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ESSENCE AND REALIZATION IN THE ONTOLOGICAL ARGUMENT

Timothy G. McCarthy

A persistent complaint about modal forms of the ontological argument is that the characteristic modalized existence assumptions of these arguments are simply too close to the conclusion to be of much probative value in establishing it. I present an abstract form of the ontological argument in which the properties imputed to the divine nature by these assumptions are replaced by any of a wide class of properties of a sort I call “actualizing.” These include basic theistic attributes such as authorship, sovereignty and omniscience. The import of these arguments is to show that the metaphysical coherence of some of the most familiar conceptions of the divine nature ensures their actual realization.

I

I shall present a new form of the ontological argument or, perhaps better, a new form for ontological arguments. The ontological argument has many alternative expressions, and so it is well to begin by placing the present one in context. As I am using the term here, an *ontological argument* delineates a set of properties that are assumed to constitute a partial specification of the nature of God. These are agreed by all parties to the dispute about theism to be properties that would be necessarily exemplified by God if there were such a person. Let us say that such a set is *essentially consistent* if it is possible that there is an object necessarily exemplifying each property in the set. The argument then shows, or purports to show, that if the set is essentially consistent, then there actually is some object satisfying each property in the set. If successful, the argument thus accomplishes the apparently remarkable feat of amplifying the grounds we have for supposing the given partial description of the nature of God to be essentially consistent to grounds for believing in the actual existence of an item falling under that description. Positive theological uses of such an argument assume that we have good reasons to suppose that the given set of properties is in fact essentially consistent, so that the actual existence of an item falling under the conjunction of those properties may be soundly inferred.

A persistent difficulty with these arguments lies in an interaction between the essential consistency assumption and the content of the assumed description of the divine nature. In particular, the property of *existence*, characterized in the natural way in terms of quantification and identity, has often been placed into the divine nature on the ground that it is a perfection,

or on the ground that it is a positive property, or on some other ground. Within a familiar modal-logical framework, the necessary existence of an item falling under the relevant properties is then an immediate byproduct of the inclusion of the existence property in the partial specification of the divine nature and the essential consistency of that set of properties. As Robert Adams has remarked with regard to Gödel's ontological argument, such a consistency assumption seems to be simply too close to the conclusion of the argument to be of much probative value in establishing it.¹

In the present paper, existence and other ontically tendentious properties figuring in ontological arguments are located within a wide class of properties I call "actualizing." Within that same familiar modal-logical framework, it will be shown that ascribing any actualizing property to the divine nature is sufficient to arm a form of the ontological argument; and some of these properties flow from what would normally be regarded as standard, ontically-untentious conceptual commitments of theism. Within that framework, then, the consistency of some of our most ordinary conceptions of nature of God may be shown to imply the actual existence of a being realizing those conceptions. The effect of all of this will be to blur the distinction between the conceptual and the ontological commitments of theism.

II

Let us begin by considering a bit more closely a traditional structure for such an argument.² The divine nature has often been conceived as an interconnected set of *perfective* properties. A perfective property is roughly an idealized or limiting case of a type of state, capacity, condition, or power; it is usually added that such properties are "positive" (in some sense). Thus, for example, omnipotence is an idealized condition of power and omniscience of knowledge. A familiar idea is that the divine nature is a *maximal* ensemble of such perfective properties. One form of the ontological argument proceeds from the thesis that *existence* is a positive characteristic of things. Idealization of the concept of existence leads to various notions of ontic robustness, or stable existence. The limiting case of ontic robustness is necessary existence, which is then the perfective property corresponding to the existence property.

Suppose, then, that the totality of relevant perfectives is simply consistent, so that there is a possible world in which these properties are jointly exemplified. If "*w*" denotes such a world, there is an inhabitant *G* of *w* that, in addition to falling under all of the traditional perfective properties (omnipotence, omniscience and so on) in *w*, also exemplifies the property of *necessary existence* in *w*. A widely held formal principle concerning the concept of the broadly logical or metaphysical necessity in play here is the characteristic axiom for the modal system S5, which states that if it is possible that an out-

¹R. M. Adams, Introductory note to "Ontological Proof."

²This is a version, more or less, of the argument given by Leibniz in the *New Essay Concerning the Human Understanding*.

come is necessary, then that outcome is necessary *tout court*. If the relevant modality respects S5, then, *G* necessarily, and thus actually, exists.

That is *almost* the conclusion of the ontological argument, but there is still one difficulty. The argument seeks to establish the existence of a being in the actual world that exemplifies each of the divine perfections. We have shown only that there exists a being *G* in the actual world that falls under the relevant properties *in the world w*: but we have no reason as yet to suppose that the Godlike characteristics of *G* in *w* should apply to *G* also in the actual world.

We can address this difficulty by means of a natural generalization of the robustness idea. Let *P* be any perfective property. *G* falls under *P* at the world *w*, but *G*, it seems, would be less than maximally perfect if *G*'s exemplification of *P* were accidental to *G* at *w*. *G* is more perfect, *ceteris paribus*, the wider the class of possible worlds containing *w* wherein *G* exemplifies *P*. In the best case, *G* should exemplify *P* at each world possible relative to *w*, so that *G*'s exemplification of *P* is necessary to *G* at *w*. Again by the characteristic axiom of S5, then, *G*'s exemplification of *P* is necessary and thus actual. Thus *G* exists and exemplifies each of the relevant perfective properties in the actual world. That is the conclusion we sought.

III

The above is a sketch, in terms of the possible worlds heuristic, of a modal form of the ontological argument. It is inspired by and more or less strongly resembles a number of modal ontological arguments familiar from the literature. The first-order logical framework for such arguments is supplied by the modal logic S5. Since these arguments talk not only of objects but of properties of objects and sets of such properties, their proper formalization in terms of modalities requires a third-order modal logic in which the second-order variables range over properties of objects in the first-order domain, and the third-order variables range over sets of such properties. I will be concerned throughout with arguments of this sort.

