Argument

Maydole (2003) presents a formal derivation of the claim that there is exactly one supreme being. He claims that this derivation is 'arguably sound' (311), but acknowledges that it has 'premises, presuppositions and inference rules' that 'can and, perhaps, should be challenged' (311). In the last part of his paper, Maydole tries to address some of the potential challenges to his argument, but nonetheless allows that it would be 'philosophically arrogant' to claim that the argument is 'an honest-to-god demonstration of the existence of God' (311). Even so, he concludes that, 'rather than being a cause for despair, this shortage can hopefully serve as an invitation to further philosophical disputation' (311).

I'm happy to accept the extended invitation. In my view, it is quite clear that no one—theist or non-theist—should suppose that Maydole's argument is *sound*. Moreover, I think, there is no serious prospect of patching Maydole's argument to produce a *successful* argument for the conclusion that there is exactly one supreme being, i.e. an argument that gives reasonable people who do not already suppose that there is a supreme being a *reason* to accept the conclusion that there is such a being. If there is a supreme being, then sound arguments with that conclusion are a dime a dozen—and, likewise, if there is no supreme being, then sound arguments with that conclusion are equally a dime a dozen: so there is a nice question to be addressed about the distinctive virtues that Maydole might claim for his argument, given his own acknowledgement that it is not *successful*.

1. The Derivation

Maydole's derivation occurs in a second-order quantified modal logic that he calls 2QS5. This logic includes an unrestricted principle of abstraction—all instances of the axiom schema: $(\forall x)([\hat{a}F]x \leftrightarrow Fx)$—and the Barcan formula—$((\forall x)\Box Fx \rightarrow \Box(\forall x)Fx)$. The Barcan formula is the key instrument in the second half of the derivation, which moves from the claim that $\Diamond(\exists x)Sx$ to the conclusion that $(\exists x)Sx$

The main argument that Maydole defends relies upon two primitive notions: the higher-order property of *being a perfection*, and the first-order property of *being greater than*. However, when he comes to support the key premises in this main argument, he relies upon the claim that a perfection is *a property that it is better to have than not*, where this further notion is primitive and unexplained.

I think that we can improve upon Maydole's account of greatness and supremity. At the very least, the relation of being greater than—*Gxy*—should satisfy the following three axioms:

A1: $\Box(\forall x)\sim Gxx$
A2: $\Box(\forall x)(\forall y)(Gxy \rightarrow \sim Gyx)$
A3: $\Box(\forall x)(\forall y)(\forall z)((Gxy\&Gyz) \rightarrow Gxz))$

Given these axioms, we can simplify Maydole's definition of supremity: $Sx =_{df} \Box(\forall y)(y \neq x \rightarrow Gxy)$. In words: a being is *supreme* iff, in all possible worlds, it is greater than every other being.

The key premises in the first part of Maydole's argument are the three assumptions that he makes about perfections:

M_1: $(\forall X)(P([\hat{a}X]) \rightarrow \sim P([\hat{a}\sim X])$
M_2: $(\forall Y)(P(Y) \rightarrow (\forall Z)(\Box(\forall x)(Yx \rightarrow Zx) \rightarrow P(Z))$
M_3: $P([\hat{a}S])$

In words:

M_1: If a property is a perfection, then the negation of that property is not a perfection
M_2: Any property that is entailed by a perfection is also a perfection.
M_3: Supremity is a perfection.

The first part of Maydole's derivation depends upon the fact that, in 2QS5, the set of formulae $\{M_1, M_2, M_3, \sim\Diamond(\exists x)Sx\}$ is inconsistent. Given that $\Box(\forall x)\sim Sx$, it follows from M_2 and M_3 that every property is entailed by S, contradicting M_1.

The second part of Maydole's derivation depends upon the fact that Sx has the form $\Box(\Phi(x))$. Given that $\Diamond(\exists x)\Box(\Phi(x))$, it follows, by way of the Barcan formula, that $(\exists x)\Diamond\Box(\Phi(x))$, and hence, by the properties of the modal operators in S5, that $(\exists x)\Box(\Phi(x))$, i.e. $(\exists x)Sx$.

