FROM FIRST EFFICIENT CAUSE TO GOD: SCOTUS ON THE IDENTIFICATION STAGE OF THE COSMOLOGICAL ARGUMENT
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1. INTRODUCTION

Scotus's carefully detailed argumentative style easily commends itself to those who, like me, have been trained in contemporary analytic philosophy. And his common scholastic practice of marshalling several, often markedly different arguments in support of important conclusions enables the contemporary philosopher to pick and choose from among them, discarding those that appear to rest on assumptions less widely held nowadays than in Scotus's own time while retaining and developing the more promising alternatives.

These features are clearly evident in Scotus's elaborate theistic argument in the final two chapters of the De Primo Principio. Like all arguments of the cosmological type, it has two main stages, which I will call the establishment and identification stages (adopting a bit of terminology suggested by Norman Kretzmann). The proponent of such an argument first establishes the existence of a being of a certain sort (typically, a necessarily existing first cause) and then attempts to show that such a being must have further attributes sufficient to warrant identifying it as God. Scotus's establishment stage is more complex than what one usually finds. He first tries to show by three parallel arguments that there must be a primary being in each of three orders - viz., efficient causality, finality, and eminence - and then that these three primacies are united in a single nature.

In an earlier paper,1 I examined the De Primo argument in support of a (necessarily existing) first efficient cause (the first of the three primacies). I contended that Scotus's elaborate defense of a crucial premise of that argument - that a first efficient cause can exist - is flawed, but that there are glimmerings of a more promising alternative defense in one of his subsidiary arguments. I also suggested that one could try to defend the premise on more direct, intuitive grounds (this is also suggested by a subsidiary argument in the text), in
which case the argument turns out to be an ontological, rather than cosmological argument, with a more limited conclusion than traditional arguments of this type.

In this paper, I examine some main threads of the identification stage of Scotus's project in the fourth chapter of *De Primo*, where he tries to show that a first efficient cause must have the attributes of simplicity, intellect, will, and infinity. Many philosophers are favorably disposed towards one or another argument such as Scotus's (e.g., the cosmological argument from contingency) purporting to show that there is an absolutely first efficient cause. How far can Scotus take us from this starting point towards the ultimate aim of establishing the existence of a being more recognizably identifiable as God?

As I noted at the outset, Scotus tries to show the existence of a nature having a *threelfold* primacy (efficient causality, finality, and eminence). But on behalf of the existence claims corresponding to the last two of these primacies, Scotus simply tells us that they follow in each case by five arguments similar to those given on behalf the first. But it is very hard to see how this might go for these cases (or, for that matter, how it might go with a suitable refashioning of what in my earlier paper I called the Argument from the Essential Dependency of Accidentally Ordered Series, which I’ve suggested is the most promising avenue available amongst the various Scotistic arguments involved in establishing the first primacy). One could, perhaps, take the route of giving a purely ontological argument for each of these primacies (in the manner suggested above for the first primacy). But I think that establishing the primacy of eminence in this way turns into the usual, full-blooded ontological argument, with its much stronger possibility assumption.

In any case, I propose to abandon altogether Scotus's claim to have established by the end of chapter three a *triple* primacy in one existing nature, and consider how much of the lengthy, complex argumentation for further attributes can be retained and suitably refashioned if one draws solely upon the claim to have established the first primacy (of efficient causality).


2. SOME FORMAL ATTRIBUTES

I begin by looking at certain arguments employed by Scotus to establish the following four claims:

(3c6)² Necessary-existence-of-itself is suited to one nature only.
(4c11) Numerically there is but one necessary being.
(4c1) In itself the first nature is simple.
(4c2) Whatever is intrinsic to the supreme nature is such to the highest degree.

As I hope to make clear, we are led to affirm each of these claims by reflection on the radical peculiarity of necessary existence.

One Necessarily Existing Nature

Consider first the one-nature-only thesis, (3c6). Scotus gives four arguments for this claim. The last of them (in 3.26), which is probably the one most likely to occur on first reflection, turns on the fact that the nature characterized by absolutely first effectivity is such that every part of the contingently existing spatiotemporal universe is causally ordered to it. But it cannot be the case that the series of objects and their causal transactions in our universe are essentially ordered to two such natures. As Scotus notes, we might simply conclude that the reasonable person "ought not to postulate anything for no apparent need" and so assume that there is only one such nature.³ But since this appeal to simplicity still leaves open the formal possibility of a plurality of discrete, causally isolated universes ordered to different first effectives (or even simply other first effectives that have not exercised their causal capacity), one would like to offer a more compelling argument.