The framework developed here accommodates the above argument and its variants, as well as some versions of the ontological argument that, as far as I know, are new. That framework is based on a general observation in pure third-order modal logic that is introduced in section VI below. Given a set X_0 of initial properties, we first show how to characterize a set *X* of properties on the basis of X_0 and certain closure conditions; *X* is the smallest collection of properties containing the properties in X_0 and satisfying the conditions of closure. The closure requirements provide roughly that *X* is closed under a strong relation of entailment between properties, and that the necessitation $\Box\varphi$ of a property φ belongs to *X* whenever φ does. These closure conditions are satisfied by the collection of properties necessary to any object in the *de re* sense, which we may call the *nature* of that object. Thus if the initial properties are all essential to some possible object, then the resulting total collection *X* is essentially consistent, and comprises part of the nature of that object.

Say that a set of properties is *structurally consistent* if it does not contain any property along with its negation. The observation of section V says that if at least one of the initial properties is of the special sort that I call “actualizing,” then *either* the total set X of properties is actually instantiated in each possible world (i.e., each property of X is exemplified, at every world w , by an object that exists or is actual in w), *or* the set X is structurally inconsistent. It turns out that *existence* is trivially an actualizing property, and the version of the result obtained by placing existence along with the standard perfections into the initial set X_0 is a natural reformulation of the ontological argument sketched in section II above.

We can, however, consider alternative initial sets, which constitute non-standard starting points. The trouble with the classical starting point, using existence as an initial property, is that on weak modal assumptions the structural consistency of the resulting total set is trivially equivalent to the possible existence of a being that necessarily exemplifies each of the initial properties, including existence; again, this assumption has seemed to many philosophers to be simply too close to the conclusion of the ontological argument to be of much help in establishing it. It would mark an advance over traditional forms of the argument if we could think of the initial properties—the properties in the set X_0 —as being uncontroversial constituents of a theistic conception of the nature of God, and by that I mean properties that all parties of the dispute about theism would regard as constitutive of the nature of God if there were such a being. To put existence into X_0 is not far from saying, from the outset, that any possible being exemplifying the divine nature *necessarily exists*. This is a conclusion that one might hope to *derive* from a basic characterization of the divine nature; but it is tendentious to regard it as fundamental.

I shall argue in section VII that there are in fact very familiar components of theistic conceptions of the nature of God that are actualizing properties in the technical sense required by section VI, and which thus, if put into X_0 , lead to a corresponding X satisfying its conclusion: either the properties in X are simultaneously exemplified at each world, or X is structurally inconsistent. These include theologically central properties of God characterized in terms of casual or epistemic verbs (i.e., in terms of his *role*): e.g., God as *pantokrator* or all-creative/sustaining, as omniscient, as sovereign, etc. Thus any story that construes these features as constituents of his nature or essence will be necessarily realized if it is structurally consistent.

I shall offer no structural consistency proof for the particular choices of X we shall consider. However, the suggested candidates for membership in the initial set X_0 are core components of theistic conceptions of the nature of God; and the relations which lead from X_0 to X are closure conditions which are satisfied by the nature of any object whatever. A bit more precisely: no matter what properties you put into X_0 , *if* the properties in X_0 are essential to an object a in a possible world w , *then* all properties in X are necessarily exemplified by a in w ; and for the particular choices of X_0 we shall consider, theism is committed to the thesis that the properties

in question follow from the very identity of God, and are thus essential to him. The summary import of sections VI–IX below is that the metaphysical possibility of an item with a nature realizing some of the most familiar and basic theistic attributes requires the necessary and thus actual existence of an item exemplifying those attributes.

IV

Unfortunately, seemingly minor variations in the semantic underpinnings of modal ontological arguments can have major consequences for questions of possible existence and actuality of just the sort we are dealing with, and so it is appropriate to pause to describe a bit more explicitly the semantical framework that will be adopted here.

That framework is not at all unusual, and probably deserves to be called standard. It is essentially the model theoretic semantics for quantified modal logic introduced by Saul Kripke in 1963.³ On this view, an interpretation of a elementary modal language L is given by data that may be packaged in a 5-tuple $\mathfrak{I} = (K, H, R, \psi, \Phi)$. K , H , and R supply the modal background: K is a collection of objects, in the intended application taken to represent possible worlds; H is a member of K (the “actual world”); and R is a binary relation of relative possibility on K . In the intended application, it is assumed that K represents the set of all logically possible total situations, and that each such situation is possible relative to any other, so that R is the universal relation on K . ψ is a set-valued function on the domain K of possible worlds: for any element w of K , $\psi(w)$ is thought of as the collection of objects that exist or are actual at w . The *domain* of $\mathfrak{I}$ is the set $|\mathfrak{I}|$ consisting of all of the inhabitants of all of the worlds in K , that is $|\mathfrak{I}|$ comprises all and only the members of some set $\psi(w)$. Finally, Φ is a two-place function that associates each world w of H and each n -place relation symbol P of L with an n -ary relation on $|\mathfrak{I}|$, the *extension* of P in $\mathfrak{I}$ at the world w .

For a fixed world w in K , the formula $Px_1 \dots x_n$ is true on the interpretation $\mathfrak{I}$ at w for an assignment of values $a_1, \dots, a_n$ to $x_1, \dots, x_n$ iff $(a_1, \dots, a_n) \in \Phi(w, P)$; it is not required that the objects in question are members of the set $\psi(w)$ of objects that exist at w . However, in the given interpretation first-order quantifiers are restricted at w to the set $\psi(w)$ of objects existing at w , with the welcome consequence that at a given world the sentence $(\exists x)A(x)$ asserts the existence of an object at that world falling under $A(x)$. If φ is a formula and w a world of $\mathfrak{I}$, then $\Box\varphi$ is true at w for an assignment if φ is true for that assignment at every world w^* such that w^*Rw ; if, as is usually assumed here, R is universal, that simply means “at every world.”

