

10 Leibniz's ontological and cosmological arguments

I believe . . . that almost all the methods which have been used to prove the existence of God are sound, and could serve the purpose if they were rendered complete.

(*New Essays*, A VI.vi: RB 438)¹

Few philosophers today would go this far. Even in a period that has witnessed a dramatic rebirth of Anglo-American philosophical theology, the typical strategy has been to embrace a favorite proof while criticizing others or to maintain, more cautiously, that a particular argument has not been refuted. Nevertheless, while most of these philosophers reject the claim that *all* the classic arguments can be rendered sound, they also dismiss as passé the once prevalent view that proving God's existence is a hopeless task.

Natural theology, then, is on the rise. At such a time, it is reasonable to review the arguments of Gottfried Leibniz, one of its most distinguished proponents. Because he thought deeply about many of the issues that now absorb us, an examination of his ideas is likely to illuminate contemporary concerns.

Leibniz gives his own versions of four traditional proofs of God's existence: the ontological argument, the cosmological argument, the argument from eternal truths, and the argument from design. According to the ontological argument, God's existence follows *a priori* from his definition as an absolutely perfect being. Since existence is more perfect than nonexistence, the very idea of God entails that he exists. The cosmological argument, on the other hand, begins with the fact that something exists and derives the existence of God via a causal principle. The proof from eternal truths asserts that since there are necessary truths (e.g., mathe-

mathical ones), known *a priori*, they must exist "in an absolutely or metaphysically necessary subject, that is, in God" (G VII 305; L 488).² Finally, the argument from design claims that the degree of organization and order in the universe implies the existence of a divine being who designed things. Leibniz gives the argument a distinctive twist by purporting to show that the world consists of infinitely many monads which are perfectly coordinated with one another yet are utterly incapable of interaction. This infinite coordination, and the appearance of interaction to which it gives rise, involve a preestablished harmony that only God could have produced (e.g., *New Essays* IV.x, A VI.vi: RB 440; G IV 484–85; L 457–58).

In this essay, I discuss Leibniz's ontological and cosmological arguments. Although his other proofs are also important, I believe that these two contain his most enduring contributions to natural theology.

I

Leibniz formulates the ontological argument in several ways, each of which he seems to think expresses more or less the same idea.³ Because the variations do not appear to be equivalent, it will be useful to examine the connections he sees between them. Even if we cannot justify his view that they come to the same thing, it makes sense to ask why he should think they do.

Two of these variations employ the concept of an absolutely perfect being.

OA1

1. God is by definition an absolutely perfect being.
2. Existence is a perfection.
3. Therefore, God exists.

OA2

1. God is by definition an absolutely perfect being.
2. Necessary existence is a perfection.
3. Therefore, God necessarily exists.

Leibniz also suggests that, by using the concept of a necessary being, one can construct the proof without mentioning the perfections. In that case, we would have:

OA3

1. A necessary being is by definition a being that necessarily exists.
2. But a being that necessarily exists, exists.
3. Therefore, a necessary being exists.⁴

To achieve theological significance for OA3, one must also prove that a necessary being is absolutely perfect. But Leibniz thinks he can do it. In his scheme, positive reality is the same thing as quantity of essence or degree of perfection. (e.g., G VI 613; L 646–47; G VII 261; L 267; G I 266; L 177) Furthermore, necessary existence is "absolute" existence and every absolute trait "expresses whatever it expresses without any limits" (G VII 261; L 267).⁵ Therefore (swallowing hard!), we are led to the conclusion that a necessary being is a being with absolute perfection and conversely.⁶

For clarity, we should note that Leibniz distinguishes two modes of existence. Creatures exist contingently, i.e., their nonexistence is logically possible. God, on the other hand, exists necessarily, i.e., his nonexistence is logically impossible.⁷ Leibniz also expresses this by saying that God is a necessary being (or that he has necessary existence) and that creatures are contingent beings (or that they have contingent existence!).

