Contemporary philosophers frequently claim that the truth-conditions of modal claims involve necessarily existing abstract entities, be they states of affairs, propositions, attributes or possible worlds. Thus Platonism, or belief in a realm of necessary abstract entities, is currently a popular philosophical stance. Many Platonist philosophers hold no brief for theism. There even appears to be a conflict between traditional theism and a Platonist ontology. Traditional theism holds that God is the creator of everything distinct from Himself, so that whatever is distinct from God depends on God for its existence. Necessary beings seem not to depend on God for their existence. If something exists necessarily, we want to say, it exists simply because it is its nature to exist, just as God, according to Descartes' ontological argument, exists because it is His nature to exist. If necessary abstract entities do not depend on God for their existence, then by positing these, contemporary Platonism contradicts the traditional theistic claim that whatever is distinct from God does depend on God for its existence.

There is a passage in Leibniz' *Monadology* which appears highly surprising against this backdrop, for in it Leibniz seems to argue that far from being incompatible with theism, Platonism entails theism. In sections 43—44 of that work, Leibniz contends that

if there is a reality in essences or possibilities, or indeed in eternal truths, this reality must be founded on something existent and actual, and consequently on the existence of the necessary being in whom essence involves existence, or in whom to be possible is itself to be actual... without (God) there would be nothing real in the possibilities — not only nothing existent, but also nothing possible.²

Leibniz calls this argument a proof of the existence of God "by the reality of eternal truths"³. He adds that

we must not... imagine... that because the eternal truths are dependent on God, they are therefore arbitrary and depend on His will... This is true only of contingent truths.

... whereas necessary truths depend solely on His understanding, of which they are the internal object.¹

The surprise in Leibniz' thinking is this. Leibniz' "eternal truths" are genuinely necessary, in the most full-blooded sense, and their truth-conditions involve the similarly necessary existence of certain abstract entities. As we have noted, it seems that genuinely necessary beings are not caused to exist; similarly, it seems that necessary truths are not caused to be true. Yet Leibniz is so sure that necessary truths must be caused to be true and necessary beings must be caused to exist that he bases an argument for God's existence on this conviction.

Robert M. Adams has recently offered a reading of what Leibniz might have in mind:

Possibilities and necessary truths are discovered, not made (and yet) possibilities and necessary truths cannot be there except insofar as they or the ideas involved in them are thought by some mind. The first (thesis) seems to require Platonism; the second is a repudiation of it. Yet they can both be held together if we suppose that there is a non-human mind that . . . necessarily exists and thinks all the possibilities and necessary truths.²

According to Adams, then, Leibniz denies that non-divine necessary beings exist by their very natures. Rather, these exist necessarily because God necessarily exists and necessarily creates them; they are thoughts which God thinks (and so creates) in all possible worlds.

Even if Adams does capture Leibniz' thinking, he does not put together a deductive argument for the existence of God from the existence of necessary abstract entities or necessary truths. I would like to try to do just this. I will not claim that the argument I offer is exactly what Leibniz had in mind. I do however claim that the argument comports well with Leibniz' text and is of enough intrinsic philosophical interest to be worth considering. I must stress that the argument I offer will be strictly within the framework of a Platonist ontology. It depends on one or two metaphysical assumptions which only a Platonist will accept, and its conclusion will be only that a Platonist ontology commits one to the existence of a being with at least some attributes a Platonist would ascribe to God. I begin by arguing that possibly, necessary abstracta are caused to exist — the Causability Thesis, or CT.
I. CAN NECESSARY BEINGS BE CAUSED?

CT may seem to conflict with beliefs which seem quite plausible, e.g. that for any $x$, if $x$ exists necessarily, then $x$ is uncausable, or that for any $x$, if $x$ exists necessarily, then $x$ exists in virtue of its nature. Now if we believe either conditional, we believe it because we think that the nature of necessity renders this claim true. But arguably these (and any other such) conditionals are false, and derive their specious plausibility from insufficiently precise understandings of alethic necessity. According to currently popular semantics, “$x$ exists necessarily” asserts only that $x$ is to be found in every possible world. It entails nothing at all about why this is so; it leaves open the question of whether there may be some cause or causes which account for this. If this is so, the conditionals just mentioned may well be false, and so may well not create difficulty for CT. In any event, it seems that intuitions about necessity do not conflict with CT, for they do not warrant the conditionals mentioned.

There are intuitions which support CT. Many philosophers find ontological arguments for God’s existence dubious because these seem to infer God’s real existence from the fact that the concept of God includes His being a necessary existent. Jerome Shaffer puts the problem with such a move this way:

even if we have . . . the concept of an object which necessarily exists, a further question remains whether any existent meets the specifications of the concept.6

Shaffer’s point is that for all $x$, even if we know that necessarily, if $x$ exists, then $x$ exists in all possible worlds, this is not sufficient for knowing that $x$ exists. I think that Shaffer, like Kant, also intends the more general point that

1. for any putative necessary $x$, no matter what we know about the attributes $x$ would have if it were actual, this knowledge does not suffice for knowing that $x$ exists.

If we leave it undecided whether the concepts “perfect being” or “God” may be exceptions, most philosophers, Leibniz included, will accept (1). Yet (1) poses a question: what explains this insufficiency?

