

Scotus On the Existence of a First Efficient Cause
Timothy O'Connor
International Journal for Philosophy of Religion, 33 (1993), 17-32

A lengthy argument for the existence of a being possessing most of the attributes ascribed to God in traditional philosophical theology is set forth by John Duns Scotus in the final two chapters of his Tractatus De Primo Principio.¹ In 3.1-19, Scotus tries to establish the core of his proof, viz., that "an absolutely first effective is actually existent". It is an ingenious blend of elements that figure in standard versions of the cosmological and ontological arguments. However, while the reader of De Primo is apt to be deeply intrigued by the suggestiveness and originality of Scotus' discussion, attempting to organize and interpret the various threads of argument is a challenging task. This no doubt partially explains the relative neglect of Scotus' argument in contemporary discussion of theistic proofs. In what follows, I offer a reading of the argument as well as my critical assessment of it. I will contend that Scotus is unable to achieve all that he wants, in that a critical aspect of his official version of the argument is centrally flawed. However, the text also seems to suggest a modified version of the proof which relies on intuitive support for a possibility claim. I maintain that this form of the proof is sound. Furthermore, owing to the comparative weakness of its underived premises, Scotus' proof can be seen to offer a novel and appealing alternative to the more widely advertised versions of the cosmological and ontological arguments. If I am right, then, Scotus' De Primo has an important contribution to make to the contemporary discussion of an issue of perennial philosophical concern.

I

The claim Scotus seeks to establish in 3.19 is the fourth conclusion of the chapter ("3c4"), and the argument incorporates the results which precede it. However, I will reverse Scotus' order of discussion and begin by examining 3.19 directly, so that we may have the

basic shape of the argument clearly before us before proceeding to assess the support Scotus attempts to adduce for its central premise.

The argument of 3.19 begins with the following premise:

(1) Whatever is by definition such that the possibility of existing from something else is incompatible with it is such that, if it can exist, it can exist from itself (a se).

Two things should be noticed about this claim. The first is its implications for how we may think of the causal grounding of some entity's existence. One might suppose that Scotus is committed to allowing only two possibilities - either an entity is caused to exist by some other thing, or it exists "of itself" (a se), where, I think, this latter phrase is intended to be understood as meaning "has the reason for its existence within its own nature". Against this, at least two other suggestions could be made, whether or not upon considered reflection we would regard them as representing genuine possibilities. One might suggest, first, that there could be an entity which existed uncaused and beginninglessly, and for whose existence there was absolutely no explanation. The other apparent possibility is that there be something which had a beginning, but whose existence was nevertheless uncaused and for which there was absolutely no explanation (i.e. that some object "pop into existence", without any antecedent causal conditions). I think that it is likely that Scotus did in fact hold that the states of affairs depicted by the latter two "options" are utterly unthinkable, and therefore metaphysically impossible. But, importantly, this is not implied by his first premise here (nor, I believe, by anything that follows). For the first premise concerns only those beings (if any) which are essentially such that they are incapable of being produced by another. Consider the alleged possibility I suggested of a being which comes into existence uncaused. There is nothing in this description which suggests that the being is essentially incapable of being caused to exist by some other being. The claim is merely that in fact it had no cause. Similarly for the other suggestion.

This is important because the claim Scotus is actually making is thus significantly weaker than the Principle of Sufficient Reason (PSR) as traditionally understood,² and might therefore prove more compelling to those who have doubts concerning the latter. Most philosophers are willing to grant as a first principle that it is impossible that any object come into existence utterly uncaused.³ However, some have felt that it is logically possible that an object exist beginninglessly although it does not have the explanation for its existence either within itself or in the causal efficacy of another. The denial of that logical possibility may be thought to have more force, however, when we add to the description of the object that it is essentially incapable of being caused by another. For can it plausibly be denied of a being which has within its own nature the explanation for its being uncaused that it likewise have within itself the explanation for its existence? It seems to me that, in the absence of any considerations to the contrary, we ought to grant to Scotus his (comparatively modest) version of PSR as a reasonable-looking assumption.