Leibniz regards OA1–OA3 as incomplete rather than sophistical. Assuming that God is possible – or that his concept does not contain a contradiction – it follows that he exists. But what justifies that assumption? For all the proofs show, the idea of God might involve a hidden contradiction, as do the notions of a fastest possible speed and a greatest possible circle. If so, the correct inference would be that God does not exist, since he is impossible (G IV 292 f., 401 ff., 405–6; D 141–46, *New Essays* IX.x, A VI.vi: RB 438).

The moral is that OA1–OA3 establish only this: if God is possible, God exists. In Leibniz's view, this is a very important result because it is the sole instance in which one can move from possibility to actuality (GIV 359; L386; GIV 294, 402; D141, 143; *New Essays* IX.x A VI: RB 438). The transition, however, requires that one prove that God is possible.

To this end, Leibniz offers two proofs, one defending the notion of an absolutely perfect being, the other justifying the concept of a necessary being. He also has what might be called a "fallback" position to the effect that, in the absence of proof, it is reasonable to presume that

God is possible. This presumption "may suffice for practical life, but it is not sufficient for a demonstration" (GIV 294: D 142).

We shall examine these proofs, together with the fallback position, later. First, however, I want to inquire why Leibniz treats OA1-OA3 as more or less equivalent. Unfortunately, since he does not explain this himself, I can merely offer a plausible conjecture.

It will be instructive to begin by asking why parallel reasoning won't prove the existence of other things, such as a perfect island. In other words, what justifies the claim that the ontological argument works only for God? Leibniz's answer, I believe, is that "perfect x" implies the actual existence of an x if and only if two conditions are satisfied: (1) "perfect x" is taken in a sense which entails "necessary x" and (2) "necessary x" is possible or non-contradictory. But, he thinks, condition (2) fails for anything except the concept of God.

Let us first ask why the idea of a perfect x entails x's existence only if "perfect x" entails "necessary x". As I noted, there are two modes of existence: the necessary and the contingent. Obviously, if "perfect x" does not entail "necessary x", it does not entail that x has necessary existence. But Leibniz argues that contingent existence cannot be inferred from *any* definition. Definitions, he says, are conditionals which state that if something answering to the definiendum should exist, it will be found to have the properties of the definiens (*New Essays* IV.xi 14, A VI.vi: RB 446-47). As such, coherent definitions always express necessary or eternal truths. Therefore, a thing's existence can be inferred from its definition only if its *necessary* existence can be inferred.

Why is "necessary x" contradictory for any concept other than that of God? This follows, I believe, from Leibniz's identification of reality with perfection. As we saw earlier, necessary existence is unlimited reality. But then unlimited reality is unlimited perfection, and a necessary being turns out to be one with all and only pure perfections. Thus, "necessary island" is contradictory because it means "island with all and only pure perfections," or "island with perfect knowledge, power, etc."⁸ Clearly, on these assumptions, we will get a similar contradiction for the idea of anything except God.

This may explain why Leibniz lumps OA1-OA3 together, as though the differences between them were relatively insignificant.

Since he equates "necessary x" with "perfect x," he would naturally feel free to express the ontological argument using either concept. And, in the versions whose premises attribute necessary existence to God (OA2 and OA3), we can also see why the conclusion could be either that God necessarily exists (as in OA2) or simply that he exists (as in OA3). If the argument works at all, it proves that God necessarily exists, which of course entails that God exists.

But how can OA1, whose second premise says that existence is a perfection, differ only insignificantly from arguments which attribute necessary existence to God? Possibly Leibniz would take the following line. When one refers to existence *simpliciter* (as in OA1), or says merely that something "exists", one leaves it to the context to determine which mode of existence is intended. Now, Leibniz thinks it is fairly obvious that only necessary truths can be deduced from definitions and even more obvious that the conclusion of the ontological argument is not that God contingently exists.⁹ In his view, to make existence part of something's definition is faculty to attribute necessary existence to it. So perhaps he would say that a charitable reading of OA1 would construe it as amounting to OA2.