Let me introduce some technical terms. I will say that knowledge
about what attributes some being \( x \) would have were \( x \) actual, abstracting from whether or not \( x \) is actual, is \( E \)- or existentially-neutral knowledge about \( x \). Again, I will call such truths as “Santa Claus has a beard” or “God is that than which no greater can be conceived” \( E \)-neutral truths, and will say correspondingly that \( E \)-neutrally Santa Claus has a beard and \( E \)-neutrally, God has the attribute of \textit{being that than which no greater can be conceived}. If God is \( E \)-neutrally \( F \) and God exists, then God is \( F \). If God is \( E \)-neutrally \( F \) and God does not exist, one can say that “God is \( F \)” is true in virtue of the concept of God, or perhaps of the unexemplified divine nature. In this case the import of “God is \( F \)” is really that a counterfactual conditional is true, that were God to exist, He would be \( F \).

These terms being given, the explanation for (1) might be that with perhaps one exception, discussed below,

2. for all \( x \), if \( x \) is a candidate necessary being, \( E \)-neutral knowledge about \( x \) is not of the right sort to warrant belief that \( x \) exists, or

3. for all \( x \), if \( x \) is a candidate necessary being, \( E \)-neutral knowledge never suffices to let us know that \( x \) is possible, or that if \( x \) is possible, then \( x \) is actual, or both at once.

(2) and (3) could be true even if some \( E \)-neutral truth about some putatively necessary \( x \) entails that that \( x \) exists. They merely assert that even if this is so, we do not know enough to take advantage of the entailment. But I think that the intuition behind (1), which most philosophers will share, is that \( E \)-neutral claims about some putatively necessary \( x \) just do not entail that that \( x \) exists. Let me express this intuition more fully, incorporating some qualifications whose rationale I will then explain. I think most philosophers will accept that

4. for all \( x \), if \( x \) is a candidate necessary being, no \( E \)-neutral truth about \( x \) non-paradoxically entails “\( x \) exists,” save perhaps \( E \)-neutral truths non-paradoxically entailing \( x \)’ identity with the sole possible being whose existence is the conclusion of a valid ontological argument.

(4) is the intuition to which a defender of CT can appeal. Let me explain (4) and then try to show just why we ought to trust it.
If $x$ is a candidate necessary being, then "$x$ exists" is either necessarily true or necessarily false. If "$x$ exists" is necessarily false, no truth entails it, and so no E-neutral truth entails it. If "$x$ exists" is necessarily true, then it follows from every proposition whatever, including E-neutral propositions about $x$. That this is so is a case of a paradox of strict implication. (4) asserts that with perhaps one sort of exception, there is no derivation of "$x$ exists" from an E-neutral truth which is not purely a case of implicational paradox. Equivalently, (4) asserts that with perhaps one sort of exception, one could not derive "$x$ exists" from an E-neutral truth within a logic which blocked all such paradoxes. We may find reason to accept (4) so construed in a counter-move to ontological arguments which harks back to Anselm's critic Gaunilo.

2. THE GAUNILO STRATEGY AND (4)

Anselm in effect contends that because E-neutrally, God is that-than-which-no-greater-can-be-conceived, God is actual. Gaunilo in effect replies that if this entailment holds, then because E-neutrally, Lost Island is the most excellent island, it equally follows that Lost Island exists. Gaunilo's riposte is singularly inept. His analogy fails because for any attribute $F$, there are important differences between being the most excellent actual $F$ and being an $F$ than-which-no-greater-can-be-conceived, and because for any determinate kind $F$, there are important differences between being an $F$ than-which-no-greater-can-be-conceived and being a being than-which-no-greater-can-be-conceived. But Gaunilo's move suggests a general strategy against ontological arguments. Ontological arguments claim that for some $\Phi$, "E-neutrally God is $\Phi$" entails "God exists." Gaunilonians can reply that the $\Phi$ in question or another $\Phi$ relevantly like it is multiply exemplifiable and E-neutrally belongs to any number of other beings. (This is what Gaunilo seems to have been trying to do with being the most excellent $F$.) If this is so, it follows that not just God but a great or even infinite variety of beings with $\Phi$ exists.

One can argue cogently that this variety would include beings whose existence would be incompatible with God's. For instance, the attribute of being an uncausable necessary being seems multiply exemplifiable.
That an attribute is multiply exemplifiable entails that many distinct possible individuals would have that attribute if actual. This entails that there are many distinct possible uncausable necessary beings. In the Brouwer system of modal logic (B), possibly necessarily \( P \) entails \( P \). Hence in the Brouwer system, it follows that there actually are many uncausable beings. But if it is \( de dicto \) necessary that God causes to exist everything distinct from Himself, then no uncausable being distinct from God can coexist with God. Like remarks apply to the attribute of being a necessary being who knows that God does not exist. Again, the attribute of being divine seems multiply exemplifiable, at least in the sense that it seems conceivable that not God but (say) Brahman should be its sole actual instance. But if it is \( de dicto \) necessary that God is the only actual deity, no deity distinct from God can coexist with God.