A second point to be considered in connection with this premise is how the modal term "can" is to be understood, both here and elsewhere in the argument. Some commentators on Scotus are inclined to think that he has a special type of modality in mind, which one might dub "real possibility", such that a proposition *p* is really possible just in case its truth is consistent with the basic laws and structure of the physical world. I don't want to assess here the textual basis for this supposition. I will simply comment that, as far as I can see, interpreting the modal operators in this way does not affect the cogency of the argument in the least. It will be less confusing, then, simply to understand Scotus as thinking in terms of ordinary logical possibility.⁴

The next two premises are taken from conclusions arrived at prior to 3.19. The second premise is simply an instantiation of the first clause of premise (1):

- (2) A first effective is by definition such that the possibility of existing from something else is absolutely incompatible with it.

While this is simply a definitional claim, it requires a bit of comment. First, the quasi-technical term "effective" is essentially synonymous with "efficient cause". The only reason for retaining "effective" is that it carries no commitment to the entity's having exercised its causal capacity. Since Scotus' proof employs no contingent, empirical claims, describing the entity whose possibility we want to establish as an efficient cause might imply the falsity of the traditional claim that God was free not to create anything at all. The notion of a "first effective" will be clarified quite soon. The third premise (an implication of 3c2) is

(3) A first effective can exist.

And (1) - (3) jointly imply

(4) An absolutely first effective can exist from itself.

The final, homeward turn in the argument occurs in the remaining three premises. Scotus asserts (as underived premises)

(5) It is impossible that what is nonexistent bring anything into existence.

and

(6) Even if [per impossibile] what is nonexistent could bring itself into existence, it would not be altogether uncausable.

These premises, intended to rule out the possibility of a self-caused being, seem unobjectionable. From (5) and (6) Scotus believes it follows that

(7) What does not exist from itself cannot exist from itself.

This claim may give one pause, owing to the following sort of consideration⁵: Just as the fact that some object x does not actually exist implies nothing concerning its existence in some other possible world, so the fact that x does not exist from itself has no implication concerning whether it may so exist in some other possible world. However, the inclination

to draw such a parallel results from failing to consider the peculiar character of the "from itself" mode of existence. For to say of some being that it has the reason for its existence within its own nature is to say that it is essentially constituted in a way which explains its existence, that its essence entails its existence. But this is just to say that it exists of (broadly) logical necessity. And of course any being whose existence is logically necessary must actually exist. So (7) seems to be true even when the modal operator is given its widest scope, i.e. logical possibility according to the possible worlds conception.

I will close this section by laying out the argument of 3.19 (in terms of LP):

(1) Whatever is by definition such that the possibility of existing from something else is incompatible with it is such that, if it is logically possible for it to exist, it is logically possible for it to exist from itself (a se).

(2) A first effective is by definition such that the possibility of existing from something else is absolutely incompatible with it.(3c2)

(3) It is logically possible that a first effective exist. (from 3c2)

.°. (4) It is logically possible that an absolutely first effective exist from itself.
(from 1-3)

But (5) It is impossible that what is nonexistent bring anything into existence.

And (6) Even if [per impossibile] what is nonexistent could bring itself into existence, it would not be altogether uncausable.

.°. (7) It is not logically possible for something to exist from itself which does not [actually] exist from itself.

.°. (8) An absolutely first effective does exist from itself. (from 4&7)

Having shown that this argument of Scotus' is formally valid, I will now take up the arguments preceding 3.19, to see what support they can give to establishing (3), the crucial premise.