II

Let us now turn to the possibility of God. Leibniz's fallback position is that, in the absence of proof, one ought to assume that God is possible. This is because "there is always a presumption on the side of possibility; that is to say, everything is held to be possible until its impossibility is proved" (G IV 294, 405; D 142, 145; G IV 404; G III 444; *New Essays* IV.x, A VI.vi: RB 438). Possibility claims are, as it were, epistemically innocent until proven guilty. Thus we have:

The Presumptive Argument for God's Existence

1. If it is possible that God exists, then God exists.
2. In the absence of proof to the contrary, it is more reasonable to suppose that a statement of the form "It is possible that . . ." is true than that it is false.
3. There is no proof that "It is possible that God exists" is false.
4. Therefore, it is more reasonable to suppose that "It is possible that God exists" is true than that it is false.

5. Therefore, it is more reasonable to suppose that God exists than that God does not exist.

But premise 2 is much too strong, for it allows us to construct an equally good presumptive argument for atheism.¹⁰ To see why, note first that, while Leibniz accepts 1, he would also accept:

1'. If it is possible that God does not exist, then God does not exist.

On Leibniz's definition, God is a necessary being, or one whose nonexistence is impossible. If it is nevertheless possible that God does not exist, then the very idea of his existence is contradictory and he is impossible. (This was the insight of Leibniz's critique of the ontological argument.) Until someone shows that God is possible, however, we are also entitled to:

3'. There is no proof that "It is possible that God does not exist" is false.

Given 1', 2, and 3', however, it follows that it is more reasonable to suppose that God does not exist than that he does.

It may be objected that Leibniz did not have anything quite so broad as premise 2 in mind. At one point, he distinguishes a presumption from what he calls a "supposition," arguing that "suppositions ought not to be admitted unless they are proved." But a presumption, "which is incomparably more than a simple supposition," should be admitted without proof (G III 444). The problem is that Leibniz does not indicate how to differentiate these notions and I, for one, have no plausible clue to offer on his behalf. Perhaps someone else can provide a defensible way of drawing this distinction.¹¹

III

Presumptions aside, Leibniz thinks he can prove "with all imaginable accuracy" that God is possible (G IV 293: D 141). His most famous argument for this occurs in a paper he showed to Spinoza during a visit to the Hague, though the same idea is found in a couple of other essays apparently written at about the same time (1676) (G VII 261: A VI.ii: 578; L 1677; A VI.iii 571-79; Cf. G IV 296 and *Monadology* par. 45, G VI 614: L 647). The argument rests on the definition of a perfection as a simple, absolutely positive property. It also presupposes that if "A perfect being is possible" is true, it is necessarily true and that every necessary truth is either an identity

or reducible to an identity. The basic idea of the proof is this. Positive properties are always compatible, because things can exclude each other other only if one involves the negation of the other. Simple properties, on the other hand, are always irreducible, because reduction requires complexity. Consequently, for any two properties that are positive and simple, the proposition that they are incompatible neither is, nor is reducible to, an identity.

The Proof from Affirmative Simple

1. The concept of an absolutely perfect being is consistent if and only if the combination of all perfections in one being is consistent.
2. The combination of all perfections in one being is consistent if and only if, for any two perfections, *A* and *B*, "*A* and *B* are incompatible" is not a necessary truth.
3. For any two perfections, *A* and *B*, "*A* and *B* are incompatible" is not a necessary truth if and only if this proposition neither is, nor is reducible to, an identity.
4. But, for any two perfections, *A* and *B*, "*A* and *B* are incompatible" is not an identity. For, if it were, *A* and *B* would express the negation of the other, which is contrary to the hypothesis that perfections are purely positive.
5. And, for any two perfections, *A* and *B*, "*A* and *B* are incompatible" is not reducible to an identity. For a reduction requires the resolution of at least one of the terms, which is contrary to the hypothesis that perfections are simple.
6. Hence, for any two perfections, *A* and *B*, "*A* and *B* are incompatible" is not a necessary truth.
7. Therefore, the concept of an absolutely perfect being is consistent.
8. If the concept of an absolutely perfect being is consistent, an absolutely perfect being is possible.
9. Therefore, an absolutely perfect being is possible.¹²

An objection to the second premise of this argument is that it does not follow from the fact that any two members of a set of properties can be consistently combined that *all* the members can be so combined. (Consider the set of properties: *married at t*, *happy at t*, *either unmarried or unhappy at t*.)