The argument I believe to be most forceful is Scotus's second (3.24). It is a reductio of the hypothesis that there are two or more necessary beings:

(1) Two natures can be necessary-existence-of-itself. (assumption for reductio)

∴ (2) Necessary existence is a common feature. (from 1)
(3) The two natures are distinguished by their ultimate actual formalities. (from 1)
(4) Either (a) the common nature or (b) the differing ultimate formalities account for the existence of these two natures.
(5) Not (4b), since in that case the common feature of necessary existence does not account for the actual existence of the natures that have it (which is absurd).
(6) Not (4a), since in that case the common nature would actually exist of itself and without any distinguishing features.

∴ (7) It is not the case that more than one nature is necessary-existence-of-itself. (from 1-6)

Though I am not certain how Scotus intended the crucial premise 6, it suggests to me the following paraphrase, which I find compelling:

The notion of necessary existence ("N") is that of an ultimate explanatory feature. If you say that there are two or more actually existing natures possessing N, you are committed to supposing that they each have at least one further (essential) characteristic ("C") that is related in a merely contingent manner to N. But then the fact that there is an entity having C cannot be explained. This rationally unacceptable consequence can be avoided only by supposing that whatever essential features are possessed by a nature having N must be necessarily connected to necessary existence.

I think this is a cogent argument. It is clearly reliant upon some version⁴ of the Principle of Sufficient Reason, an assumption that is probably at work already in the Argument from the Essential Dependency of AO Series discussed above.

One Necessarily Existing Individual
If this is right, we might wonder whether a similar argument could be given that there can be at most one individual having necessary-existence(-of-itself). Scotus's own principal argument for this claim is found in 4.92. Again, I will lay out the formal structure of the argument:

(1) Necessary being can be found in more than one individual. (assumption for reductio)

(2) If a species is capable of existing in more than one individual, then so far as the species itself is concerned, it is capable of existing in infinitely many individuals.

\[\therefore\] (3) There can be infinitely many necessary things. (from 1 and 2)

(4) Whatever is necessary cannot exist if it does not exist.

\[\therefore\] (5) There are infinitely many necessary things. (from 3 and 4)

\[[(6) It is false that there are infinitely many necessary things.]\]

\[\therefore\] (7) Necessary being is not found in more than one individual. (from 1-6)

Let us grant Scotus (6), the implicit premise that I have supplied. We saw something similar to (4) earlier, in the discussion of the ontological argument in 3.19 that the possibility of a first efficient cause implies its actuality. I take it to be completely unobjectionable, as a putatively necessary being either exists in every possible world or none at all, and so its nonactuality implies its impossibility.

The only remaining underived premise is (2), and at first glance it seems highly plausible. It asserts only that if the species admits of a plurality of existences, then there cannot be something about the species as such that limits it to a particular finite number. (This is of course consistent with supposing that in the actual world there are factors external to a given species to render its existence in infinitely many individuals causally impossible.)

However, perhaps one could object to the application of this principle to natures that involve necessary existence in the following way. Ultimately, all explanation is grounded in
the single nature that involves (or is) necessary-existence-of-itself. Consequently, we may establish what is possible only by determining what is within the power of such a nature, and then any imaginable scenarios falling outside the scope of such a nature will be seen to be simply impossible. So if there are in fact just two individuals having this special common nature, their existences are explained by their own nature (of necessary existence), and the impossibility of any others follows from the fact that not even the actually existing necessary beings could bring it about that there are other absolutely uncaused beings.5

It is not obvious to me that this is an improper response to Scotus's argument as it stands. Still, it leaves one with the impression that in such a scenario (involving two and only two necessary beings) something is left radically unexplained, despite what is claimed. I think this suspicion is well-grounded, and I suggest it can be developed into an eminently Scotistic argument, one that is structurally similar to the argument that was given for the impossibility of two distinct natures having necessary existence. For if there were two distinct individuals sharing the common nature that entails necessary existence, then we need an explanation for the fact that this common nature has been particularized in these two instances, that it has been 'linked' to these haecceities (and to no others). And it seems that there cannot be such an explanation, since none is to be found in the common nature, and there cannot be a causal explanation accounting for the existence of an uncausable being. Indeed, I believe that this problem can be avoided only if the relation between common nature and haecceity in this case is one of strict identity (i.e., involving neither formal nor real nonidentity), in which case there can only be one such individual, which is what we wanted to show.

**Essential Simplicity**

This suggestion of the strict identity of common nature and particularity provides a natural entry point into Scotus's argument for essential simplicity in 4.4. It consists of an
argument for two basic subconclusions, from which Scotus evidently supposes the simplicity thesis follows. These subconclusions are:

(1) The matter/form distinction cannot apply to the uncaused first efficient cause (FE).
(2) FE does not have such diverse perfections, as are so distinct in the thing that one could form a notion of genus and difference from them.