II

The first conclusion Scotus tries to demonstrate en route to the establishment of premise (3) is that "some nature among beings is effective (i.e. capable of producing an effect)." (3c1) His argument for this is as follows: Since there is at least one nature which is "effectible" (i.e., capable of being effected), by the nature of correlatives we may conclude that there is at least one nature which is effective. He argues for the first premise by pointing to the fact that there is some nature which is contingent (i.e. could exist after not existing) and some nature which is changeable or movable (thus covering the two basic ways of being effected). How are we to interpret this talk of "natures"? In accordance with the earlier discussion, I take Scotus to be arguing in the mode of logical possibility. (So 3c1 might be rephrased as "An essentially effective being is logically possible".) This suggests that the natural understanding of Scotus' notion of "nature" is an essence whose instantiation is logically possible.⁶ (For short, I will use the term "possible essence".) Hence, Scotus supports the premise that there is a possible essence which is effectible by claiming that i) there is a possible essence which is contingent and ii) there is a possible essence which is changeable. These latter claims are readily verifiable by introspection: I am contingent and changeable, and my essence is possible because it is actual.

This modest beginning is followed by an attempt to establish the crucial claim of Scotus' argument: "Something effective is absolutely first — i.e. neither effectible, nor effective in virtue of another." For clarity, I will rephrase this as the following:

An absolutely first essentially effective being is logically possible — i.e. a being of which it is impossible that it be effected by another or exercise its causality in virtue of another. (3c2)

The first thing that needs to be understood here is the type of order Scotus has in mind when he speaks of a nature as being absolutely first. He thinks there is an important distinction to be made between accidentally-ordered (AO) and essentially-ordered (EO)

series of causes.⁷ The notion of an AO series seems roughly equivalent to our ordinary notion of a continuous causal sequence of events over time as well as to a series in which some object A generates B or endows it with some causal capacity, and B goes on to do the same later with respect to some object C. (Natural reproduction, the example Scotus tends to use, is of the latter type.) Scotus tells us that an EO series differs from such AO series in three respects. In an EO series, but not in any AO series: (i) Every secondary cause depends upon the first "precisely in the act of causing". The other differences, according to Scotus, follow from the first. (ii) The first cause is of a higher nature and order than the second. (iii) All the causes in the EO series are required in order to produce the single effect to which they are ordered. Now Scotus' argument, as shown by the parenthetical clause in 3c2, is directed towards showing that there is some nature having the capacity to be first in an EO series, and also in any AO series of which it may be part.

Before considering his arguments to that end, we need to be clear about whether it's plausible to suppose that there are any examples of such EO causal series in the natural world.⁸ The stock example given by medieval philosophers is that of an intelligent agent moving some object by means of another (e.g., moving a stone with a stick). The movement of the stick is dependent for its causality on the simultaneous movement of the arm, which is in turn dependent on a continued decision or intention on the part of the agent to carry out such an action. There does seem to be an ordered dependency here in the production of some one effect, and further it is not implausible to describe the order as ascending in "nature and order" as one moves toward the first cause in the series.⁹ Suppose we allow this, therefore, as a legitimate example of an EO series. A second type of example that might be suggested concerns the dependency of a primary cause of some effect upon the necessary background conditions for its exercise of that causal capacity.¹⁰ A flame's consumption of a candle depends on the presence of certain atmospheric conditions — there being sufficient oxygen in the immediate vicinity, its not being the case that it is raining, or that the wind is blowing too strongly, etc. These factors in turn seem dependent

on conditions on a larger scale. One problem here is that it is not clear in what sense the more general causal conditions are of a higher nature and order. But I'll suggest that we tentatively waive this requirement (or at least leave it an open question whether this sort of example can satisfy it) until we can see whether it plays any vital role in Scotus' attempt to establish 3c2. This allows us to broaden our base of examples to include some that apparently don't involve intelligent agents.

With such examples in hand, we can turn to Scotus' argument on behalf of 3c2. From 3c1, we know that there is some agent (call it A) capable of producing an effect. (For expository simplicity, I here follow Scotus in dropping the qualification that this nature is officially only logically possible, and speak as if it were actual.) Either A is absolutely first (in the sense given in the second clause of 3c2) or it is not. If it is, we have what we want to prove. If it isn't, then it is such that it could be produced by something else or it exercises its causality only in virtue of some other thing. Call this other thing B. We ask the same question of B. Either we will go on in this way ad infinitum or we will reach something which is absolutely first. Since an infinite regress of this sort is impossible, and there cannot be a circle in causes, there must be something which is absolutely first.