Leibniz would reply that although this does not follow in general, it does in the present instance. The combination of any two simple, positive properties yields a consistent property that is complex, but still purely positive. Since purely positive properties can never exclude one another, however, the new property can itself be consis-

tently combined with any simple, positive property you like (and so forth ad infinitum).

The idea that the concept of God consists of simple properties is an instance of the more general notion that all complex concepts depend on simple elements (G VI 612: L 646; G I 143: L 199; G VII 293: L 230; G IV 425: L 293 and C 429–30). Furthermore, Leibniz identifies the simples (which he takes to be positive) with the primitive attributes of God (G IV 425: L 293; C 513: P 7; G VII 310: P 77). But while these assumptions may have felicitous consequences for the possibility of God, Leibniz worries whether they fit with his other views. He notes, for example, that on his account *all* positive properties are compatible *inter se* and this leads him to wonder what explains “the impossibility of different things or how it is that different essences can be opposed to one another” (G VII 195: Russell, *Critical Exposition*, pp. 296–97). He is sure that the actualization of certain possibles excludes others, but if possibles consist solely of positive, and hence compatible, properties, how can this be? In the previous passage, he says that God alone knows the answer.¹³

Some may urge that the difficulty can be relieved by the addition of negative simples. Yet even on the doubtful premise that this idea is coherent, it destroys the proof of God’s possibility. Or, at any rate, it does so given Leibniz’s further view that simple concepts are the primitive attributes of God. Once negativity is added to the divine nature, the game is up, since the idea that all *positive* properties are compatible will then no longer entail that God is possible.

These issues are internal to Leibniz’s system. Setting such matters aside, however, many would question the very idea of intrinsically simple properties.¹⁴ Linguistic items, such as words or sentences, can be negative or positive, simple or complex, but what sense is there in simple properties or concepts? Leibniz seems to conflate linguistic and metaphysical entities by hypothesizing the former and projecting their features onto the latter. But even given this penchant, the case for a “true” set of simples that is not relative to any particular language is problematic, since it has often been noted that what is simple or positive in one language may be complex or negative in another.¹⁵

The charge of conflating language and metaphysical reality gains further credence when we note that the proof from affirmative simples says that any two perfections, *A* and *B*, are compatible just in

case the sentence “*A* and *B* are incompatible” is neither an identity nor reducible to one. A sentence, moreover, is an identity, for Leibniz, when it is of a certain form (namely, “*A* is *A*,” “*AB* is *A*,” etc.). And it is reducible to an identity when one can be produced in a finite number of steps by substituting terms, on the basis of definitions, into the subject and/or predicate position of the sentence.¹⁶ All of this makes a certain amount of sense when the entities and operations involved are linguistic, but little otherwise.

Leibniz’s reply is that language represents concepts, which make up the content of significant discourse. If natural languages discriminate differently between simple and complex, negative and positive, or if there are inconsistencies within a single language, this means only that existing parlance does not adequately map the true conceptual order. But his ideas apply only to an *ideal* language, or one in which the form of a sentence corresponds to the form of the proposition it expresses and in which the substitutions that are possible in the former reflect parallel relationships in the latter.¹⁷

Yet if different languages suggest distinct mappings of the realm of concepts, how are we to know which mapping is correct or indeed whether there is any language-independent realm to be mapped? How, in fact, are we even to understand the claim that in an ideal language the form of a sentence corresponds to the form of the proposition it expresses? There are rules for identifying the form of a sentence, but none for determining the form of a proposition. So the basic problem remains.