He says that proof of (2) is to be found in the argument we looked at earlier for the claim that necessary-existence-of-itself is suited to one nature only (3c6). And indeed the argument he proceeds to give includes the earlier argument as the proof of one horn of a dilemma that he takes to follow immediately from the denial of (2).

Suppose, says Scotus, that, contrary to (2), FE does have perfections G and H that are so distinct that one can form a notion of genus and difference from them. Then it follows that

(3) Either

(a) G is the primary reason why FE is necessary and H is necessary neither primarily nor of itself or

(b) G and H are individually sufficient reasons why FE is necessary.

Now (3b) apparently entails that there could be two or more natures possessing necessary-existence-of-itself, and so, as Scotus makes clear, the argument against the latter claim straightforwardly demonstrates the falsity of (3b) as well. (As an aside, Scotus adds that one who objects to the move from (3b) to the possibility of two or more necessary natures is no longer maintaining the denial of (2), the very claim at issue.) What about (3a)? Scotus's argument at this point gets a bit murky. He claims that it follows from (3a) that FE formally includes what is not necessary (H), and so FE is not a necessary being, contrary to hypothesis. The best account I can come up with of what is going on here is this: one who affirms (3a) and also concedes the no-two-necessary-natures claim is thereby supposing
that while G is of itself sufficient for the necessary existence of a certain nature, it nonetheless also happens to be the case that the further attribute H is part of this nature as well. (Note that since H is said to be of itself insufficient for necessary existence but such that one can form a genus/difference distinction from it, there apparently could be a contingent created entity having H but not G.) But what is to explain this mysterious necessary concomitance? Surely H would have to be only contingently connected to FE - but in that case, FE itself would not be a necessary being, since H is said to be part of its essential nature. Thus, (3a) is reduced to absurdity, by again insisting upon the excision of all possible causal/explanatory loose ends from the nature which is the ultimate ground of all explanation.

But, granting the arguments against (3a) and (3b), we need to ask two important questions. First, are (3a) and (3b) exhaustive alternatives for one who has denied (2)? I believe there is one further possibility that Scotus does not explicitly consider. It might be thought that

(3c) both G and H are individually insufficient for necessary existence, but they are individually necessary and jointly sufficient it.

In Scotus’s terms, neither G nor H is of itself the primary reason that FE is necessary; it is only the combination of them that accounts for FE’s necessity. Having noted this apparent further possibility, however, I think that a reply similar to the argument against (3a) is available. For, on the envisioned scenario, one is still left wanting to ask what accounts for there being something having both G and H. At first glance, this may sound perverse or just confused, since by hypothesis anything having both G and H is a necessary being. But if you think about it, on the proposed view the order of explanation seems to be the reverse of what it should be. If necessary-existence-of-itself is the ultimate explanatory feature, then it can’t be accounted for in terms of some further attribute or cluster of attributes - for what would account for their instantiation? So (3c) is out, and apparently (2) cannot be consistently denied.
A second question needs to be asked, however. 4.4 is a proof for
(4c1) In itself the first nature is simple.

And this is supposed to follow from the conjunction of

(1) The matter/form distinction cannot apply to the uncaused first efficient cause (FE),
and
(2) FE does not have such diverse perfections, as are so distinct in the thing that one
could form a notion of genus and difference from them.

((2) is undoubtedly the more important of these, and so we may simply concentrate on it.)

Now the doctrine of divine simplicity, in its most basic formulation, is the thesis that in God
there are no components of any sort. But is there, as Scotus implies, no alternative to
simplicity (of the essential attributes) consistent with (2)? I think there is such an alternative,
which we may call the Thesis of Internal Connectedness:

(IC) The attributes of FE are so internally connected as to be mutually entailing.

Since necessary existence and whatever other attributes are possessed by FE are internally
connected to one another, there is not the problem of supposing that necessary existence is
somehow grounded in something deeper. And note that (4c1), the simplicity thesis, is just a
specific instance of (IC).