The final part of Maydole's derivation—moving from the assumption that there is a supreme being to the conclusion that there is exactly one supreme being—is easy, particularly given the above suggestion of uncontroversial axioms for the greater than relation.

2. A Problem

Maydole's own discussion suggests that he thinks that the most controversial point in the derivation is the use of the Barcan formula. While I think that the Barcan formula should be rejected—the intuition that there could have been things other than those that actually exist is stronger than any of the arguments that have been mounted against this claim—I do not propose to argue about this here. For there is a far more glaring weakness in the argument that Maydole neglects to mention.

The problem is that M_2 seems patently false, even granted everything else that Maydole would like to believe. Consider the property of *being either supreme or else a mass murderer*. That there is such a property is guaranteed by the unrestricted principle of abstraction that belongs to 2QS5. Moreover, it is quite clear that anything that has the property of supremity has this further property. But it is quite unintuitive to suppose that the property of *being either supreme or else*

a mass murderer is a perfection. This is particularly clear when we consider the intuitive gloss that Maydole puts upon perfections: it is plainly not so that the property of *being either supreme or else a mass murderer* is a property that it is better to have than not. It would have been far better than not had Stalin and Hitler lacked this property. End of story.

Maydole gives a brief argument for the truth of M_2, as follows:

> Suppose X is a perfection and X entails Y. Then it is better to have X than not, and having Y is a necessary condition for having X. But it is always better to have that which is a necessary condition for whatever it is better to have than not; for the absence of the necessary condition means the absence of the conditioned, and per assumption, it is better to have the conditioned. Therefore it is better to have Y than not. So, Y is a perfection. (302)

The failing in this argument is evident. There are clear counterexamples to the claim that it is always better to have that which is a necessary condition for whatever it is better to have than not: for something can be a necessary condition both for something that it is better to have than not, and for something that it is not better to have than not.

So Maydole's argument should convince no one; indeed, no one—theist or non-theist—should suppose that it is so much as *sound*. (Although I won't pursue this point here, I should point out that Maydole's justification for M_3 is also highly questionable. In particular, it raises interesting questions about the standing of conjunctions of perfections, and about the propriety of paraphrasing M_2 as the claim that perfections are closed under entailment.)

3. Repair?

Nothing in Maydole's derivation depends upon the *intended* interpretations of *Gxy*, *Sx*, and *P*. In order to get a sound derivation, all we need is a non-trivial [âS], i.e. an [âS] that does not entail all other properties, i.e. an [âS] that satisfies $\Diamond(\exists x)Sx$, where Sx has the form $\Box(\Phi(x))$.

If we have $\Diamond(\exists x)Sx$, then we can simply let P be the properties that are entailed by [âS], and axioms M_1-M_3 will all turn out to be true. So, if it is true that $\Diamond(\exists x)Sx$, and if we reinterpret P as described, then—given the truth of the Barcan Principle—we shall certainly end up with a sound derivation of $(\exists x)Sx$.

That is: if $P(Y) =_{df} \Box(\forall x)(Sx \rightarrow Yx)$, then M_1-M_3 will all be true iff $\Diamond(\exists x)Sx$; and—given that Sx has the form $\Box(\Phi(x))$, and granted the truth of the Barcan Principle—there will be a sound argument from M_1-M_3 to $(\exists x)Sx$ iff $\Diamond(\exists x)Sx$.

Even if we did not have an independently telling objection to the claim that Maydole's derivation is sound, we might suspect that the above considerations provide us with a good reason to suppose that his derivation is not *convincing*. Maydole himself agrees that the logical form of his derivation is this:

1. F is a P-property
2. F is necessitative
3. Not all properties are P-properties
4. Any property entailed by a P-property is a P-property.
5. (Therefore) Something has F.

Moreover—as we have just noted—any derivation of this form will be sound iff $\Diamond(\exists x)Fx$ (at least, granted the truth of the Barcan Principle); and, in particular, for each F-property, the only question about the soundness of the corresponding argument that one gets when one defines $P(Y) =_{df} \Box(\forall x)(Fx \rightarrow Yx)$ is whether $\Diamond(\exists x)Fx$ (again, at least granted the truth of the Barcan Principle).