Leibniz claims to have an infallible proof that there are simple concepts (G I 140: L 199; C 429; Cf. G VI 612: L 646).¹⁸ If any concepts are conceived at all, they are either conceived through themselves or through other concepts. If they are conceived through themselves, they are incapable of analysis and hence are simple.¹⁹ But nothing can be conceived thorough other concepts unless the sequence of concepts through which it is conceived terminates in ones conceived through themselves. Leibniz illustrates this point with an analogy. Suppose I give you a hundred dollars, which you are to receive from person *A*. *A* sends you on to *B*, *B* to *C*, and so on forever. In that case, you will never receive anything. Similarly, one cannot conceive a concept through others unless the sequence of concepts through which the first is conceived terminates in ones conceived through themselves (C 429–30: P 1–2; A VI.iii 514: L 160)²⁰ There-

fore, since many concepts are in fact conceived, there are concepts which are conceived through themselves, i.e., ones that are simple.

Proof of the Existence of Simple Concepts

1. If any concepts are conceived, they are either conceived through themselves or through other ones.
2. If they are conceived through themselves, they are simple.
3. If they are conceived through other ones, then there must also be simple concepts, since the analysis of anything conceived through something else must terminate in concepts conceived through themselves.
4. Therefore, if any concepts are conceived, there are simple concepts.
5. But many concepts are conceived.
6. Therefore, there are simple concepts.

This argument should be intriguing to someone who accepts the assumption that there is a language-independent realm of concepts. But it does nothing to justify that assumption. Leibniz treats premise 1, for example, as axiomatic, and that axiom embodies the very intuition that we have been at pains to call into question.²¹

IV

Leibniz's next proof is a modal argument designed to defend the possibility of a necessary being. It turns on the following *a priori* premise: if a necessary being is not possible, no being is possible (G IV 406: D 147).²² Leibniz defends this by claiming that contingent (or nonnecessary) beings *require* a necessary being to provide a sufficient reason for their existence.²³ On that assumption, if a necessary being is not possible, then neither a necessary nor a nonnecessary being is possible.

To derive "A necessary being is possible" from "If a necessary being is not possible, no being is possible" Leibniz needs only a premise to the effect that some being or other is possible. Most commentators have taken it for granted that he means to infer this *a posteriori* from the fact that something exists.²⁴ In that case, the proof of the possibility of God would be the first five steps of the following argument.

Modal Proof of the Existence of God

1. If a necessary being is not possible, no being is possible.
2. But something exists.

3. If something exists, some being is possible.
4. Therefore, some being is possible.
5. Therefore, a necessary being is possible.
6. If a necessary being is possible, a necessary being exists.
7. Hence, a necessary being exists.

Now this argument is valid and consists entirely of statements Leibniz accepts. So he would surely embrace it. Nevertheless, it does not complete the *ontological* argument, which, as he often points out, can include no *a posteriori* element. What we have here is a variation on the cosmological argument.

Did Leibniz lapse and complete the ontological argument cosmologically? That would be surprising, since he claims that his proof fills the gap "geometrically *a priori*," and the argument above glaringly fails to do so (G IV 405-6: D 145; Cf. G IV 403, 404; D 144; *New Essays* IX, A VI.vi: RB 438-39; G III 444; A VI.iii 583).

I think he had something else in mind. Leibniz holds that if the definition of a concept is noncontradictory, then the existence of something that exemplifies the concept is possible. This is true, moreover, whether or not the concept is complete, i.e., sufficiently complex to designate a possible individual. On his account, a "real" (as opposed to merely "nominal") definition is any one containing a proof that the thing defined is noncontradictory (G IV 424-25: L 293). Furthermore, he thinks there are many examples of such definitions, some of which we know to be "real" on *a priori* grounds. It would appear, then, that the desired premise could be supplied by choosing one of these definitions at random. Hence, the proof might run as follows:

Modal Proof of the Possibility of God

1. If a necessary being is not possible, no being is possible.
2. If the definition of a concept is noncontradictory, then a being that exemplifies the concept is possible.
3. But there are instances of definitions of concepts which are noncontradictory. (A circle, for example, is defined as a plane figure having all of its points equidistant from the center, and we know *a priori* that this definition is not contradictory.)
4. Therefore, a being that exemplifies the concept of a circle is possible.
5. Therefore, some being is possible.
6. Therefore, a necessary being is possible.