As beings whose existence is incompatible with God’s cannot coexist with God, the ontological arguer must block the Gaunilonian countermove. To do so, he or she must either deny that the \( \Phi \) in question is multiply exemplifiable and that other relevantly similar \( \Phi \)s are exemplifiable, or relinquish the claim that “E-neutrally, God is \( \Phi \)” entails “God exists.” Thus to preserve the entailment on which his argument depends, the ontological arguer must contend that at most one possible being can have the attribute on which the ontological argument turns, as is so with being identical with the individual who is God, or being the most perfect possible being. Whether there actually is an attribute which only one possible being possibly possesses (a haeccity, in Plantinga’s sense) which allows for a valid ontological argument is a question we need not address. What all parties to the debate must grant is that any sound ontological argument must escape the Gaunilonian countermove, and that therefore any valid ontological argument must work for just one possible being. To accept this is effectively to accept (4), for it amounts to granting that with at most the sort of exception (4) mentions, for all \( x \), if \( x \) is a candidate necessary being, E-neutral truths about \( x \) do not “really” entail that \( x \) exists.

3. AN ARGUMENT FOR CT

It seems then that (4) is true, and if it rests on (4), Shaffer’s point is defensible. Consider, then, these propositions:
5. For all propositions $R$, $S$ and $T$, the truth of $\{R, S\}$ explains $T$'s truth only if \textit{inter alia} $\{R, S\}$ does not include $T$ and the truth of $\{R, S\}$ entails the truth of $T$.11

6. Possibly there is a necessary being $x$, not identical with the sole possible being whose existence could be proven by an ontological argument, whose existence would be explicable were $x$ actual.

If (4)—(6) are true, then $x'$ existence can be explained, but not by any attribute $x$ has E-neutrally. For per (5), “$x$ has $F$ E-neutrally” explains “$x$ exists” only if it entails “$x$ exists,” and per (4), no such proposition as “$x$ has $F$ E-neutrally” entails “$x$ exists.” Nor can “$x$ exists” explain “$x$ exists.” Nor, finally, can $x'$ existing be explained by some attribute $x$ has non-E-neutrally. For $x$ can have attributes non-E-neutrally only because $x$ exists: that is, $x'$ having attributes non-E-neutrally presupposes $x'$ existing, and so cannot explain it. Thus if (4)—(6) are true, $x'$ existence is explicable, but not by $x'$ existence or attributes, and so

7. Possibly $x'$ existing is explained by the existence or by some attribute or activity of some being other than $x$.

Now (5) is highly plausible and intuition favors (4). If one accepts (6), then, one must accept (7). But if we believe that possibly there are necessary beings, as Platonists do, we will also accept (6).

If $x$ is an actual necessary being, $x$ exists in all possible worlds. If $x$ exists in all possible worlds, then whatever explains this explains $x'$ existing in this world. If we treat things' existing in all possible worlds as explicable, then, we are committed to taking their actual existence as explicable. But we do treat things' existing in all possible worlds as explicable. For we find it reasonable to offer and discuss theories purporting to explain the necessary existence of some such beings. Some argue that they exist “by nature,” or that all of them which are abstract exist “by nature.” Various anti-Platonist metaphysical proposals seek to explain why certain entities exist in all possible worlds by rendering both these abstract entities and the possible worlds in which they exist mind-dependent. In other words, Platonists and anti-Platonists offer competing explanations of entities' existing in all possible worlds:
and what is taken to have competing explanations *a fortiori* is taken to be explicable.

Again, *x* exists in all possible worlds iff the state of affairs that *x* exists obtains in all worlds. Platonists in particular may treat the obtaining of states of affairs in all possible worlds as explicable. For the states of affairs which truths of logic and mathematics express obtain in all possible worlds. Thus a Platonist may take any proposal to axiomatize a complete logical calculus as in effect a proposal to explain the obtaining of some necessary states of affairs by the obtaining of others — namely, to explain the obtaining of the theorem states of affairs by the obtaining of the axiom states of affairs. A Platonist who does so does not assert that theorem states of affairs come to exist or that axiom states of affairs are agents which cause others to obtain. He or she rather says this: “if shown a complex logical theorem, one may well ask why it is true. It seems proper for someone to reply by displaying a simpler, intuitively evident thesis and showing how the first, more complex thesis follows from it. One who does this at least provides a reason to believe the first thesis. But beyond this, he or she explains why the first thesis is true — i.e. shows that the first is true because the simpler thesis is, where “because” has not just epistemic but also ontological import.” So too, in just this sense, the character of the number two explains its being the case that 2 + 2 = 4. As Platonism is a variety of what Putnam calls “metaphysical realism,” arguably it is partly motivated by a desire to make just such claims, i.e. to say what abstract entities there really are and what relations there really are between them.

To say in this sense that some necessary states of affairs obtain because others do is to assert a real dependence between them. This might but need not be an asymmetric dependence. That is, a Platonist can indeed say that some states of affairs have a special status as absolute foundations of (say) propositional logic, so that in some sense, all other logical states of affairs obtain because they do but not *vice-versa*. But a Platonist need not say this. Such a philosopher can say instead, for instance, that since all necessary truths entail all necessary truths, each necessary state of affairs explains the obtaining of all the rest.12 “Explains” would not lose its content in this case, for this would not be an ordinary causal explanation. Instead, to say “these necessary
state of affairs explain the obtaining of that one” would be like asserting
that “this part of the painting requires that part to achieve the effect it
aims at, and would not be complete without it” — a claim which would
retain its sense even if the existence of each part of the painting entailed
the existence of the other. That is, “these necessary state of affairs
explain the obtaining of that one” would say that the intrinsic character
of those could not be as it is were that one (per impossibile) different or
absent. Now the relations by which necessary truths explain necessary
truths themselves obtain necessarily. Thus the relations of real depen-
dence between states of affairs which those explanation-relations
express are essential attributes of those states of affairs. So since a state
of affairs cannot obtain without an essential attribute, if one state of
affairs depends on another in this way, each depends on the other for
its obtaining.