The importance of this becomes clear when we reflect on the considerable difficulties
associated with the stronger simplicity thesis. For many medievals, notably Aquinas, this
had the perplexing implication that divine goodness is strictly identical to divine wisdom
which is strictly identical with divine power. . . all of which are strictly identical further still
with God himself. Scotus - correctly, I think - sees deep difficulties here and is thereby led
to introduce the wedge afforded by his notion of the formal distinction.6 On his view, the
various divine attributes are distinct realities within the one thing that is the divine nature.
Now the same holds for the relationship of formalities or attributes in created individuals, and yet in such cases this is said to imply complexity. The reason the implication does not hold true in God’s case, according to Scotus, is (very briefly) that the infinity of the divine attributes entails their lack of potentiality (and therefore their imperfectability) with respect to one another. And Scotus believes that two or more realities within a thing are properly said to be components of that thing only if they are in potentiality to one another.\(^7\)

It would take a lengthy examination to evaluate the propriety of Scotus's moves here in trying to reconcile his acceptance of the formal distinction of the divine attributes with a robust understanding of simplicity, and at least some of us would not judge the outcome in a manner favorable to Scotus. (The particular matter of the infinity of the divine attributes is one to which I will return shortly.) For my purposes, I am content to insist that all that the argument of 4.4 directly shows is (IC). A simplicity theorist might press me here and say that if we affirm only the more general claim of (IC), we are left without an account of the divine attributes that enables us to see them as internally connected. While this is true enough, it nonetheless remains the case that the fact of internal connectedness, and not its nature, is all that the argument of 4.4 shows. If we could assure ourselves that accepting the identity of the divine attributes would not land us in irresolvable problems, the further explanatory power of this idea might well provide a sufficient justification for accepting it.

\textit{Maximality of Essential Attributes}

Having argued for essential simplicity (though not wholly successfully, I have claimed), Scotus tries to establish a completely general claim concerning the formally distinct, yet really identical divine attributes, viz.,

\((4c2)\) Whatever is intrinsic to the supreme nature is such in the highest degree.

He says that proof of this is made possible by the simplicity thesis. The argument runs as follows:
(1) The first nature is supreme.
(2) Anything intrinsic to that nature is identical with it. (4c1)

\[ \therefore \] (3) If anything intrinsic to the supreme nature could be conceived to be surpassed in kind, then the nature with which it is identical could be conceived to be surpassed in kind. (from 1 and 2)

\[ [(4) The supreme nature cannot be conceived to be surpassed in kind.] \]

\[ \therefore \] (5) Anything intrinsic to the supreme nature cannot be conceived to be surpassed in kind. (from 3 and 4)

\[ \therefore \] (6) Whatever is intrinsic to the supreme nature is such in the highest degree. (from 5)

Obviously I cannot accept this argument at present, since I have foresworn reliance on Scotus's claim to have shown the primacy of eminence or perfection in Chapter 3. I will, however, make a few remarks on it.

First, I do not see how simplicity does any real work in the argument. We can see this by substituting ''of which it is a component'' for ''with which it is identical'' in the third premise. The resulting premise seems just as plausible as the original, for a composite object would be supremely perfect only if it possessed each of its component attributes in a perfect way. (Perhaps this result is not so surprising, given that Scotus's understanding of simplicity allows a greater distinction between the divine attributes than most simplicity theorists would tolerate.)

My second point about this argument is that one has to be careful about interchanging ''greatest possible'' and ''greatest conceivable'' (and variations thereof). This is especially true in the present context, since Scotus's proof of the primacy of eminence or perfection is of a broadly cosmological sort, to the effect that among possibly-existing natures, there is one which is supreme. Even if one has established that there is a first nature in the order of eminence, and so a nature that is greater than any to be found in any metaphysically-possible world, it does not immediately or obviously follow from this that such a nature is
the greatest that one could conceive or that could be consistently described. Such a being, after all, is the first efficient cause, and so the delimiter of metaphysical possibility. If its nature is in some way limited, the same will be true of any possible causal product of it (and so the whole range of possible worlds). Hence, all that Scotus can legitimately claim to have shown, even given the primacy of eminence as part of the nature of FE, is that the attributes of FE are such in the highest metaphysically-possible degree, where this may not be the conceptual or (narrowly) logical terminus along the relevant dimension. (I will have more to say about this, though, in a moment.)

I have noted that thus far I am prevented from adopting Scotus's argument for even this more qualified conclusion, due to its reliance on the primacy of eminence. However, I believe that one can give a fairly plausible and straightforward argument in support of the FE's possession of its attributes to the highest possible degree based on the nature of the FE as the ultimate source of all that could possibly be. This follows from the simple observation that anything that could possibly be would exist only as the product (direct or indirect) of FE. And it would seem that, owing to this fact, nothing could possibly possess a characteristic possessed by FE to a degree that surpasses its possession by FE. For how could FE impart an aspect of its own nature to a creature, drawing on no resources outside itself, to a degree greater than FE itself possesses it? If this consideration leads us to affirm the maximality thesis, as I believe it should, we must again be careful to note that it falls short of establishing any claim concerning a conceptual or logical terminus. I will return to this matter in the final section.