So, consider, for example, the property of *being necessarily morally worse than anything else*. If we take the P-properties to be exactly the properties that are entailed by this property then we can use the Maydole derivation to establish that there is a being that is necessarily morally worse than any other being (provided that it is possible that there is such a being, and granted the truth of the Barcan Principle). A similar point applies in the case of the properties of *being necessarily bigger than anything else*, *being necessarily heavier than anything else*, *being necessarily less intelligent than anything else*, and so on, for the necessitations of a myriad of partially ordering comparative properties.

Now, of course, in many of these other cases, theists and non-theists will be agreed in rejecting the corresponding arguments: for example, we do not suppose that it is possible that there is something that is necessarily less intelligent than anything else, and so we reject the claim that not all properties are P-properties under the associated definition of P-properties. (Perhaps there will be some cases in which we all agree that the corresponding arguments are sound: perhaps, for example, we may think that the universe is necessarily bigger than anything else. However, I shall not explore this line of thought here. It suffices for the present argument that there are many cases in which all agree that the corresponding arguments are unsound.) But, if it is acceptable to reject these arguments because one is strongly persuaded of the relevant impossibility claim, then surely it is acceptable for non-theists to reject the (tidied up version of the) Maydole argument on exactly the same grounds. Non-theists do not believe that it is possible that there is a supreme being; *a fortiori*, they do not believe that not all properties are P-properties, given the assumptions that supremity is a P-property and that any property entailed by a P-property is itself a P-property.

Maydole does discuss this kind of objection to his argument. He claims that the line of reasoning implicit in these kinds of considerations is as follows:

> For any arguments X and Y, if X has the same logical form as Y, and the premises of X are true only if the premises of Y are true, and the conclusion of Y is false, then X is not sound. The logical form of the equivalent of MPA [Maydole's ontological argument] and countless other arguments is [as above]. The premises of all of these countless arguments are true if the

> premises of the equivalent MPA are true. If the equivalent of MPA is not sound, then MPA is not sound. Yet the conclusions of these countless arguments are not all true. Hence, MPA is not sound. (310)

In the light of this analysis, Maydole objects that it has not been established—and, indeed, that no reason has been supplied to suppose—that 'the premises of all of these countless arguments … are true if the premises of the equivalent MPA are true' (310).

Maydole's objection is surely misconceived. The point of adverting to the parodies is to establish that Maydole's argument is not *convincing*, i.e. that it fails to give reasonable non-theists a reason to embrace the conclusion that there is a supreme being. The argument here plainly does *not* rely on the assumption that the premises of all of these countless arguments … are *true* if the premises of the equivalent MPA are *true*. (That assumption is, I think, mistaken: as I noted above, it is plausible to suppose that there are *some* cases in which the parallel arguments are sound; and there are *many* cases in which it is clear that the parallel arguments are not sound.) Rather, the key point is that consideration of the many parallel arguments establishes that all of these arguments are powerless to *reasonably persuade* those who do not already accept the assumption that it is possible for there to be an instance of the property at issue. A reasonable non-theist—i.e. someone who reasonably fails to accept the claim that it is possible that there is a supreme being—will reasonably fail to accept the claim that not all properties are entailed by the property of supremacy (if, as we have been supposing throughout this discussion, that person accepts the Barcan Principle).

4. Some Further Considerations

I conclude with some observations about other points of interest in Maydole's article.

1. Maydole considers the possibility that a parallel argument might establish the existence of a necessarily least being:

1. A property is an imperfection only if its negation is not an imperfection.
2. Imperfections entail only imperfections.
3. Being paltry—necessarily the least of all beings—is an imperfection.
4. (Therefore) There is a paltry being.