As Platonists accept that possibly there are necessary beings and
share some of the ways of thinking I have alluded to, they will accept
(6). Thus Platonists should also accept (7). (7) is a step toward CT. That
is, I will now suggest that if necessary beings’ existence is
explicable, it is also causally explicable, i.e. there is also an appropriate
(if perhaps stretched) sense of “causes” in which possibly something
distinct from our necessary x causes that x to exist. This claim will
doubtless raise howls of protest. Rather than offer further direct
argument for CT, I will try to quell these.

4. CT AND CAUSALITY

The most likely line of attack on the claim just made is that we can
make no sense of the causality by which something would cause a
necessary being to exist. The critic may have something like this in
mind. If my striking it causes a match to light, it seems to follow that
had I not struck it and had no relevantly similar event occurred, the
match would not have lit. If something causes a necessary being to exist,
then, one will want to make a parallel claim, that if this cause had not
existed, those necessary beings would not exist. This seems to be what
Leibniz means when he says, as quoted above, that if God did not exist,
“there would be nothing real in the possibilities — not only nothing
existent, but also nothing possible.” But it is not clear that one can thus
flesh out the assertion that a necessary-being-causer (NBC) causes necessary beings to exist. Consider the claim that

8. had an NBC not caused the proposition \( P \), \( P \) would not exist.

Adopting David Lewis' "would"-counterfactual operator \( \Box \rightarrow \), one can symbolize (8) as

8*. an NBC does not cause \( P \) \( \Box \rightarrow \) \( P \) does not exist.

If \( P \) is a necessary being, "\( P \) does not exist" is necessarily false. If "\( P \) does not exist" is not true in any possible world, it is not true in that possible world in which an NBC does not cause \( P \) which is most similar to the actual world. In fact, for any possible world \( W \), "\( P \) does not exist" is not true in the world most similar to \( W \) save for any counterfactual variation. So as the consequent of (8*) seems necessarily false, on a standard treatment of counterfactuals, it seems to follow that (8*) is necessarily false. If (8*) is necessarily false, what content can one give to the claim that \( P \) exists because an NBC caused it to exist?

The answer is that this question rests on a false understanding of (8*), one which assumes that there is a possible world in which an NBC does not cause \( P \) which is most similar to the actual world. The concept of an NBC is such that if an NBC causes a necessary \( P \), it causes \( P \) necessarily. Let us take the totality of conditions which lead to \( P \)'s existing as a single NBC, so that no questions of causal overdetermination will intrude. On this supposition, if \( P \) exists in all possible worlds, then if there is a possible world most like the actual world save that in it, its NBC does not so act as to cause \( P \) to exist, and (ex hypothesi) nothing else causes \( P \) to exist, \( P \) nonetheless exists in that world. Hence if \( P \) exists necessarily, it seems false that if its NBC did not act, \( P \) would not exist. But on a standard understanding of causation, if its NBC causes \( P \) to exist, it is true that if its NBC did not act, \( P \) would not exist. (Just how this can come out true if "\( P \) exists" is necessarily true is a story we will delve into shortly.) So an NBC can cause \( P \) to exist only if there is no possible world in which \( P \) exists and the NBC does not so act as to cause \( P \) to exist. If \( P \) exists necessarily and has an NBC, then, its NBC must both exist necessarily and cause \( P \) necessarily. So there is no possible world in which an NBC does not cause \( P \)
which is most similar to the actual world, for in no possible world does an NBC fail to cause \( P \). In \((8^*)\), then, both antecedent and consequent are necessarily false. This is reason to assign \((8^*)\) truth rather than necessary falsehood.

Having said this much, though, we face further problems. If \((8^*)\) is true, still so is

9. had an NBC not caused the proposition \( P \), \( P \) would still exist.

For \((9)\) can be symbolized as

\[9^*. \text{ an NBC does not cause } P \square \rightarrow P \text{ exists.} \]

\((9^*)\)'s consequent is necessarily true, and so therefore (it seems) is \((9)\). But if \((9)\) is true, then even if \((8^*)\) is true, the claim that an NBC causes \( P \) to exist seems to have no content.

One could perhaps meet the problem of \((8^*)\) and \((9^*)\) by treating them as a *reductio* of the claim that an NBC does not cause \( P \). If a proposition counterfactually implies a contradiction, that proposition is necessarily false. If \((8^*)\) and \((9^*)\) are both true, “an NBC does not cause \( P \)” counterfactually implies a contradiction. Hence, one could contend, “an NBC does not cause \( P \)” is necessarily false, and so “an NBC creates \( P \)” is necessarily true — whence it follows that “an NBC exists” is necessarily true, giving us the conclusion of our Leibnizian cosmological argument. But if we accepted this move, we would grant the truth of \((9^*)\), and so “an NBC causes \( P \)” would still seem to have no content.