3. TWO CORE ATTRIBUTES

We have just seen, then, that there is good reason to agree with Scotus that whatever attributes FE possesses, it possesses to the highest degree. But now we need to explore just
what those further attributes might be, beyond absolutely first effectivity and necessary existence. A highly promising route would be provided by Scotus's next conclusion, viz.,

(4c3) Every pure perfection is predicated of the supreme nature as being present necessarily and in the highest degree.

Scotus glosses "pure perfection" as "whatever is absolutely and without qualification better than anything incompatible with it." In basic outline, his proof that the supreme nature must possess all pure perfections runs as follows:

Suppose a pure perfection, P, not actually possessed by the supreme nature. P is either compatible with the supreme nature or it is not.

(a) If P is not compatible with the supreme nature, then it has to be greater than that nature (which is impossible). Here Scotus appears to be relying on the essential simplicity thesis. For a pure perfection is an attribute that is without qualification better than any attribute incompatible with it. One might object that while P may be incompatible with the supreme nature in virtue of its inconsistency with attribute Ø, and so in that respect be better than the supreme nature, it does not follow that it is, all things considered, a more perfect being. (It may be that Ø, unlike P, is consistent with other attributes that together form a maximal set of great-making attributes.) But, given the essential simplicity thesis, P is really identical to each of the supreme nature's other essential attributes; and so if it greater than one, it is greater than all of them, considered together. [A similar reply is available that uses only the weaker IC thesis. For, in measuring the greatness of an attribute, it is appropriate to take into account all the attributes that necessarily follow from it.]

(b) If P is compatible with the supreme nature, it either exists there necessarily or is contingently related to it (whether actually so or not). If necessarily so, our conclusion is proved (given 4c2). So suppose it is only contingently related to it. It remains possible
that something possess P necessarily, which is a more perfect way to possess the attribute. But nothing can possess an attribute had by FE more perfectly than FE (by 4c2).

More would have to be said to make the second part of this argument fully convincing. In any case, it draws on the claim to have established the primacy of eminence, which I have here foresworn. Nonetheless, it seems Scotus could say (consistently with what has thus far been granted) something like the following: The possibility of a pure perfection that is not also possessed by FE implies that FE could create something that is in an absolute respect better than FE. Now, of course, you might be able to produce something better than you are, but only because you can draw on already-existing materials that come ready-made with potentialities you haven't given to them. But an absolutely first effective is dependent on nothing outside itself in its causal activity, and for this reason it seems inconceivable that it impart to something else an attribute that makes that other thing absolutely greater than it, in that respect. Of course, much more remains to be said here about why the argument is appropriately restricted to pure perfections, instead of saying more generally that FE could not create anything possessing an attribute not possessed straightforwardly (as opposed to just 'eminently') by FE itself. I think the restriction is plausible, but I won’t try to argue that here.

Note, though, that this argument, even if successful, is limited to showing that FE must possess all metaphysically possible pure perfections, which again leaves open the door to supposing that there are perfectly consistent descriptions of pure perfections that fail to correspond to anything metaphysically possible (since not possessed by FE). Thus, the argument just considered does not permit one to infer from the fact that the apparently possible attribute Ø is plausibly taken to be a pure perfection that Ø is in fact possessed by FE. Still, it would allow you to go from (i) some creature’s actually possessing Ø and (ii) there being good reason to say that Ø is a pure perfection to (iii) FE’s possessing it. And
this might seem fertile enough, since these conditions would seem to hold of intellect and will, two of the more important characteristics ascribed to God.

**Will**

Interestingly enough, however, Scotus denies that one can establish that intellect and will are pure perfections, and so sets himself the task of showing directly (without using 4c3) that FE possesses these attributes. He suggests that there are several ways that one can show this. I will have to confine myself to a discussion of what I take to be the most plausible of these ways, which turns upon the presence of contingency in the natural world. The basic argument is quite simple:

1. Something causes contingently.
2. The first cause causes contingently.
3. The first cause causes voluntarily.

In the subsequent discussion, Scotus tells us that “only that whose opposite could have occurred at the time that this actually did” is properly termed “contingent”. Hence, (as Scotus notes) the causal mechanisms in the natural world may be divided into two classes, (i) those which act by a “necessity of their own nature” and (ii) the wills of free agents. And the only contingent events are those that are at least partly the direct result of will.

Given this, the second implication in the argument (from contingency in the causal activity of FE to voluntariness) is clear enough. What about the first implication? Might not one suppose that while FE acts with necessity, human agents can act in a genuinely contingent manner?