In response to this argument, Maydole insists that the first premise is false:

> Consider the property of being red. There is no reason to believe that it is better to be red than not red. So, the property of being red is an imperfection, and the antecedent of the instantiation of 1. with respect to the predicate 'is red' is true. But there is also no reason to believe it is better to be not red than not. So, the property of being not red is also an imperfection, and the consequent of the instantiation of 1. with respect to the predicate 'is not red' is false. Therefore 1. is false. (308)

But this objection relies on a less than optimal interpretation of the notion of an *imperfection*. Given that a perfection is something that it is better to be than not, it is clear that—at least for the purposes of the present parody—an imperfection is something that it is worse to be than not. On this interpretation, the property of being red is not an imperfection—since (McCarthyist propaganda notwithstanding!) it is not in general worse to be red than not to be red—and so the objection simply lapses. For all that Maydole has argued, his ontological argument is vulnerable to this parody.

2. Maydole considers the possibility of another kind of parallel argument that might establish the existence of a paltry being. This time, we take the P-properties to be the anti-perfections, i.e. those properties that 'attribute moral badness or ugliness without any admixture of goodness or beauty' (309).

Against this parody, Maydole objects that it is plainly not true that any property entailed by an anti-perfection must be an anti-perfection, and that it is not at all obvious that the property of paltriness is an anti-perfection. These points seem fine, as far as they go. However—as I have already noted—we can avoid both of them by simply stipulating that, in this case, the P-properties are just those properties that are entailed by paltriness.

In apparent anticipation of this line of reply, Maydole adds that:

> It is not the case, however, that [the claim that supremity is a perfection] must be true by definition in order to be true. I take 'is greater than' as a primitive, and then non-definitionally argue that it is better to have the property of being supreme than not. [My opponent] is free of course to take 'is worse/less than' as a primitive, and to non-definitionally show if possible that it is bad or ugly to have paltriness. But such an argument has not been forthcoming. (310)

These remarks seem misguided on two counts. *First*, it is not relevant to the question of the soundness of the argument—nor, indeed, to the persuasiveness of the argument—whether some of the key premises are, or are not, true by definition. Of course, if there are premises that are true by definition, then there is no room at all to contest those premises: so one might insist that the argument in which some premises are true by definition is stronger, other things being equal. In any case, and more importantly, it seems that one could hardly suppose that, other things being equal, the argument with premises true by definition is worse. *Second*, as we have already noted, it is plainly not true that any property entailed by a perfection must be a perfection: so it is actually no failing on the part of the proposed parody that it is plainly not true that any property entailed by an anti-perfection must be an anti-perfection. As far as this consideration goes, the two arguments are plainly on a par.

3. Maydole provides a brief critical discussion of my earlier critique of Gödel's ontological argument (Oppy (1996) (2000)).

For the purposes of the present discussion, I shall suppose that Gödel's ontological argument takes the following form:

1. A property is positive iff its negation is not positive.
2. Positive properties entail only positive properties.
3. The property of being God-like—i.e. of having all positive properties—is positive.
4. Positive properties are necessarily positive.
5. Necessary existence is a positive property.
6. (Therefore) There is a God-like being

Nothing in the logic of this argument depends upon the intended interpretation of 'positive'. So, we have a template for constructing parodies of this argument:

1. A property is a P-property iff its negation is not a P-property.
2. Any property entailed by a P-property is a P-property.
3. The property of having all of the P-properties is a P-property.
4. P-properties are necessarily P-properties.
5. Necessary existence is a P-property.
6. (Therefore) There is a being that has all (and only) the P-properties

Suppose you think that there is a necessarily existent, necessarily maximally evil being. Define the properties that this being has (in the actual world) to be the P-properties. Given that there is such a being, all of the premises of the argument will be true under this interpretation of the notion of a P-property.

Perhaps it may be objected that there is something fishy about the suggested construction (even though it can plainly be elaborated to any set of necessitative properties that includes necessary existence). But—as I have argued, at least *inter alia*, in Oppy (2000)—there is at least one alternative construction to be considered. Start with a set of (putatively co-instantiable) necessitative properties, and a list of all remaining pairs of properties and their negations. Construct the set of P-properties by running through the list of pairs, adding one property from each pair to the growing list of P-properties in such a way as to avoid lapsing into inconsistency. (Given that the initial properties are co-instantiable, it will be possible to do this.) The only tricky part is the handling of the property of having all of the P-properties, and other properties that are logically related to this one (remember that this property has to end up in the set of P-properties).