I suspect that in fact, \((9^*)\) is not true. I submit that this is so because where a conditional’s antecedent involves an NBC’s not existing, special rules apply in virtue of an NBC’s special relation to necessary beings. At first glance, this move has an air both of irrelevance and of hopeless ad hocery. I think we can lessen these appearances by showing that this move is well-grounded in a plausible theory about the nature of NBCs. Let me explain.

5. NBCS AND THE NECESSARY

Above I gave reasons to think that at least one possible necessary abstract entity is such that if it exists, its existence is explicable by
something other than itself. These reasons did not discriminate among possible abstracta, for we can and do offer theories which purport to explain the necessary existence of all such beings, and as we have seen, a Platonist can maintain that every necessary logical or mathematical state of affairs is explicable. Moreover, suppose a Platonist were to assert that just one set of states of affairs is in all possible worlds the real foundation of (say) propositional logic, and that all other logical states of affairs depend asymmetrically on these. Even a Platonist who made this controversial claim might incline to accept that

NA. all necessary abstracta are as such equally explicable intrinsically, even if some have a peculiarly basic place in the realm of the necessary.

For if there are absolutely foundational states of affairs, it seems natural to say of them that if they do not obtain because others do, they obtain "by nature". But to say this is to treat the existence of these as explicable. It is to say that there is an explanation of why they exist, and that this lies in their own intrinsic character. Again, we can axiomatize logical calculi in many ways. As far as we know, no proposition which can serve as a logical axiom cannot also serve as a logical theorem. Thus if there are any absolutely foundational states of affairs, we do not know which they are. This could be just a function of our cognitive limitations. But (NA) could also help to explain it; perhaps the fact that we can axiomatize logic in many ways tells us something about the nature of abstracta.

It seems reasonable, then, to say that if any abstract necessary being's existence is explicable by something other than itself, all are (unless we are forced to qualify this claim by specific facts about specific possible necessary beings). This does not entail that they are all causable, or that all of them which are causable would if caused be caused by the same NBC. But we will see below that there is good reason to call them all causable, and it is plausible that all of them would if caused be caused by the same NBC. For one thing, that one NBC causes all caused necessary abstracta is the simplest view. Hence we ought to believe it unless positive reason to doubt it is forthcoming, and it is hard to see what reasons to doubt it there could be. Let me give a
positive argument for the claim that all necessary abstracta which can be caused to exist would if caused be caused by the same NBC. We have seen that any NBC must be a necessary being, and this by the very meaning of "NBC." Say that we have reason to grant CT. CT is reason to grant that at least one NBC is possible, for if it is possible that necessary abstracta depend causally on another being, it is possible that there be another being on which they causally depend. If more than one NBC can be possible, then CT is reason to grant that as many are possible as can be possible, since CT does not discriminate among candidates for the title of NBC. But then we have indefinitely many beings falling under a description which entails that they are possible and that they are by nature necessary beings, i.e. that they exist in all worlds if in any. This is to say that given B, we have indefinitely many beings whose existence can be proven by ontological arguments — which contradicts (4). Hence if we uphold B and (4), we have reason to say that there can be at most one NBC. If there can, then whatever abstract necessary beings are caused must all be caused by that one. But then there is good reason to think that if any necessary abstracta are caused to exist, the same NBC causes them all to exist. We have reason, that is, to say that whatever is a necessary being is either abstract or identical with a single NBC.

6. NBCS AND THE CONTINGENT

Let us suppose that an NBC causes all abstract necessary beings to exist, and assume (what I will shortly argue) that sense can be given to the thesis that if no NBC existed, no abstract necessary being would exist. Now it is clear that if there are no attributes, there are no contingent beings, since no contingent being can exist without exemplifying attributes. Again, if there are no possibilities, there are no contingent beings, since no contingent beings can exist without being possible. But for Platonism, attributes and possibilities are abstract necessary beings. Thus for Platonists, if no abstract necessary beings exist, no contingent beings exist either. Note that I am not claiming that an NBC or any abstract entity causes the existence of any contingent beings. I claim only that if Platonism is true and if there is an NBC, the NBC is a necessary condition of contingent beings' existing.
Thus if there is at most one possible NBC, then the concept of an NBC is such that if that being did not exist, nothing else necessary or contingent would exist either. That is, the concept of an NBC is such that the only world in which an NBC does not exist is the (absolutely) null world. (Thus again, an NBC is a being which exists in all non-null worlds if in any.) Thus the concept of an NBC’s non-existence is unlike the concept of any other impossible state of affairs.\textsuperscript{17}