Obviously, the claim that there cannot be an infinite regress needs further argument. Scotus first highlights the fact that he is not denying the possibility of an infinity in the accidental order, a possibility which Aristotle affirmed. He then makes (in 3.12) three claims he will try to defend:

- [A] An infinity of EO causes is impossible.
- [B] An infinity of AO causes is impossible unless a terminus is admitted in EO elements.
- [C] If an EO series is denied, infinity is impossible.

Scotus follows his introduction of these assertions with the remark "Consequently in any case there is something able to produce an effect which is absolutely first". It is not

altogether clear from the way in which they are presented whether Scotus intends these theses to constitute the premises for a second argument for 3c2, or intends them to be merely a restatement and amplification of his denial of an infinite regress in EO series (with the arguments he goes on to give on their behalf thus being support for this denial).

We need not settle this important matter, however, for either way there seems to be an invalid inference at work. 3c2 involves the claim that there is something which is first in two ways: (1) it is essentially such that it cannot be "effected" - nothing can modify it or bring it into existence (i.e. it is first in any AO series of which it is a member); and (2) it is not effective in virtue of another (i.e. it is first in any EO series of which it is a member). But [A]-[C] clearly are capable of establishing only (2). So it looks as if Scotus' attempt to marshal them in support of the core argument is fallacious.

Now no such fallacy is embedded in the structure of the original argument itself, for it, in accordance with the two-part goal of 3c2, is not restricted to the attempt to block an infinity in an EO series alone. Hence it must speak of a hybrid series comprised of both AO and EO elements. We take some element A of an EO series and ask whether it is first in both ways. Scotus doesn't make clear what happens if it isn't. For A may be first in some EO series, but dependent in an AO series, or the reverse, or dependent in both. Presumably, if it proves dependent in the EO series, then regardless of its status in any AO series, we should continue to proceed back further in the EO chain. Suppose Scotus could show that there must be a first in this EO chain (which would be to establish thesis [A]). But now we ask of this element whether it is also first in any AO series in which it may participate. Scotus, of course, cannot just assume that it must be. So perhaps it isn't. But then we're told to continue proceeding back until we do get to an element which is "absolutely first". But notice that in so doing, we are embarking on a task of tracing back an AO series, which Scotus grants may be infinite. So how can he show that it does in fact stop at some point? Even if at some point in tracing back the AO series we encounter another element which has dual citizenship, and so we can "jump over" to this new EO series, clearly we lack the means

to keep the process from repeating itself ad infinitum. So for all that we've seen so far, there may be (one or more) finite EO series which tie into an infinite AO series, or (as in the example just suggested) a continuous, infinitely-membered link between various AO and EO strands, without there being one element that is absolutely first in the manner desired.

When we stop to consider the two types of examples we used to get a grip on Scotus' concept of an EO series, this is exactly the result one might have expected. In the case of an intention of a purposive agent being essentially ordered, ultimately, to the movement of a stone, it seems that the agent is the first such essential cause.¹¹ But we nonetheless recognize that the agent herself is part of various AO causal chains, including one in which she was causally generated by another. The case of the flame's dependency (in the very act of burning the candle) upon various background conditions is similar. No doubt the chain progresses a little farther in this example, but at some point we will arrive at some very general feature of the world which will constitute the first cause in the EO series (i.e. one which is not dependent in its act of sustaining the causal efficacy of some more local feature). But again we do not suppose there to be any such feature of the natural world which is entirely immune from causal influence (of an AO type). Hence, there do not seem to be any guarantees written into the concept of an EO series, such that there must be an absolutely first element.