The extension of the indicated semantics to the higher-order framework mentioned above presents no difficulty. We extend the first-order modal language L to a language L^* by adding second- and third-order quantification, and we extend the first-order semantics for L to L^* by construing

³Kripke, “Semantical Considerations on Modal Logic.” *Acta Philosophica Fennica* 16 (1963), 83–94.

second-order variables to range over properties defined over the relevant first-order domain and third-order variables to range over sets of such properties. For this purpose, a property in the interpretation $\mathfrak{I}$ may be identified with a function mapping each world in K to a subset of the domain of $\mathfrak{I}$, whose members are the objects taken to fall under the property at that world. The definition of truth in L on $\mathfrak{I}$ relative to a world and an assignment of objects to first-order variables is extended to a definition of truth in L^* , additionally relative to an assignment of properties and sets of properties to second- and third-order variables, in the natural way.

A salient feature of the Kripke semantics is that at a given world on a given interpretation, predicates may be defined for, and variables may take as values, objects that do not exist at that world. This aspect of the semantics can seem curious but is crucial for various applications. For example, one can define an existence predicate $\varepsilon(x)$ quite naturally in terms of quantification and identity, via $(\exists y) y=x$; at any world w , $\varepsilon(x)$ is true of exactly the items that exist or are actual at w . The existence predicate will be defined but false at w for any object that does not exist at w . If the interpretation is to reflect our actual modal opinions, we must be able to say, correctly, that there are some things that might not have existed (or which, equivalently, do not necessarily exist). We can easily express this claim in terms of $\varepsilon(x)$, by means of the formula $(\exists x) \neg \Box \varepsilon(x)$. For the purpose of making this sentence true, the occurrence of ' x ' within the " $\Box$ " is construed as taking a value at a possible world that does not exist in that world but does exist in the actual world. Another example arises from affirming the necessity of identity in the form $\forall x \forall y (x=y \rightarrow \Box x=y)$, which requires of each actual object a that the pair (a,a) fall into the extension of the identity predicate at every world w , whether or not a exists at w .

The present framework, then, assumes a universal domain of possible objects but supposes that quantifiers at a world range only over objects that are actual at that world. Perhaps the biggest advantage of this arrangement lies in its allowing the satisfaction clauses for " $\Box$ " and " $\exists$ " to be stated in the most natural way: an object (or n -tuple) falls under the necessitation of a predicate if and only if it falls under the predicate in each possible world, and at any world " $\exists$ " expresses *existence*. On the alternative "actualist" construal of the domains of worlds, the domain of a possible world is restricted to objects existing therein. This requires a reworking of the interpretation of " $\Box$ " if there are to be any true ascriptions of *de re* necessity involving contingent objects, but the obvious ways of doing this lead to trouble. Objects should be counted as necessarily self-identical whether or not they necessarily exist (I shall take it as at least *sufficient* for an item to fall under a property necessarily that it do so essentially, and I take self-identity to be a paradigmatic essential property of any object). The most natural suggestion for accommodating actualism is to provide, where " A " represents a monadic predicate, that an object satisfies a sentence of the form " $\Box A$ " if it falls under A at each world in which it exists. The difficulty is that this gets another family of cases flatly wrong; the most typical of

these involves the predicate " $\Box(x \text{ exists})$," which is false of any contingently existing object, but trivially true of any such object on the actualist reconstrual of " $\Box$."

In defending the thesis that the Kripke semantics with a universal domain is the proper semantic framework for representing modal ontological arguments, I do not mean to commit myself to any particular metaphysical interpretation of that framework. We require a system of models wherein possibilities are in a suitable sense represented, but within the present enterprise it is left open whether the constituents of these models are nonactual objects or actual ersatzes for them. What is important about such objects for an account of semantic relations is their structural role and not their particular identities.

V

In this section I will develop the metaphysical background of the form of the modal ontological argument presented below. For this purpose, we assume given a fixed model $\mathfrak{I}$ of the sort described above, extended to third-order logic in the indicated way. We think of $\mathfrak{I}$ as providing a description of the necessity concept (broadly logical, or metaphysical necessity) relevant to modal ontological arguments. In particular, the accessibility relation of $\mathfrak{I}$ is assumed to be the universal relation between the worlds of $\mathfrak{I}$.

Some notation will be useful. First, if K is the set of worlds associated with $\mathfrak{I}$, for any property φ , $\Box\varphi$ is the property that maps any world w onto the set of all objects in the domain falling under φ at each world in K . Secondly, if S is a set of properties, $\bigwedge S$ is the property that is satisfied by an object a at a possible world w iff a falls under each property in S at w . S entails a property φ iff for any object a and world $w \in K$, if a falls under $\bigwedge S$ at w , then a also falls under φ at w . If A is a monadic predicate in the free variable x , $(\lambda x)A$ is the property it expresses; officially, then, $(\lambda x)A$ is a function defined on K that maps any world w in K onto the set of all objects a satisfying A in $\mathfrak{I}$ at w . We define ε (existence) as the property $(\lambda x)(\exists y)x=y$.

I shall be concerned with a special sort of property that I call "actualizing." As the terminology would suggest, an actualizing property is one that is exemplified by an object at a world only if the item exists or is actual at that world. Equivalently, a property is actualizing if it entails the existence property ε , which of course is trivially an actualizing property. Essential properties of contingently existing individuals are not actualizing, since such an individual falls under its essential properties in each possible world but does not exist in all of them.⁴ Thus, for example, any object is necessarily

⁴The semantic framework of the foregoing section is designed to accommodate this observation, since the extension of a property at a world consists of the objects that fall under the property at that world, whether or not they exist therein. The intuitive idea the reader should bear in mind is that the essential properties of an object are those that follow from a complete specification of its identity. This point of view about essential properties has been persuasively defended by Kit Fine in "Essence and Modality"; see also "The Logic of Essence."

self-identical, and so on the intended reading of *de re* necessity self-identical in each possible world, whether or not it is actual at that world.