7. A THEORY OF WORLDS

To explain this, I need to set out a few theses about the nature of possible worlds. I propose a version of actualism: that the \textit{actual cosmos} contains all there is, including all abstract entities, and that a world is a set of entities within the actual cosmos. I propose that a non-null world is a set of atomic propositions which would tell a true story about the actual cosmos were the appropriate events to occur — that it is a set which for every atomic proposition \( \Phi \) either includes \( \Phi \) or includes not-\( \Phi \), and that a possible world is a non-null-world-sized set of propositions which is consistent, i.e. such that all its member propositions can be true together.\textsuperscript{18} If an NBC is a necessary being, any world in which it does not exist (i.e., the null world) is an impossible world. But we need not say that every impossible world is the null world. A set of propositions can be both a non-null world and inconsistent. For instance, suppose that a set of propositions is such that for every atomic proposition \( \Phi \) save for \( P \), it includes either \( \Phi \) or not-\( \Phi \), but not both, and it includes both \( P \) and not-\( P \). This set satisfies my condition for worldhood. For that condition was just that for every \( \Phi \), a world includes \( \Phi \) or includes not-\( \Phi \), and if a set includes \( \Phi \) and includes not-\( \Phi \), it includes \( \Phi \) or includes not-\( \Phi \). An impossible world, then, will be either the null world or an inconsistent world-sized set of propositions. As I am advocating a set-theoretic view of possible worlds, I take it that there is neither more nor less difficulty in talk of the null world than in talk of the null set.

8. NBCS AGAIN

Now the uniqueness of an NBC’s nonexistence is this. Any impossibility
save an NBC's nonexistence, including the nonexistence of necessary beings other than the NBC, occurs in some set of inconsistent worlds. But the concept of an NBC is such that its non-existence occurs only in the null world. Because of the unique place of an NBC causally prior to the entire framework of worlds, any world containing its non-existence is automatically identical with the null world. An NBC's non-existence is a logical "black hole," sucking all the propositions of a world into itself. (It is also a logical "singularity"; the semantic peculiarities of "an NBC does not exist," though well-grounded in the unique attributes of an NBC, do not in any way alter the standard treatment we accord other impossibilities and conditionals whose impossible antecedents do not involve an NBC's not existing.) That an NBC's non-existence occurs in the null world does not entail that the proposition "an NBC does not exist" exists in the null world. This proposition does not exist there. In the null world, no propositions exist, and so no propositions are true or false. But while nothing is true or false in the null world, there are truths and falsehoods about the null world, e.g. that it is null and that an NBC does not exist in it. The propositions expressing these truths and falsehoods exist in the actual cosmos and in other, non-null worlds.

This metaphysical framework lets us distinguish semantically between counterfactuals whose impossible antecedents involve an NBC's not existing and counterfactuals whose impossible antecedents do not. From any ordinary impossibility, anything whatsoever follows. Thus if any ordinary impossibility were actual, all other states of affairs would be actual and possible. Because an ordinary impossibility entails everything, we usually assign trivial truth to all conditionals with ordinarily impossible antecedents. But if there is an NBC, its nonexistence occurs only in the null world. If it did not exist, no states of affairs would be actual or possible.

Thus an NBC's nonexistence is in fact unlike any other impossibility. Also, then, if there is an NBC, any counterfactual conditional with an antecedent involving an NBC's nonexistence is a claim about the null world. This permits us to say that some such conditionals are non-trivially false. For instance, in the null world, nothing exists. So any counterfactual whose consequent entails that something exists in the null world will be non-trivially false.
9. NBCS AND CAUSALITY

Consider now the claim that

9*. an NBC does not create \( P \rightarrow P \) exists.

Given that an NBC is as such a necessary being which necessarily causes whatever necessary beings it causes, it clearly is true that

10. \( \neg(\text{an NBC does not exist} \equiv \text{an NBC does not create } P) \).

For there is no possible world in which either claim is true, and so there is no possible world in which one but not the other is true. (10) and (9*) in conjunction entail that

11. an NBC does not exist \( \bigcirc P \) exists.\(^21\)

Per the semantics we have outlined, (11) is a claim about the null world, the claim that if the null world were actual, \( P \) would exist. So taken, (11) is non-trivially false. Were the null world actual, neither \( P \) nor anything else would exist. Now (10) is a necessary truth, given S4 or S5. If (9) in conjunction with a necessary truth entails (11), then (9) entails (11). But if (9) entails (11), (9) is non-trivially false, and so likewise, assuming that there is an NBC, will be any proposition which asserts that a necessary abstract entity could exist uncreated by that NBC. By contrast, consider the earlier claim that

8*. an NBC does not create \( P \rightarrow P \) does not exist.

In conjunction with (10), (8*) entails that

12. an NBC does not exist \( \bigcirc P \) does not exist.

Per the semantics we have outlined, (12) is a claim about the null world, the claim that were the null world actual, \( P \) would not exist. (12) is thus non-trivially true; (8*) does not share the problem (9*) faced.

So, I submit, a defender of CT can vindicate his use of the concept of causality, precisely by offering an explication of Leibniz’ claim that without God, “there would be nothing real in the possibilities — not only nothing existent, but also nothing possible”. For he can claim that (8) is true (and perhaps not wholly trivially, given its connection with (12)) while (9) is false, and that this gives sense to his use of causal idioms.
10. A PROBLEM ABOUT NBCS

Now this explication of the concept of an NBC raises numerous problems. One which may seem particularly difficult is this. I have suggested that an NBC must be a necessary being. But have I not also said that an NBC causes the existence of all necessary beings? Does this not entail that an NBC causes its own existence? And if this is (as it seems) impossible, does it not follow that nothing can be an NBC?