I think that if Scotus is going to attempt a demonstrative argument for the possibility of an absolutely first cause which is both plausible and valid, he is going to have to argue for a special sort of EO series beyond the garden varieties we've considered so far — one which transcends the web of interconnecting AO series constituting the causal history of the world. Up to this point, I've suggested that theses [A]-[C] are inadequate to any such task, given that their sole function is to establish the necessity of positing a first element in an EO series. However, I think that there is more "inferential force" to [B] than is apparent on the face of it. For Scotus' argument for this in 3.14 - which I'll call "The Argument from the

Essential Dependency of AO Series" - is an argument for a terminus to a peculiar sort of EO series. We may represent the argument as follows:

- (1) A secondary element in an AO series can cause when an element prior to it does not exist.
- . ° (2) An infinity in an AO series (if one is posited) is not simultaneous but only successive (one element after another), in such a way that a secondary element does not depend on a prior element as regards causing (although it is from it in some way).
(from (1))
- (3) All the elements of [an infinite AO] succession are of the same sort.
- . ° (4) The difformity [of nonsimultaneity in an infinite AO succession] is preserved only in virtue of something permanent that does not belong to the succession. (from (3))
- . ° (5) Such a nonsimultaneous infinity of succession is possible only on the basis of some infinitely-enduring nature [Z], on which the whole succession and every element of it depend. (from (2)-(4))
- (6) This dependence of the whole succession and every element of it on what is essentially prior is dependence in an order different from dependence on a proximate cause that is something belonging to that succession.
- . ° (7) Z is essentially prior to the whole succession and every element of it. (from (6))

Scotus remarks that from this, "[B] is evident." Presumably, Scotus is relying on [A] in concluding (in accordance with [B]) that there is a first in this essential order which he takes himself to have established. I don't want to concern myself here with looking at Scotus' attempts to argue for [A]. Instead, I will focus on the Essential Dependency Argument.¹²

Unfortunately, I don't know that much headway can be made towards understanding and accepting this argument. Obviously, the main points of contention will center around how (3) is to be understood and why (4) is thought to follow from it. (3) brings to mind that unexplained criterion Scotus gave regarding EO series, viz. that a prior cause in such a

series is always of a "higher order and nature" than those which follow it. WC 232-4 suggests that we have here a (partially implicit) version of Aristotle's "unmoved mover" argument (Physics VII, 258b32-259a6). If so, a lot of arguing remains to be done on Scotus' behalf, and I'm not very optimistic about the outcome. Still, it seems that something broadly along these lines is needed for Scotus' argument to go through - some sort of consideration(s) concerning the nature of an infinite AO series and its elements which will necessitate postulating an EO series between it and some object of a "higher" sort of nature. Once we put the matter this way, it becomes clear that what is needed is nothing short of a cosmological argument.

III

Before proceeding to take up a significantly modified version of the argument, I want to pause to review just what sort of theistic proof Scotus was (unsuccessfully) trying to construct. The general form of the final argument in 3.19 would seem to be that of an ontological argument, turning as it does on a claim concerning the logical possibility of a certain sort of being. But it should be clear by now that this was, in the final analysis, largely window-dressing. For since we are all willing to grant that there is at least one efficient cause in the world, Scotus' argument on behalf of 3c2, if successful, could be viewed as an a posteriori demonstration of the actual existence of an absolutely first efficient cause. His couching the premises of 3.19 in "possibility" terms seems merely to reflect a desire to have a wholly a priori proof.¹³ (The possibility of re-casting cosmological arguments into such a form is, of course, interesting in its own right.) Scotus is clearly cognizant of this point, as seen in his remark in 3.6: "In this conclusion, as in some of those which follow, I could argue in terms of the actual thus...". He proceeds to give a parallel argument in existential terms for 3c1. Presumably, the very next conclusion (3c2) is also one of those he had in mind.

But given the apparent validity of the form of argument in 3.19, why not have it do the real work by dropping the attempt to demonstrate that there must be an absolutely first efficient cause associated with any EO series (in the manner of typical cosmological arguments), and claim instead intuitive support for the possibility of such a being (the usual procedure in a more straightforwardly ontological argument)? A possibility claim is, of course, all that is being made by the crucial third premise of the proof in 3.19. There seems to be no need to base an argument for such a claim on the necessary features of causal series. Characteristically, perhaps, Scotus at one point seems to recognize that this simpler route to establishing 3c2 is available to him by giving an argument of just this sort,¹⁴ amid the numerous arguments which focus on causal series. I have in mind his fifth argument (ostensibly) for [A], in 3.13:

- (1) Being an effective does not necessarily imply any imperfection.
- .°. (2) Being an effective can occur in some nature without imperfection.
- But (3) If being an effective occurs in no nature without dependence on something prior, it occurs in none without imperfection.
- .°. (4) [Essentially] independent effectivity can occur in some nature.
- (5) A nature in which [essentially] independent effectivity occurs is absolutely first.
- .°. (6) Absolutely first effectivity is possible.