Actualizing properties are closely connected to a corresponding family of relations that I shall also call "actualizing." An actualizing relation holds of a pair (a, b) at a world w only if both a and b exist at w . There are weaker notions of *left-* and *right-actualization*: a relation R is left-actualizing iff, given that a pair (a, b) falls under R at w and b exists at w , then a exists at w ; similarly, *mutatis mutandis*, for "right-actualizing." Obviously any relation that is actualizing is both left- and right-actualizing. That the left- and right-actualization properties are jointly weaker than the actualizing property may be seen by considering identity, which is both left- and right-actualizing but not actualizing (again, an object is self-identical in every world, whether or not it exists in that world).

A pertinent example, for the purposes of the present discussion, of a relation that is left- but not right-actualizing is *the father of*. On the thesis of the necessity of origin defended by Kripke, it is a necessary property of any particular woman that she has the father that she actually does. If Karl is Alma's father, then, the pair (Karl, Alma) falls into the *father of* relation in each possible world. This does not require either to exist at any particular world; however, the (actual) father of Alma exists and begets her in any world in which Alma exists. This shows the *father of* relation to be left-actualizing. Clearly, however, the father can exist without begetting that particular child. Thus *the father of* is not right-actualizing. There is a mild paradox here: for, it would appear that " x is the father of y " can be defined by " x begat y & x is male." The difficulty is that the relation expressed by " x begat y " is actualizing. In fact, it is a paradigmatic example of an important species of actualizing relations that we shall shortly consider. If that is the case, however, the relation *father of*, thus defined in terms of "begat," must also be actualizing. But it is not. I will try to sort this out at the conclusion of the present section.

In an important class of cases, an actualizing binary relation between two objects involves the existence of a connection between them in space and time; such a connection may, but need not be, causal. In such a case, I shall call the relation "real." I take the notion of "connection" as primitive here, but a connection between two things is roughly a state of affairs that involves the objects themselves as constituents, and so exists at a world only if the constituent objects exist at that world. A real binary relation $R(a, b)$ is thus equivalent to a form $\exists x R^*(x, a, b)$, wherein " x " ranges over connections of the relevant sort and $R^*(c, a, b)$ holds when c connects a to b in the relevant way. The ontological commitment of such a form to the existence of a and b is thus a product of three factors: the existential quantifier over connections; the fact that a and b are constituents of any connection between them; and the fact that a connection can exist at a world only if its constituents exist at that world.

Relations introduced by causal verbs are real. If " V " represents such a verb, the form " $a V\text{-}d b$ " holds at a world w iff there exists a connection

between the subject a and the object b which consists in a causal link between certain basic actions performed by a and an end-state of b .⁵ The verb "to beget" mentioned above is a typical example: " a begets b " holds at a world w iff there is a *begetting* of b by a at w , which is a generative connection between a and b in w involving both a and b as constituents. Examples of this sort are readily multiplied. However, not all predicates that introduce real relations involve causal verbs; there are non-causal connections. Pure spatial relations between objects afford one example. The pair (a, b) falls under the relation *is 50 km due north of* at a world w if and only if there exists a longitudinal path p of length 50 km, oriented north to south, joining a to b at w ; the connection in this case is not the path p itself but roughly the state of affairs consisting in p 's joining a to b .

Let's now return briefly to the puzzle about fatherhood posed above. There is indeed a relation between people exactly defined by the condition " x begets y & x is male," viz., x *fathered* y . This relation obtains between x and y when x is male and there is an appropriate connection between x and y , a state of affairs that consists in x 's begetting y ; and this connection can exist only if both x and y exist. This means that the fathering relation is actualizing. On the other hand, if in fact y is the daughter of x , the property *being the daughter of* x is a property that y has essentially, and thus exemplifies in all possible worlds.⁶ This means that the pair (x, y) falls under the binary relation *is the father of* in each world whether the relata exist in that world or not. Thus *fathers* and *is the father of* are not even extensionally equivalent. What then is the relation between them? Here I shall simply state what I take the correct answer to be: x is the father of y just in case x fathers y in every world in which y exists, or, putting " F " for "fathers," just in case $\Box \forall z (y=z \rightarrow xFz)$. The characteristic structural features of the *father of* relation readily follow from this characterization: in particular, it is immediate that the *father of* relation is left- but not right-actualizing, and (via S4) that this relation obtains necessarily if it obtains at all. Similar considerations will apply to a variety of analogous pairs involving verbs of creation or authorship, in particular the pair "creates" and "is the creator of," which play a crucial role below.

⁵On an influential analysis of action sentences due to Donald Davidson, the sentence 'Shem kicked Shaun' is true if and only if there is an action, e , such that e is a kicking of Shaun and e is performed by Shem. If e is taken to be a basic action (roughly, something that Shem can do independently of the causal structure of his context), then the action itself is not the required connection, since it can exist without its bringing about the relevant end state (for example, Shem could have performed the same basic action while missing Shaun entirely). The connection in this case is the second-order state of affairs which consists in e 's bringing about the end state in the appropriate way. The connection thus seems closer to what Davidson calls "an event [action] under a description." See Davidson, "The Logical Form of Action Sentences."

⁶This is obviously a substantive metaphysical assumption. The contemporary doctrine of the necessity of origin derives from Kripke, *Naming and Necessity*, n56. It seems fair to say that the doctrine has won wide though not universal acceptance.

VI

In this section, I present a logical observation that will serve as a template for a class of modal ontological arguments. In what follows, $\mathfrak{S}$ is again a fixed Kripke model taken to describe the relevant necessity concept: various notions, e.g., “world,” “property,” “satisfies,” “actual,” “entails,” etc. should be understood as relativized to $\mathfrak{S}$. A set X of properties is said to be *realized* by an object a at a world w iff a exists at w and satisfies each property in X therein. Here then is the observation:

Realization Lemma. Let X be any collection of properties defined over $\mathfrak{S}$ such that:

- (i) if $\varphi \in X$, then $(\Box\varphi) \in X$;
- (ii) X is closed under entailment of properties;
- (iii) if $\neg\varphi \in X$, then $\varphi \notin X$;
- (iv) X contains at least one actualizing property.