Leibniz takes this problem into account in the passages quoted, when he calls God (his NBC) “the necessary being in whom essence involves existence, or in whom to be possible is itself to be actual.” Whatever the difficulty of interpreting these words, their intent is plainly that God is unlike any other necessary being. While other necessary beings need to be actualized, God does not; His necessity is such that if He is possible, He is ipso facto actual. If this is so, then God cannot be caused to exist, for if He is even possible, He is actual, and so cannot be brought to be. Thus Leibniz conceives God to be the sole uncausable necessary being. If God is uncausale, God cannot cause His own existence. In this way Leibniz rejects the claim that his NBC causes its own existence.

Need we get involved in such a metaphysical digression? After all, we have not said that an NBC causes all necessary beings to exist. We have instead said that an NBC causes the existence of all abstract necessary beings. An NBC is necessary, yet it is also a cause of some sort. Hence plausibly an NBC is a concrete rather than an abstract necessary being. Thus, it may seem, there is no reason to say that an NBC creates itself. Seemingly we can take an even simpler route out. If we admit that an NBC cannot cause itself to exist, yet do not trust the vague and controverted abstract-concrete distinction to save us, all we need do is surrender the claim that an NBC causes all necessary beings to exist, and say instead that it causes all necessary beings save itself to exist.

Still, despite these evasive moves, it makes sense to ask why an NBC exists, and it makes sense to answer e.g. “it exists by its nature.” Thus the argument given to recommend (NA) to a Platonist will also apply to an NBC, leading us to call it an explicable necessary being. Does this not lead us to say that an NBC must cause its own existence, or have its existence caused by an infinite series of NBCs, which aside from being
unlovely would destroy any possibility of calling this NBC God? The second alternative is ruled out by our earlier argument that there can be at most one NBC. To treat the first we must first actually argue an NBC's existence. So let us do this.

11. THE EXISTENCE OF AN NBC

With the concept of an NBC thus explained, we can argue the existence of such a being as follows. Per (7), possibly some necessary abstract entity depends for existence on some other thing, perhaps another abstract entity. Dependence on an NBC would be like dependence on an abstract entity, save that the treatment of counterfactuals just completed renders this dependence at least in a stretched sense causal. Accordingly, if all necessary abstracta can depend on other abstracta for their existence, all necessary abstracta can depend quasi-causally on some other thing for their existence. If the treatment of counterfactuals just completed was plausible, its plausibility is reason to judge such quasi-causal dependence possible: that is, it is reason to affirm CT. Assume that Platonism is true and that S5 states the logic of "broadly logical" modality. We have seen reason to say that CT is true. If CT is true, possibly there is an NBC. As we have seen, nothing can be an NBC unless it is a necessary being. So if we let "N" represent the proposition "an NBC exists," we can argue this way:

13. \( N \rightarrow \Box N \).  
   premise, from the concept of an NBC.
14. \( \Diamond N \).  
   premise, from CT.
15. \( (N \rightarrow \Box N) \rightarrow (\Diamond N \rightarrow \Diamond \Box N) \).  
   instance of modal rule.
16. \( \Diamond N \rightarrow \Diamond \Box N \).  
   13, 15, modus ponens.
17. \( \Diamond \Box N \).  
   14, 16, modus ponens.
18. \( \Diamond \Box N \rightarrow \Box N \).  
   instance of Brouwer axiom/S5 theorem.
19. \( N \).  
   17, 18, modus ponens.

Hence an NBC actually exists.

Our argument moves from the possibility that an NBC exists to one's actually existing without claiming or implying that an NBC actually causes anything to exist. So we are not as yet committed to the latter claim. A fortiori we are not committed to the claim that an NBC causes
its own existence. Nor are we committed to the claim that an NBC's existence is explicable. For we have not claimed that all necessary beings are explicable, we have distinguished being explicable from being causable, and we have not claimed that the first entails the second. We therefore can claim that an NBC's existence is explicable but not causable. Let us back this claim. By the argument of section four, no contingent being can cause the existence of a necessary NBC. If some necessary being caused our NBC to exist, this would be a second NBC. But by the argument of section five, there cannot be a second NBC. Nor have we any reason to suppose that our NBC can cause its own existence. Thus it seems that our NBC's existence is not causable. Nor can some other being explain its existence non-causally, for any such being would derivatively be responsible for the causing of the NBC's effects, and so would be a second NBC — as cannot be.

If our NBC's existence is explicable, then, it must somehow be able to explain its own existence. An NBC can do this only if it exists "by nature" and can be proven to exist by an ontological argument. For a claim about its nature can explain its existence only if it entails its existence, and a claim about a thing's nature is an E-neutral truth. Leibniz' claim that in God "essence involves existence . . . to be possible is itself to be actual" asserts at least that his NBC exists by nature and can be the subject of a sound ontological argument. We cannot here investigate the prospects of such an argument, and so cannot fully validate the claim that our NBC is explicable but not causable. Still, suppose that we could show this. We would then be entitled to say that there exists a wholly uncaused and underived being able to cause the existence of abstract necessary beings. Theists would argue that God satisfies this description. If so, that an NBC exists would be reason to say that a being with some of the distinctive attributes of God exists, and so any Platonist would have to be at least a quasi-theist.25

NOTES

1 My claim here is only that Platonists hold that some propositions, attributes etc. exist necessarily. Some abstract entities exist contingently — for instance, sets with contingent members. Platonists can and do grant this. The present argument, though, concerns only necessary abstracts. The term "abstract" is notoriously hard to clarify. For present purposes, we can say that an entity is abstract only if it has no spacetime location, concrete iff it is not abstract, and concrete if it is possibly a cause. No
particular account of propositions etc. is assumed in this essay; any account on which they can exist necessarily will do. In all future occurrences, unqualified modal terms such as "necessary," "impossible," "contingent," or "possible" will express "broadly logical" modality.