Scotus's response to this draws upon the fact that an implication of his definition of a first efficient cause is that every secondary cause is dependent on FE in the exercise of its causality. Hence, he claims, whether FE moves my will immediately with necessity or does so via an intermediary that acts directly upon the will, whatever "is proximate to [my] will will
move it necessarily, and thus it would will necessarily and would be necessarily willing.” (4.17)

Now this seems too quick. Scotus himself, in a discussion of a related matter a few sections later in the *De Primo* (4.26), anticipates the most pointed objection that may be made to his argument, which is this. The view that Scotus wants ultimately to endorse is that God’s causal activity upon which I am dependent in willing does not determine my will either way. Thus, it is consistent with my will’s causal activity being ordered to the divine will as first efficient cause that my will causes contingently. But then why would things be any different if we instead supposed that FE’s own causal activity proceeds of necessity, rather than voluntarily? Unfortunately, Scotus does not provide a response here, and instead refers us to a separate discussion concerning God’s knowledge of future contingent facts. Pursuing this matter fully would take more space than I can afford here.

A related, and less problematic, defense of that thesis might note that if one supposes that FE is a necessary agent, then its causal activity is the same in every possible world. From this it follows that the range of metaphysical possibility is delimited by the range of possible activity by creatures endowed with will (both those that actually exist as well as those that could have been brought about by actual free agents). But since this is intolerably restrictive of the range of metaphysical (or broadly logical) possibility, one ought to reject the assumption that FE is a necessary agent. While this consideration may give one some reason to favor the hypothesis that FE is a voluntary agent, however, it hardly is compelling as it stands. For positing a necessarily existing FE is already to exclude some offhand intuitions about what is metaphysically possible. It implies, for instance, that there simply could not have been a world of any sort that does not include FE.

I think, though, that there is yet another, more compelling objection to the FE-as-necessary-agent hypothesis, one which, in a way, gives a sharper focus to the one just considered. Consider the enormous variety and particularity of the features of this world that, on the view in question, are the necessary results of FE (those aspects that are directly
produced by created free agents excepted). It is scarcely conceivable that a nature whose attributes form a tight unity (as we saw to be true of FE in discussing the simplicity thesis) could be necessarily ordered to just such effects, for there would have to be a necessary correspondence between facets of FE’s nature and each particular detail of its effect, the spatio-temporal universe.

Indeed, this reflection can be pushed further in a way that poses an even more formidable difficulty for the necessary-agent hypothesis. The only available model we have of a necessary agent is that of an agent whose activity is in each case triggered by surrounding circumstances, and as such, is always part of a chain of events. But this cannot be true of the absolutely independent causal activity of FE. And so we are left without a very clear idea of how things are supposed to go with respect to FE, according to the proposed scheme.

I will leave my two reflections at that. Perhaps they do not demonstrate the desired conclusion, but they certainly support the claim that, insofar as we understand necessary causal mechanisms, on the one hand, and the free activity of a voluntary agent, on the other, the supposition that FE is of the latter type is not only much more likely, but also more intelligible.

*Intellect*

But now, supposing FE has will, what about intellect? We might divide up the possible types of knowledge into three categories: (a) FE’s self-knowledge, (b) knowledge of necessary truths, and (c) knowledge of contingent truths about the natural world. [We can leave it an open question whether (b) is properly a subset of (a); in his discussion, Scotus does not explicitly address (b).] Scotus's own attempt to establish a maximal degree of self-knowledge by FE draws upon the primacy of finality, and may be pieced together as follows:

(1) FE is the ultimate end to which all causes are ordered.
(2) In his causal activity, FE is moved by his love for himself. (from 1)

(3) Nothing is loved unless it is known.

(4) FE has knowledge of himself. (from 2 and 3)

(5) Whatever knowledge of himself FE has, being uncaused, is necessary.

(6) FE’s act of self-knowledge is really identical with his own nature. (from 5 and 4c1)

(7) FE’s nature is perfect.

(8) FE’s act of self-knowledge is perfect. (from 6 and 7)

Even if we do not help ourselves to the assumption that the primacy of finality has already been established, we can easily see that (4) (which is all this primacy is used to establish in this argument) ought to be granted. For clearly FE must have some knowledge of his own causal capacity in order to will an effect. The attempt to show the perfection of this knowledge as I have represented it here involves the simplicity thesis, which I earlier claimed Scotus had failed to establish. However, as we also saw, one can motivate the claim that FE possesses its essential attributes to the highest degree without commitment to a strong simplicity thesis (Scotus's preferred method) - but with the following important qualification: "highest degree" must be interpreted in terms of metaphysical possibility, with no guarantee that this will correspond to logical possibility, narrowly conceived. Bearing this in mind, we may at least grant to Scotus that FE’s self-knowledge cannot possibly be surpassed. Let us further suppose that similar reasons will lead us to affirm FE's knowledge of necessary truths (b) in the highest degree as well.