Then X is realized at every world in $\mathfrak{S}$.

The proof is straightforward. Suppose that X is a given set of properties satisfying the conditions (i)–(iv). Consider the property $X^c = \neg\wedge X$. Then the extension of $\wedge X$ is nonempty at some world. For suppose otherwise. Then the extension of X^c is universal at each world, so that X entails X^c . Thus $X^c \in X$ by condition (ii). But since X entails $\wedge X$, we have in the same way that $\wedge X \in X$, which is impossible by condition (iii). Thus suppose that w is any world and α an object that falls under $\wedge X$ at w . Since, by condition (i), $(\Box\varphi) \in X$ for each property $\varphi \in X$, α falls under $\Box\varphi$ at w for any $\varphi \in X$, and thus satisfies each property in X at every possible world in $\mathfrak{S}$. Now by (iv), some actualizing property A belongs to X . It follows that α falls under A , and thus exists, at each possible world in $\mathfrak{S}$, so that α realizes X at every world in $\mathfrak{S}$. This completes the proof.

The Realization Lemma is a rather easy result in pure third-order modal logic; it is readily formalized in an appropriate third-order extension of S5. As such, it has no philosophical implications. It acquires such implications only if an appropriate interpretation is supplied for the frame $\mathfrak{S}$ and the class X of properties above. $\mathfrak{S}$, we have supposed, constitutes a satisfactory basis for a model-theoretic account of our discourse about broadly logical or metaphysical necessity. To connect the ontological argument to the Realization Lemma, then, we have to construe X to be a theologically interesting set of properties. I will initially consider the following two possibilities for such a construal:

- (1) X is the closure of the collection of all *perfective* properties of God under the entailment relation between properties.⁷

⁷Perfective properties are here understood the sense of section II above, roughly as idealized or limiting cases of positive conditions, capacities, or powers.

- (2) X is the collection of all *essential* properties of God (or the closure of that collection under the entailment relation between properties, if on this construal X is not already deductively closed).⁸

Neither of these suggestions quite works; it turns out that these two construals of the set X present complementary obstructions to an attempt to use the Realization Lemma as a template for an ontological argument. But exploring them briefly will lead us to a more satisfactory proposal. Consider first (1). Conditions (ii) and (iii) are fulfilled on this construal; moreover, theists attribute various perfective properties to God that are actualizing and that would thus underwrite condition (iv). Prominently, a traditional form of the ontological argument regards necessary existence itself as such a property. A less tendentious example would be God's creative relationship to the actual world, or his perfect knowledge of existing states of affairs. Both of these examples involve properties specified in terms of an underlying actualizing relation (introduced by the verbs "to create" and "to know," the latter interpreted for the present purpose as expressing a real relation between an agent and a state of affairs).

The difficulty is that these examples do not comport with the condition (i). For example, for traditional theism the property of having created the actual world is a perfective property of God; but it is not one that he necessarily exemplifies if the actual world is only one of a multiplicity of worlds that he might have created.⁹ A similar problem arises for God's omniscience with respect to the class of all propositions that are true in the actual world. Many perfective properties, in short, appear to be *contingent* (i.e., contingently exemplified by any object that exemplifies them); and thus the necessitation of such a property is not exemplifiable.

A parallel difficulty arises for interpretation (2), under which X is taken to consist of the properties *essential* to God. On that construal, the conditions (i)–(iii) hold but condition (iv) becomes problematic. The basic difficulty is that it is not clear that any actualizing property is essential to God. There are various actualizing properties attributed to God by theists and which constitute central themes of traditional theism. Any description that characterizes God's activity in the world, on the analysis of causal verbs adopted above, specifies an actualizing property, but not, in general, one that God falls under essentially. Again, for traditional theism, the fact that God created the world that happens to exist is an exceedingly important actualizing property that he exemplifies; but he might not have

⁸This is roughly to say that X consists of all properties that are necessary to God in the relational (*de re*) sense. The necessary properties of an object are not uncommonly identified with its essential properties. On a more discriminating demarcation of essential properties, suggested by Kit Fine, the essential properties of an object are those that can in a certain sense be "read off" an appropriate specification of the object's identity; see the papers cited in n4 above. It is then natural to suggest that the properties necessary to an object in the *de re* sense constitute the smallest collection containing its essential properties and closed under the entailment relation between properties.

⁹Such an assumption, of course, would be challenged by Leibniz; it would not hold, for example, if the actual world were undefeated and untied in perfection.

created the world that actually exists, and so he might not have exemplified that property.

VII

Part of the allure that perfectionist versions of the ontological argument have enjoyed may perhaps stem from the idea that if God has a perfection, then it cannot be accidental that he exemplifies that perfection. It is part of the very core of familiar theistic conceptions of God that he is perfect in virtue of his nature or identity, which is one way of saying he exemplifies his perfections essentially. If that is so, the condition (i) in the Realization Lemma should after all be ensured if we take the class X to consist of the perfective properties of God, or the closure of that class under property entailment.

That something has gone wrong with this line of argument is shown by the sort of example introduced at the conclusion of the last section. Theism is not committed to the claim that God necessarily created any particular actual item (including the actual world itself); but it is committed to the view that God is the creative source of everything else that does in fact exist. Moreover, theism seems committed to the further view that this property, *authorship*, accrues to God in virtue of his nature, and is thus a property that he exemplifies necessarily. The thesis, then, is not that God necessarily created any particular actual item, but that necessarily he is the creator all else that is.