A first attempt to clarify the first premise¹⁵ might read "It is not necessarily the case that a being capable of efficient causality is imperfect." However, this implies that a being perfect in every way is possible. While Scotus no doubt thinks this is true, we should avoid having the argument rest on such a controversial premise. And in fact, I think that Scotus is (and needs to be) making only the more modest assertion that it is not necessarily the case that a being capable of efficient causality must possess that attribute in an imperfect way (as is clear from (2)). One may feel a little uncertain about what accepting this claim involves,

but Scotus intends it, I believe, in the sense given by (4) - that of essentially independent effectivity. We would expect (3), accordingly, to read

- (3') If being an effective cannot (logically) occur in any nature in essential independence of anything prior, then it cannot occur in any nature without imperfection.

This is just a backhand way of saying that dependent effectivity¹⁶ is imperfect effectivity, and this seems to be true. But Scotus' way of deriving (4) is based on implications from what is actually the case ("occurs"), and seemingly apart from any appeal to the essential possession of the attribute of effectivity. This will work, however, only if the modal term "can" in (2) and (4) is interpreted in terms of the unattractive statistical conception of (logical) modality.¹⁷ I suggest, therefore, that we replace Scotus' (3) with (3'), and understand the logical operators in the argument in the standard way. The claim that absolutely first effectivity is possible then follows directly from (4) and (the definitional truth) (5).

It's hard to block Scotus' argument for this claim. For notice the comparative weakness of the proposition being asserted - absolutely first effectivity is possible. One often hears objections to ontological arguments (which rest on the apparent conceivability of a being possessing various attributes) on the grounds that either one or more of the predicates involved are not very clearly understood, or that we cannot be confident of the lack of an internal contradiction in the description itself. But effectivity is a pretty homely sort of attribute, and it is hard to believe that there could be a logical contradiction in the idea of a being which was absolutely first in that regard. For this reason, I am inclined to conclude that the onus is upon a would-be objector to provide some positive reason why we should withhold our assent from this claim.¹⁸

What should be said about the larger argument of 3.19, if premise (3) is defended in the manner just suggested? It seems to me that such an argument compares favorably with

standard arguments of both the cosmological and ontological type, owing to the fact that its central assumptions are considerably weaker than those traditionally employed. In contrast with cosmological arguments, the Scotistic demonstration suggested here simply argues for the possibility of an absolutely first effective, and derives its actuality on the basis of a greatly restricted version of PSR. This principle claims that it cannot be a fundamental fact¹⁹ about a (possibly-existing) being that it is essentially incapable of being caused by another; this can be so only in virtue of the fact that it exists from itself - that it has the reason for its existence within its own nature. Scotus' argument also differs significantly from usual ontological arguments in the comparative modesty of its possibility claim, to which accordingly we are more willing to assent on the basis of apparent conceptual consistency. There is a price to pay here, of course, in that much further argument is needed to show that such a being has all or most of the attributes ascribed to God in traditional theism. (Scotus, however, does more than most in attempting to meet this challenge - the final third of De Primo is taken up with this task. I hope to assess his success in this regard in a future paper.) Nonetheless, a successful argument for 3c4 would itself be a significant step in the attempt to give a theistic proof.

Perhaps the most striking feature of Scotus' scaled-down version of the ontological argument is this: it seems to succeed in picking out a single, relatively-unproblematic attribute from among those that must be possessed by an absolutely perfect being that is conceptually linked to necessary existence. It is important to the project of any form of the ontological argument that necessary existence not appear to be an arbitrarily tacked-on aspect of the concept employed. And this requirement appears to be met by standard versions, as necessary existence does seem to be entailed by the simple, unified concepts of "an absolutely perfect being", or "that than which none greater can be conceived." (A failure to appreciate this fact underlies the persistent popularity of one of Gaunilo's objections to the argument.) What I take Scotus to have noticed is that, given a very modest version of PSR, this entailment holds with the far less involved notion of "an absolutely first effective."