3 Leibniz, Monadology, sec. 45, in ibid., p. 11.

4 Leibniz, Monadology, sec. 46, in ibid., p. 11. One wants to say that if what God causes to exist are genuinely necessary beings, it is not in His power to refrain from creating them. For were this in God's power, they would not be genuinely necessary beings. Rather, it would be possible that they not exist. (Cf. Thomas Morris and Christopher Menzel, "Absolute Creation," American Philosophical Quarterly 22 (1985).) For an argument which might lead one to affirm that God can refrain from creating what He necessarily creates, cf. Thomas Talbott, "On the Divine Nature and the Nature of Divine Freedom," Faith and Philosophy 5 (1988), pp. 1–24.


7 One philosopher who agrees is Aquinas; he uses this as an argument that "separate substances," the non-divine necessary beings of his cosmology, are created by God. Cf. e.g. De Ente et Essentia, c. 4.

One might wonder how a truth about some $x$ can be existentially neutral if it entails $x'$ identity with a being which an ontological argument can show to exist. After all, if such a being can be shown to exist, it exists, and so what entails $x'$ identity with it entails that $x$ exists. If a truth entails that $x$ exists, one might think, it cannot be existentially neutral. But an E-neutral truth just abstracts from whether its subject is actual, in the sense that it (or a corresponding counterfactual) is true whether or not its subject exists. Suppose that as Anselm thought, a sound ontological argument can begin from the claim "God = that than which no greater can be conceived." This latter truth (or a corresponding counterfactual) would be true even if there were no God. Accordingly, "God = that than which no greater can be conceived" would both be E-neutral and imply its subject's identity with a being which an ontological argument can show to exist.


11 Or renders it appropriately probable. But if A exists in all possible worlds, the probability of A's existing is 1. Then a set of propositions renders A's existing appropriately probable only if the propositions are true and jointly entail that A exists. Thus this qualification does not affect the present case, and I leave it out to simplify the discussion.

12 To mention one other possibility, a Platonist could say that each necessity explains and is explained by the obtaining of some but not all necessary truths. A Platonist might want to say this to restrict the explanation of character by character within disciplinary bounds.

13 "The character of . . ." is a counterfactual whose antecedent and consequent are both necessarily false. It thus comes out true on a standard semantics for counterfactuals. Of course, this is not a full account of what this claim involves, but space precludes giving one here.

14 Within an older idiom, one could say that the argument to this point has already
established CT, because the relation between abstract entities sketched in the last paragraph is a form of "formal causality." But we cannot discuss this here.


Though it would if we took "formal causality" into account.

Above I suggested that if one abstract necessary being's existence is explicable, all are. But the overall argument would go through without this claim as long as at least one abstract necessary being's existence is explicable. For every individual necessary being is a necessary condition of the existence of all contingent beings. Hence the subtraction of even one necessary being (via the non-existence of its NBC) would still leave a world empty of contingent beings. Thus one could say that if there is an NBC, the only worlds in which it does not exist are worlds in which none of the necessary beings it causes exist. This would suffice to ground the key semantic distinction shortly to be presented; one would just have to substitute for "null world" in the following sections the phrase "world null save for necessary beings not caused by the NBC," and make appropriate further changes. I ignore all this in the text for simplicity's sake.

Thus a possible world suffices to determine the truth-value of every indicative proposition without containing every proposition which it renders true. This move seems desirable to avoid set-theoretic and Liarlike paradoxes which beset the more usual claim that a possible world is a set which for every proposition P contains P or contains not-P, but not both.


In other words, when we are speaking consistently about an inconsistent world, we take ourselves to be speaking of the maximal impossible world, the one which for every atomic P contains P and not-P. There are other impossible worlds — as many as there are world-sized inconsistent sets of propositions. If you will, these worlds correspond to the impossibility that some states of affairs fail to follow from a contradiction. They are what we sketch when we speak inconsistently about an impossibility.


Or of all abstracta which are causable.

Thus if CT is true and possibly there are abstract necessary beings, we have reason to believe that a concrete necessary being is possible. This answers a criticism of the ontological argument given by Peter Van Inwagen in "Ontological Arguments," Nous 11 (1977), pp. 375—396.

This is true even if the NBC does not actually cause anything to exist, and even if nothing is actually an NBC unless it is actually causing necessary things to exist. For since an NBC, to be an NBC, must exist necessarily, whatever is possibly an NBC (i.e. is able to act as one) possibly exists necessarily. But in S5, something possibly exists necessarily only if it actually exists necessarily.

Part of this paper was read to a colloquium on Platonism at the APA Eastern Division Meeting, Washington, DC, December 28, 1988. I thank my commentator Allan Silverman for his useful criticisms.

Department of Philosophy,
Fordham University,
Bronx, NY 10458,
U.S.A.