There is a longstanding controversy, running from the medieval nominalists through St. Thomas Aquinas to Descartes, about whether God may intelligibly be said to have created certain items that necessarily exist, objects of the sort we now call "abstract."¹⁰ In order not to enter these troubled waters here, we may simply restrict our attention to a more guarded version of the authorship thesis, one that holds God to be the creative source of everything that *contingently* exists (or of everything else that contingently exists, if, contrary to the ontological argument, God himself should exist contingently). The logical form of such a commitment is

$$(a) (\forall x)_C F(g, x),$$

where the subscript " C " indicates a restriction of the quantifier $(\forall x)$ to nondivine contingents; call the property ascribed to g by (a) *restricted authorship*. The predicate $F(y, x)$ is read " y is the creator of x ," and is understood in exact analogy to the predicate " y is father of x " considered above: to say that y is the creator of x is to say that y creates x in each world in

¹⁰A negative answer is sometimes held to impugn God's sovereignty. Descartes, of course, vigorously defended God's creative power with respect to what he calls the "eternal truths," traditionally regarded as necessary. For a nice discussion of the whole issue, see Alvin Plantinga, *Does God Have a Nature?*. Plantinga says that he regards the difficulties in reconciling divine sovereignty with the modal status of abstract objects as the best argument he knows for nominalism.

which x enjoys existence. Thus, writing F^* for the verb “creates,” (a) may be expressed

$$(b) (\forall x)_c \Box(\varepsilon(x) \rightarrow F^*(g, x))$$

Observe that (b) entails

$$(c) (\forall x)_c F^*(g, x)$$

which asserts that God creates each nondivine contingent.

I shall now argue that *actualizing: i.e., if (a) holds at a possible world w , then g exists at w* . The argument is straightforward, but requires one additional assumption, *viz.:*

(NC) $\Box\exists xC(x)$ holds; i.e., for any world w , some nondivine contingent exists at w .

The justifications for (NC) I am aware of all make use of the assumption that there are fact- or event-like structures coordinated with at least some contingent propositions whose existence conditions match the truth and falsity conditions of the propositions. Thus, for example, for any contingently true proposition of the form $(\exists x)Px$, necessarily either the fact that Ps exist or the fact that Ps don't exist contingently exists, and these existence conditions are rigidly correlated with the truth and falsity conditions of that proposition. More generally, what is required is a contingent proposition p and a pair of possible objects p^+ and p^- such that necessarily p^+ exists iff p is true and necessarily p^- exists iff p is false. Thus p^+ and p^- are contingents whose existence conditions exclude one another but which are together modally exhaustive. As a first suggestion, we might take p^+ to be p 's exemplification of *truth* and p^- to be its exemplification of *falsity*.

Talk of “exemplifications” can be given a precise sense in terms of Kit Fine's notion of a *qua-object*, and qua-objects make possible a variety of other routes to (NC). Qua-objects have the following existence and identity conditions:

(QE) For any object a and property P , the qua-object a qua P exists at a possible world w iff a exists and falls under P at w ;

(QI) a qua $P = b$ qua Q iff $a = b$ and $P = Q$.¹¹

Here then is another argument for (NC): for any property P , let P^* be the property defined for cardinal numbers that applies to a cardinal number κ at a world w iff exactly κ objects exist and fall under P at w . Let $|P|_w$ be the cardinal number of the set of objects that exist and fall under P at w . Suppose now that P is so chosen that the cardinal number of Ps varies from world to world but P is satisfied at any world by a bounded number of existing non-divine particulars. Then at any world w , $|P|_w$ qua P^* , that is, the particular number that is the cardinal number of Ps at w qua *being the cardinal number of Ps* , exists at w , and is a non-divine contingent.

¹¹Fine, “Acts, Events, and Things.”

The above goes some distance, I believe, toward motivating (NC), but I cannot pretend to have offered anything like a complete defense. Certainly, it is always open to the skeptic to question the ontological closure conditions invoked above that give rise to the necessary existence of contingents. But particularly in the case of qua-objects, this line seems implausible. The simplicity and determinacy of the existence and identity conditions for qua-objects suggests that everything required for their recognition as entities is present, and the demand for some more absolute verification of their existence seems senseless.¹²

Armed with this provisional justification of (NC), let us return to the argument that the authorship property is actualizing. The argument is very simple. Suppose that g falls under the authorship property at a possible world w . By (NC), there is a nondivine object o such that o contingently exists at w . Thus, since (a) entails (c) and (a) holds at w , (c) holds at w , whence $F^*(g, a)$ holds at w . Since F^* is a real relation, it is actualizing, so that g exists at w . This is what was to be shown.

Let's connect this observation to the Realization Lemma. We have just seen that *authorship*, the property of being the creator of every nondivine contingent, is an actualizing property. Moreover it is a property that is an integral part of the conception of the nature of God associated with many forms of theism. As such, it is a property that would be held within those conceptions to be necessarily exemplified by God. Suppose that X_0 is the collection of properties explicitly ascribed to the divine nature by such a conception. We can then consider, in the role of the class X in the Realization Lemma, the smallest collection of properties including X_0 and closed under property entailment and necessitation. Closure under property entailment is the condition (ii) in the lemma, and closure under necessitation is the condition (i). Our assumption is that the initial set X_0 contains the authorship property which, as just shown, is actualizing. Thus the condition (iv) is met as well. The Realization Lemma then ensures that *if the set X is structurally consistent, then each property of X is satisfied by some actually existing object*. Such a being would be an item existing in the actual world that falls under each of the initial properties in X_0 . It would therefore exemplify *authorship*: it would enjoy the property of being creator of each nondivine contingent, and thus of having actually created each nondivine contingently existing thing.

VIII

What has happened here? We began by imagining a theist who has undertaken to compile a partial characterization of the divine nature. He begins his list with authorship, the property of being creator of each nondivine contingent. Let us call such a position *authorship theism*. Authorship theism, then, is a limited thesis about the divine nature that is not, on

¹²For a contrasting view, with an excellent summary of alleged mereological difficulties surrounding facts and fact-like objects, see Ariana Betti, *Against Facts*.

its face, committed to the actual existence of a being exemplifying that nature. Now the collection of properties constituting the nature of any object is closed under entailment between properties and under the necessitation rule. Accordingly, the structural consistency of the closure of the authorship-theist's description of the divine nature under necessitation and entailment may be regarded as a necessary condition of the metaphysical consistency of that description; and in that case the conclusion, via the Realization Lemma, that there necessarily exists a being exemplifying the authorship property, may be regarded as a byproduct of the metaphysical consistency of authorship-theism.