IV

In summary, I have examined Scotus' argument for the existence of a first efficient cause, with primary focus on his attempt to establish 3c2, which was the chief task of the argument. Insofar as Scotus may have attempted to do so solely by means of general considerations concerning EO causal series, his argument must be judged invalid. Yet there is some reason to think that he believed there to be considerations in favor of positing a special sort of EO series, considerations pertaining to the nature of ordinary accidentally-ordered (AO) causal series. An argument along these lines (which shifts attention away from attempts to deny the possibility of an infinite regress in ordinary causal chains of an AO or EO sort) seems more promising, yet Scotus' remarks here are at best suggestive concerning how this might go.

However, Scotus has available to him a simpler argument from the apparent logical possibility of an absolutely first effective.²⁰ The major assumption of this argument is a highly restricted version of the principle of sufficient reason, a version which seems plausible at first glance and is clearly immune to criticisms which have been made of its more general counterparts. In a recent article in which such criticisms have been forcefully advanced, William Rowe concludes:

There are, of course, other principles of explanation that may come along to supplant PSR and Principle E [a related principle discussed by Rowe], principles which will do the work originally assigned to PSR and which will survive philosophical criticism. But until such principles come along, I think our judgment must be that the outlook for rationalistic theology is not particularly bright.²¹

While Scotus' version of PSR does not have the generality of standard versions, when incorporated into the framework of an essentially ontological argument, it is (as we have seen) capable of doing the same work done by PSR within cosmological arguments. Those

who take any of the criticisms of certain stronger versions of PSR to be effective will no doubt be hesitant to accept a related principle until it has been subjected to a good bit of further critical scrutiny. But one might reasonably suppose that the outlook for rationalistic theology is not so dim after all.²²

¹ For a published translation, see A Treatise on God as First Principle, tr. and ed. by A.B. Wolter (Chicago: Franciscan Herald Press, 1966). ('WC' refers to Wolters commentary in this edition.) Quotations in this paper follow an unpublished translation by Norman Kretzmann, which Prof. Kretzmann has kindly made available to me.

² I have in mind the second version of PSR given on p.113 of William Rowe's The Cosmological Argument (Princeton: Princeton University Press, 1975).

³ David Hume, of course, was a notable exception.

⁴ While I'm commenting on Scotus' use of modal notions, I should point out that there were two radically different conceptions of the semantics of logical possibility ("LP") in Scotus' intellectual heritage, and neither of them can be automatically ruled out as potential readings of a given passage. (See Simo Knuuttila's discussion of Scotus in this regard in "Time and Modality in Scholasticism", in Knuuttila, ed., Reforging the Great Chain of Being (Dordrecht: D. Reidel, 1981), pp. 163-258.) The first way of construing LP, going back at least to Aristotle, has been dubbed a statistical semantics for (logical) modality. On such a view, a proposition p is logically possible just in case the state of affairs it describes actually obtained, obtains, or will obtain at some time or other in the history of our world. And a proposition is necessary on this reading if and only if it is true at t for every time t. The other approach to LP corresponds roughly to contemporary "possible worlds" semantics.

It seems clear that the statistical conception fails to capture our intuitions about the logically possible; any strong commitment to such a theory in the argument might raise trouble for Scotus. Having noted that, I do not think that the plausibility of any modal claim in the argument rests on the statistical conception (with one minor exception, which is easily amended, as I show). The reader may satisfy himself of this simply by assessing the argument with its modal operators interpreted in the usual way.

⁵ I was at first inclined to draw this conclusion myself. What I go on to say concerning the significance of existence from itself was suggested to me by Norman Kretz

mann. His remarks have forced me to re-think my understanding of Scotus' use of modal notions in the argument.