At least *inter alia*, Maydole objects to this last part of the construction. He writes:

> By including the property of [having all of the P-properties] in every set that generates [the P-properties], Oppy impredicatively defines [the P-properties], and merely stipulates thereby that [having all of the P-properties] is a P-property. But you cannot show that an argument is sound, even conditionally, by merely stipulating that its premises are true. So Oppy's so-called new refutation of Gödel's argument also fails. It would likewise fail against

> [Maydole's 2QS5 argument] for the same reason …: circular reasoning. (313)

It is hardly reasonable to object to the impredicativity of the new construction: after all, that impredicativity is there in Gödel's original argument (in the insistence that the property of having all of the positive properties is itself positive). While it may be unclear how to describe the 'construction' in an intelligible way, any inability to carry out the construction simply reflects badly on the impredicativity in the original argument.

But, as I have already argued, it is even less reasonable to object to the fact that, under the construction, *some* of the premises of the parodying argument are simply true by definition. After all, *ipso facto*, a proposition that is true by definition is *true*. Of course, it would be uninteresting if *all* of the premises of the argument were simply rendered true by definition—for then, if the argument is valid, the conclusion will also be true by definition. But, for any given instance of the construction, whether the argument is sound will depend upon whether it is possible for something to have all of the generating necessitative properties: if it is not possible for something to have all of the generating necessitative properties, then it *cannot* be that both of the first two premises of the corresponding argument are true.

Contra Maydole, then, I maintain that my refutation of Gödel's argument succeeds. Either the argument is unacceptable because of the impredicativity that it requires, or else it can be parodied by other arguments in such a way as to make it clear that the argument is incapable of persuading reasonable non-theists to accept the conclusion that there is a being that has all and only positive properties (including necessary existence, necessary omnipotence, necessary perfect goodness, and so forth).

5. Concluding Remarks

I have long insisted that one needs only very minimal resources to overthrow all extant ontological arguments. While ontological arguments may rest upon controversial theses about existence, or modal logic, or the like, one need not contest these theses in order to show that those arguments are unsuccessful. I claim that this general result applies equally to Maydole's new argument.

Maydole's argument does depend upon genuinely controversial assumptions: e.g. the Barcan Principle, the assumption that S5 is the correct logic for modal propositions, the assumption that unrestricted abstraction is an acceptable part of an acceptable higher-order logic, and so forth. But Maydole's argument can be seen to be unsuccessful even if these controversial assumptions are left uncontested.

On the one hand, Maydole's own formulation of his argument is plainly flawed, since it has a premise that all—i.e. reasonable theist and reasonable non-theist alike—should agree is false. On the other hand, plausible patches of Maydole's

own formulation that avoid this particular pitfall are vulnerable to the observation that they are plainly incapable of reasonably persuading reasonable non-theists to change their mind on the question of the existence of a supreme being (a point that can be brought out by consideration of parodies of those plausible patches, and that can also be argued on independent grounds).

In my view—though not, I should hasten to add, in the view of all non-theists—Maydole can reasonably insist that suitably patched versions of his argument are *sound*. Given that a supreme being exists, there are countless sound arguments that have the claim that there is a supreme being as their conclusion. Hence, given that one can reasonably believe that a supreme being exists, there are countless arguments that one can reasonably believe to be sound arguments for the conclusion that there is a supreme being. (And, of course, given that one can reasonably believe that there is no supreme being, there are countless arguments that one can reasonably believe to be sound arguments for the conclusion that there is no supreme being.) So I do not claim that Maydole is unreasonable in insisting that (a suitably patched version of) his argument is sound. However, I do insist that the argument is plainly nothing to write home about.

References

Maydole, R. (2003) "The Modal Perfection Argument for the Existence of a Supreme Being" Philo 6, 2, 299-313

Oppy, G. (1996) "Gödel's Ontological Argument" Analysis 59, 4, 226-30

Oppy, G. (2000) "Response to Gettings" Analysis 63, 4, 363-7