The same template may be used for various other versions of the ontological argument, involving actualizing properties that the separate versions will argue, in each case on rather different grounds, to be properties essential to God. In these arguments, the initial properties are not at all suspect *prima facie*: they are theologically salient, indeed familiar, candidates for membership in the divine nature. Here are a few additional examples, with brief commentaries on their status as actualizing properties:

1. *Sovereignty*: Every nondivine contingent is dependent upon God. Such a property has the form

$$(N1) \quad \lambda x (\forall y)_c D(y, x),$$

where D represents a dependence relation.

There are in turn at least two natural candidates for an analysis of dependence:

Strict dependence: y depends on x iff y could not exist without x ; equivalently, necessarily y exists only if x does, or again equivalently, the existence of y entails the existence of x .

Counterfactual dependence: y depends on x iff y would not exist if x did not exist.

Both of these relations entail a weaker relation D^1 of material dependence, such that $D^1(y, x)$ holds iff either x exists or y does not. This relation is clearly right-actualizing, and thus the stronger dependence relations are right-actualizing as well. Under either interpretation, then, it follows via (NC) that the property characterized by (N1) is an actualizing property.¹³

2. *Omniscience*. God is directly cognizant of every matter of fact.

Let us cast this epistemic attribute simply and directly into the form

$$(N2) \quad \lambda x (\forall \alpha) K(\alpha, x)$$

¹³It is worth observing that the strict sovereignty property is entailed by the authorship property; but there may be forms of dependence of the created realm on God other than that arising from authorship as, for example, when we speak of God's sustaining, rather than simply creating, contingent things.

where the variable “ α ” ranges over facts and K is an epistemic relation between God and states of affairs in the world whose behavior is analogous that of the relations expressed by perceptual verbs.¹⁴ The relation involves a real relation, we might call it *direct cognitive contact*, between the cognizer that the fact cognized that can obtain in any possible situation only if both relata exist therein. Since K is a real relation, it is actualizing, and so the property characterized by (N2) is an actualizing property, assuming that each possible world contains at least one fact.

3. *Omnipresence*. This is the property of being literally present at every spatial location at every time (or at every spatiotemporal location).

This property is a somewhat more controversial candidate for membership in the divine nature than the properties mentioned previously; it is sometimes mistakenly thought to be entailed by the omniscience property. In any case, if we take literally the idea that God is present in each part of space, we are ascribing to God the property

$$(N3) \lambda x \forall p \text{ Loc}(x, p)$$

where p ranges over locations and *Loc* is the relation holding between an object and a place when the object is *located at* that place. That relation is actualizing, since for any object a and particular location p , $\text{Loc}(a, p)$ holds at a world w only if a exists and occupies p at w . The property expressed by (N3) is thus also actualizing.

IX

Authorship, sovereignty, omniscience and omnipresence are all properties that have been central to discussions of the nature of God in philosophical theology. I have argued that each of these properties is actualizing, which, in an equivalent formulation, says that each of these properties stands in the property-entailment relation to the existence property $\lambda x \varepsilon(x)$. I have already commented on the propensity of some philosophers to place the existence property itself into the divine nature. Echoing a common sentiment, I suggested above that placing existence into the nature of God at the outset of an ontological argument is ontically tendentious, and tends to rob the argument of probative force. However, this difficulty does not directly affect a form of the ontological argument derived from the Realization Lemma that places any or all of the above properties into the basis set X_0 . These properties represent fundamental conceptual commitments of forms of theism which are not, at least at face value, ontically tendentious.

Here, then, is a normal form for ontological arguments. Let us say that a set A of properties is *essentially admissible* if the closure of A under the

¹⁴I do not take this analogy to imply a perceptual model of divine knowledge; it suffices to assume that whatever the mechanism of divine cognition, God has unmediated epistemic access to existing states of affairs.

entailment and necessitation rules is structurally consistent. We think of the set A as a partial specification of the nature of some possible object; the essential admissibility condition says roughly that one does not arrive at formally contradictory properties when one considers the properties which are necessarily exemplified by such an object relative to its necessary exemplification of the properties in A . On the schema I am suggesting, an ontological argument will

1. Identify a set $X_0 = \{\varphi_1, \varphi_2, \dots, \varphi_n\}$ of properties that constitute a partial specification of the divine nature.
2. Show that at least one of the φ s is an actualizing property.
3. Conclude, by the Realization Lemma, that *if* X_0 is essentially admissible, *then* the properties in X_0 are jointly exemplified by some actually existing object.

To obtain the conclusion that the properties in X_0 are in fact instantiated, we need to add the premise

4. X_0 is essentially admissible,

which is equivalent to the assertion that if a property is entailed by the properties $\Box\varphi$ such that $\varphi \in X_0$, then the negation of that property is not. The justification of this assumption is to be given in other terms.

Arguments of the present sort, then, explicate ontological commitments of the metaphysical consistency of certain representations of the divine nature that may have seemed, at least prior to the arguments, existentially innocuous.

X

The present framework for ontological arguments is likely to prompt a familiar challenge, albeit in a somewhat unfamiliar form. Gaunilo famously responded to St. Anselm's perfectionist version of the ontological argument by arguing that if it works at all, then one could show, in the same way and with equal plausibility, that there must exist a perfect island.¹⁵ Echoes and analogues of Gaunilo's objection have affected subsequent ontological arguments, and it is appropriate to ask if a version of the objection arises here as well.