⁶ One should also note that when Scotus introduces this term ("natura") in 3.3, he states that proving the existence of a nature characterized by absolutely first effectivity does not imply that there is only one such entity - this is something for which he will argue later.

⁷ A good discussion of this matter may be found in Patterson Brown, "Infinite Causal Regression", *The Philosophical Review* 75 (4), 1966, 510-25.

⁸ The examples suggested by Allan Wolter, in his commentary on the *De Primo* (WC 228-9), are not of much help in answering this question. (Though they are of some help in giving examples of what Scotus has in mind when referring to EO series in general.) It is true, as Wolter notes, that Scotus thinks that material, formal, efficient, and final causes are essentially ordered to their effects, but Scotus is here speaking only of an order of efficient causes. Wolter's second example — "the sort of causality theologians traditionally attributed to God as the primary cause of all real or physical change brought about in the natural order by created or secondary causes" — is obviously of no use in the context of an attempt to prove the existence of God. And the final example of Avicenna's hierarchical chain of intelligent creative causes is based on a false factual claim.

⁹ The plausibility of this claim will be strengthened if we suppose that Scotus's requirement of an ascendancy in "nature and order" in EO series is only that of a partial ordering - i.e., prior elements must be of the same level or greater than that of all elements posterior to it, and at least one prior element is of a higher level than the final elements of the series.

¹⁰ Suggested to me by Norman Kretzmann.

¹¹ If it is thought that the agent's intention is simultaneously dependent on further causes outside herself, then this example simply becomes a special case of the second sort of example, which will be discussed immediately below in the text.

¹² I don't think any of the five arguments he gives has much prospect for success, but clearly if (1) - (7) were accepted, a claim that in this case we have arrived at a first EO cause would have considerable plausibility (given the nature of Z), and it might even be possible to give some sort of special proof for it (that would not apply to EO series in general).

¹³ As WC 227 suggests, Scotus' motivation here may be that his argument satisfies the requirements of an Aristotelian scientific demonstration.

¹⁴ The possibility of interpreting Scotus' overall argument in this way was suggested by N. Kretzmann in a seminar he conducted at Cornell University in the Fall of 1989.

¹⁵ Scotus notes that the first premise is implied by a conclusion reached in an earlier part of De Primo (2.27), but that will be of no help to us, since no support for or discussion of the claim was given there.

¹⁶ I.e., effectivity that is not essentially independent.

¹⁷ See note 4.

¹⁸ I might add that at least one prominent philosophical critic of theism, William Rowe, is apparently quite willing to grant this claim to Scotus. (However, Rowe fails to properly understand, and therefore see the force of, the structure of the argument in 3.19). See The Cosmological Argument (Princeton: University Press, 1975), p.50.

¹⁹ I.e. one which holds but does not hold in virtue of some deeper fact or reason.

²⁰ Though I have argued that this proposition can be reasonably accepted simply on the basis of its apparent coherence (given its relative lack of complexity and the clear grasp we take ourselves to have of its basic concepts), it remains true that a positive demonstration of this possibility (such as Scotus attempted to provide) would yield firmer assent. It may be that Scotus chose the latter route for just this reason.

²¹ "Rationalistic Theology and Some Principles of Explanation", Faith and Philosophy, 1 (October 1984), pp.357-69. (The quote is from p.367.)

²² I wish to acknowledge substantial help from Norman Kretzmann in deepening my understanding of Scotus' argument, as well as in numerous valuable comments on earlier drafts of this paper. A comment from an anonymous referee of this journal led me to see the need for greater clarification of the auxiliary argument discussed in section III. A version of this paper was read at a conference at Valparaiso University in June, 1991, and I am grateful for helpful comments I received from some of the participants. Finally, I have been helped in understanding Scotus' argument by reading R. Wood, "Scotus's Argument for the Existence of God", Franciscan Studies (1987), 257-77, and ch.6 of W.L. Craig, The Cosmological Argument from Plato to Leibniz (New York: Barnes & Noble, 1980). My interpretation of the argument, however, differs from each of these authors' at various points.