What, then, of (c) - FE’s knowledge of contingent truths? Scotus rightly notes at one point that “before anything can be willed for the sake of an end, it must be known. Hence before we can even conceive of the first being as willing or causing A, we must conceive of it as knowing A. . . .And the same holds true of everything else it could produce.” (4.34)
This much is clear: everything FE produces directly must be completely known by FE, for it is entirely responsible for endowing such objects with the natures they have.

But Scotus wants to establish more than this, viz.,

(4c7) No knowledge can be an accident of the first nature.

and

(4c8) The intellect of the first being knows everything else that can be known with a knowledge that is eternal, distinct, actual, necessary, and prior by nature to the existence of these things in themselves.

His arguments on behalf of these two claims are sufficiently similar in an important respect that I will be able for my purposes to confine my discussion to his two principal arguments for 4c7. The first is the argument I noted earlier to the effect that in order to be able to produce what can be produced, FE must have knowledge of it. (One cannot will the production of that of which one has no idea, and since FE is, ultimately, the total cause of created things, he must will their existence under a total specification of their natures.)

Scotus does not make explicit how this is supposed to show 4c7, but I think it’s clear enough how he intends the argument to be filled out. The reason he restricts his attention to knowledge of created natures is that these are the only plausible candidates for objects the knowledge of which is accidental to FE’s nature. And if, as the argument given suggests, FE must have complete knowledge of such entities in order to be able to produce them, such knowledge is obviously not dependent upon any contingent circumstance, and so part of the essential nature of FE.

A formidable problem with the argument, though, is that the pre-volitional knowledge of natures (which is entailed by the argument) does not imply a corresponding knowledge of the behavior of objects instantiating such natures, insofar as the behavior does not follow as a deterministic consequence of a specification of the nature together with the environment
in which it will act. And the behavior will not so follow on Scotus's own view in the case of willing agents.

A similar objection can be made to Scotus's other principal argument for 4c7 in 4.37. There, Scotus notes that the more perfect an act of knowledge is, the greater the number of objects it can embrace, and concludes that since the understanding of FE is perfect in this way (4c2), it "will embrace all that can be known." While I think the stated conclusion does follow, it is clearly improper to presuppose (as Scotus is apparently doing) the highly controversial idea that it is possible for a single act of knowing to embrace all of an undetermined future prior (in the order of explanation) to its occurrence. One might make further appeal at this point to the Molinist doctrine of middle knowledge (knowledge of conditional future contingents concerning the behavior of free agents). I find this doctrine untenable; here, I will simply note that further argument is required along such lines is required to adequately defend 4c7. (I think it is clear that there is a similar obstacle in the way of accepting his related arguments for 4c8, though I won’t try to show that here.)

4. INFINITY

The final 'attribute' of FE that Scotus attempts to establish is infinity. Here I will have to be rather brief, though Scotus's own discussion of this is quite extended. The first question that immediately poses itself is what precisely can be meant by saying that FE, in itself, is infinite. If, with Scotus and many other medieval thinkers, we accept the claim that FE's nature is metaphysically simple, then we can explain this by saying that FE is infinite just in case one of its attributes, with which it is really identical, is infinite in its magnitude. And this is in fact the general route Scotus uses in several of his arguments for infinity. I am, by contrast, very hesitant to make the simplicity move, and in any case I believe that Scotus has failed to establish this claim in the De Primo. I did allow, however, that the broad consideration driving Scotus's argument for simplicity is sufficient for the weaker claim that FE's attributes must be internally connected to one another. Now suppose we say that where
simplicity in its fullest sense is not in play, a being may be said to be "infinite" just in case (a) each of its essential attributes is possessed to an infinite degree (intensive infinity) and (b) it possesses every pure perfection a thing may possibly have. I have already argued on behalf of (b). Furthermore, we might plausibly claim that if one essential attribute is infinite in magnitude, then given the Internal Connection thesis just noted, all are. (How could infinite power, say, be internally connected to some finite degree of knowledge?) Thus, showing the infinite magnitude of a single attribute of FE, which would be sufficient, given simplicity, for establishing the thesis of the infinity of FE's being, is likewise sufficient to render highly plausible an appropriately modified version of that thesis, given the weaker IC.

Scotus offers seven ways to prove the infinity of FE. I think that the first, fifth, and seventh of these are more promising than the others, and so I will restrict my comments to them. The First Way draws upon the claim that there are infinitely many objects of FE’s (actual) knowledge, and the Seventh Way turns on FE’s capacity to create an infinite effect. Hence, both of these ways follow the strategy noted in the previous paragraph (and so would be equally suitable for a framework such as I am pursuing that is committed to only IC, rather than full simplicity). On what basis, though, are we to accept these premises? The First Way’s claim about the infinite range of God’s knowledge is dependent on the Seventh Way’s premise that FE has the capacity to create an infinite effect, or at least the related, though weaker, thesis that there are infinitely many things FE can create.