A natural form of it is not far to seek. The mechanism that generates the conclusion of the ontological argument via the Realization Lemma allows any properties at all to figure in the initial set X_0 , as long as this set is essentially admissible and contains *some* actualizing property. Thus consider an arbitrary property that is essential to any object that exemplifies it; for example the property H of *being a horse*. I shall take it that H is essential to any object that possesses it at all. Suppose now that we simply graft H

¹⁵Gaunilo, "In Behalf of the Fool."

onto one of the partial characterizations of the divine nature above. Thus, for example, consider the set

$$X_0 = \{H, \text{sovereignty, omniscience}\}.$$

We have seen that both sovereignty and omniscience are actualizing properties. Can one then argue via the Realization Lemma, with whatever plausibility as may accrue to the argument that arises by omitting *H* from X_0 , that there necessarily exists a sovereign and omniscient horse?

No. The difficulty concerns the essential admissibility condition for X_0 , which must be met if we are to move from Step 3 in an argument of the form described above to the conclusion that X_0 is actually instantiated. We have prior modal opinions, grounded independently of our present context, which imply that sovereign horses are not possible. Consider, for example, the interpretation of sovereignty in terms of rigid dependence, according to which an item *g* is sovereign at a world *w* if it is true of any object that contingently exists at *w* that it could not have existed unless *g* had existed. This interpretation of the sovereignty condition is entailed by the authorship condition.¹⁶ But we have a firm modal opinion that the parents of any horse could have existed without engendering that particular horse. If so, in any possible world the parent horses of any horse constitute counterexamples to the thesis that every contingent particular in that world is strictly dependent on the given horse. I leave it to the reader to work out a similar modal justification of the impossibility of necessarily omniscient horses.

Can essentially the same response be made when the initial set consists of the canonical attributes of sovereignty and omniscience by themselves, or considered together? The answer is again "No." Theists characteristically hold that everything (of a suitable sort) is dependent on God, and that this is a property that is implicated in the very identity of God. It is thus, for these theisms, an essential property of God, and so constitutive of his nature. Someone who wishes to oppose this position cannot, without begging the question at issue, *simply* state a modal opinion to the effect that nothing could be essentially sovereign (in the relevant sense); a similar caution should hold good for the varieties of theism based on any combination of the canonical attributes. The claim that nothing *could* be essentially both omniscient and sovereign, for example, requires argument in a way, or of a sort, that the claim that nothing could be essentially both equine and sovereign does not.

XI

The engine that drives an ontological argument of the sort I have been attempting to describe is quite clearly the assumption that an actualizing property can be essential or necessary to a particular item that exemplifies it. In the cases I have highlighted, the assumption takes the form of

¹⁶See n13.

the claim that God stands in some real relation or other to the created realm, not simply as a matter of fact but in virtue of his identity. And so the obvious way to forestall the conclusion of such an argument would be to withdraw this assumption. There are two ways of doing that. We can reject the assumption that God exemplifies the relevant property at all; or we may retain the assumption that he exemplifies the property but give up the idea that he does so essentially.

In the instances that we have considered, neither of these options seems compatible with conceptual commitments of normal forms of theism. The actualizing properties we have considered are basic theistic attributes such as authorship (God as universally creating/sustaining, the role of *pantokrator* described by the Greek fathers); sovereignty (the universal dependence of the contingent realm on God); omniscience; and omnipresence. These are hardly peripheral themes for the forms of theism that embrace them. To deny that God exemplifies any combination of at least the first three seems tantamount to changing the subject. And so to retain a theistic conception of God while avoiding the conclusion of the argument, one would have to hold that God falls under these attributes but to deny that they are part of his nature. But that is not much better. If they are extrinsic to his nature, they are not implicated in the very identity of God as an individual. A form of theism that held this would be in the very peculiar position of asserting that these very basic properties are in the most metaphysically fundamental sense accidental accretions to the divine nature.¹⁷

In any case it seems to me that within the Western theistic tradition the tendency has been to combine the view that God exemplifies these properties with an essentialist explanation of why he does. The doctrine is that he exemplifies them in virtue of his nature or identity. For such a theistic orientation, then, the thesis that God falls under these fundamental properties is not really detachable from the thesis that he does so essentially or in virtue of his nature. Thus, if the properties in question make up the set X_0 in the schema described above, for these orientations, the thesis that X_0 is essentially admissible is clearly pertinent. Essential admissibility seems a necessary condition of the metaphysical consistency of a specification of the nature of any object: what the schema of section IX shows, then, is roughly that the metaphysical consistency of a description of the divine nature ensures its actual realization if that description incorporates at least one actualizing property. And we have seen that some of the most theologically salient descriptions of the divine nature impute to it properties of just this sort.

¹⁷To put the point in somewhat different terms, the properties considered above are plausibly also *basic perfections*. I observed above that not all perfections of God are constituent properties of the divine nature, since some are contingent. But the most basic ones do have this status within the most familiar forms of theism. The contingent perfections are derived from conjunctions of basic perfections and contingent facts. For example, *having created the actual world* is a product of authorship (a basic perfection) and the fact that the particular world we inhabit is the actual one (a contingent fact); or *knowing that Alexander was a pupil of Aristotle* is a product of omniscience and the fact that Alexander was a pupil of Aristotle.

We normally distinguish the conceptual commitments of a theistic position from its ontological commitments.¹⁸ The conceptual commitments of a form of theism tell us about the nature of God as a person. It tells us a story about what God would be essentially like if there were such a person. One would have naively thought that such a story could be consistently told without generating an ontological commitment to the person characterized in it. Familiar forms of the ontological argument blur this distinction in a radical way by placing something like the existence property into the divine nature at the outset. But the general form for the argument explored here shows that any actualizing property will initiate a more subtle but analogous construction, and any essential description of God in terms of his real connections to the world will assign such properties to his nature. If any of these are regarded as theologically basic, then, we shall have to give up the attempt to provide a metaphysically consistent fundamental characterization of the divine nature that does not commit us to the actual existence of an item falling under the characterizing properties.

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¹⁸A distinction that is reminiscent of Quine's distinction between the *ontology* and the *ideology* of a theory or discourse; see Quine, "Ontology and Ideology," 142.