One way we might argue the latter claim is via an adaptation of Scotus's Fifth Way. The basic idea there is that if, as it seems, an infinite intensity of being is not repugnant to perfection, then FE would not be perfect if it were not infinite (contrary to the primacy of eminence). The adapted argument this suggests, like so much of the previous argumentation, draws upon the fertile point that FE is the ultimate locus of explanation. Baldly put, the argument is just that it would be enormously odd for any of the essential attributes of FE to be necessarily limited to a particular finite degree. (I say “necessarily” since the claim that
an essential attribute of FE is only contingently limited to degree x - and so is present to
degree y (where y ≠ x) in some other possible world - would require there to be an 
exploration of how it came to be that in the actual world FE had the attribute to degree x
(and not y, or some other possible value). And clearly there could be no such explanation.)
Applying this general consideration to the attribute under discussion, it is mysterious that a
specific, finite mode of power should be necessarily connected to the ultimate nature (FE),
and not a greater or lesser mode instead. Anything short of an infinite mode for any of FE’s
attributes smacks of unexplained contingency, especially when we bear in mind our earlier
argument that such a mode must somehow be internally connected to the ultimate, uniquely
exemplified attribute of necessary-existence-of-itself (which is obviously perfect of its
kind).

A second, and perhaps more decisive, way one might argue the infinity of FE’s power
is suggested by Aquinas⁹: The intensity of a being’s power to produce an effect may
plausibly be said to vary with the extent to which it is dependent on other entities/factors in
its exercise of that power. FE is dependent on absolutely nothing else in the exercise of its
power, from which it would seem to follow that its power is infinite.

5. CONCLUSION

I can hardly claim to have exhausted all that is of value in Scotus’s attempt to give a
rigorous philosophical defense of theism. Others with different training and philosophical
sensitivities (not to mention acumen) may find some of the material I have overlooked or
rejected to be capable of being refashioned and incorporated into the results whose
plausibility I have urged here. If my analysis is cogent, the final two chapters of the De
Primo provides substantial guidance for uncovering evidence that the absolutely
independent, first efficient cause pointed to by the first (and most commonly discussed)
stage of the cosmological argument is unique, necessarily existing, characterized by a highly
unified nature that includes will and intellect as well as causal power, and possesses these
attributes to an infinite degree. There are other attributes that we should like to establish in addition to these, most notably goodness. But it is perhaps not too much of an exaggeration to close the foregoing argumentation with the remark, "and this all men call God."\textsuperscript{10}

Footnotes:
2. '3c6' is an abbreviated designation of conclusion 6 of Chapter 3 (and likewise for the designations that follow).
3. Note that this argument equally well suggests the second of our four conclusions, that there is only one \text{individual} having the character of being an absolutely first effective.
4. I say some version, since some contemporary philosophers of religion have noted that a common formulation of this principle leads to the result that there are no contingent facts - a result that Scotus would not have accepted. I believe that a sufficiently strong formulation can be given to ground standard cosmological arguments as well as the argument just given, but I haven’t the space to make good on this claim here.
5. This is not a real limitation on their power, of course, since it is a contradictory state of affairs of the form \text{causing something to exist uncausedly}.
6. A good overview of some prominent views on simplicity (to which I am indebted in my remarks on Scotus’ views) is found in Ch.21 of Marilyn Adams (1987) \textit{William Ockham} (Notre Dame: 1987), vol.II.
7. Much of this is implicit in the reply (in 4.6 of the \textit{De Primo}) to an objection to the simplicity thesis. Fuller treatments are found in the discussions of the divine simplicity in the \textit{Lectura} and the \textit{Ordinatio}. See the helpful discussion in Adams (1987) 931-934.
8. There seems to be no good reason to require that there be infinitely many such perfections.
9. Here I am indebted to a draft of the fifth of Norman Kretzmann’s forthcoming Wilde Lectures ("Philosophy From the Top Down").

10. I thank Norman Kretzmann and Carl Ginet for their helpful comments on an earlier draft of this paper. I am also grateful for the criticisms of various participants in the conference at which this paper was presented - especially Calvin Normore, Stephen Brown, and Stephen Dumont. For more historically-informed approaches to the argument of the De Primo, readers may usefully consult the commentaries accompanying the translations of Scotus' treatise by Allan Wolter (1966)A Treatise on God as First Principle (Chicago: 1966, 2nd ed.) and Wolfgang Kluxen (1987) Abhandlung uber das erste Prinzip (Darmstadt: 1987, 2nd ed.).