Some may object that Leibniz's basis for premise 3 is *a posteriori*. He would agree that a circle, and other such things, are possible, but only because he has experienced examples of these things, not because he knows their possibility *a priori*. Consequently, the only version of the proof he would accept is unfit to complete the ontological argument.

But that is mistaken. In some notes on the definition of God, Leibniz begins by stating that if the existence of a thing is to follow from its essence, it must be conceivable *a priori* that the thing is possible. He then adds emphatically:

A priori, I say: that is, not from experience but from the very nature of the thing, just as we would conceive that the number three, a circle and other things of that kind are possible even if we had never experienced that they actually exist or, at any rate, had taken no account of this experience.

[A VI.iii 583]

In this passage, Leibniz does not say how to show *a priori* that a circle is possible. But, in general, he describes two *a priori* ways of establishing a thing's possibility: one involves pushing the analysis of its definition back to primitive notions, the other (which he calls "causal") involves describing a method for generating the thing (GIV 450: L 3 19). And he indicates elsewhere that he would use the *a priori* causal method in the case of a circle.²⁵ So there is no doubt that he thinks he can establish the possibility of a circle without resorting to experience.

Obviously, this proof also depends on its first premise, which, as I noted, rests on a thesis supported in the cosmological argument. I turn to the cosmological argument now.

V

Leibniz bases his cosmological argument on the famous principle of sufficient reason.²⁶ In paragraph 32 of the *Monadology*, he expresses this as follows:

No fact can be real or existent, nor any proposition true, without there being a sufficient reason why it is so rather than otherwise. [G VI 612: L 646]

Likewise, he tells Samuel Clarke that there must be "a sufficient reason for anything to exist, for any event to occur, for any truth to obtain" (G VII 419: L 717).²⁷

For Leibniz, *P* is a sufficient reason for *Q* just in case *P* fully accounts for *Q*. Put slightly differently: *P* is a sufficient reason for *Q* if and only "*P* is true" gives a full and definitive answer to "Why is *Q* the case?" Sometimes Leibniz says simply that nothing is without a reason and at other times that everything has a cause. But he often uses "reason" and "cause" synonymously, taking "cause" in a broad Aristotelian sense.²⁸ So, these formulations probably come to the same thing, to wit: there is a full explanation of everything.

Leibniz regards the principle of sufficient reason as a corollary of his predicate-in-subject principle. The latter asserts that there is an *a priori* connection, or relation of inclusion, between the predicate and subject concepts of every true proposition, and this guarantees that there is a full reason for the proposition's truth (G VII: 300-1: L 226-27; G VI 612: L 646; C 518-19: L 267-68; G IV 436-38: L 310-11; C 513: P 8; G VII 309, P 75). In the case of contingent truths, we humans cannot discover the connection *a priori*, though it is always there and known to God.

When it comes to existing individuals, the principle implies that there is an answer to the question why there is anything at all and, more particularly, why things should be as they are rather than otherwise. On this view, if one knows that *Q* exists because *R* brought it about, and that *R* exists because *S* brought it about etc., but one does not know why there should have been anything at all, or why this sequence of things exists rather than some other, then one does not have a full answer to why *Q*, *R*, or *S* exist. In general, if an individual's existence does not settle these questions, then, whatever it may explain, it does not give a *sufficient* reason for anything. With this in mind we can give a quick overview of Leibniz's version of the cosmological argument. If there were no necessary being, there would be no answer to the question: Why does the world exist? For the world is a series of contingent things and no such series contains a sufficient reason for its existence. Therefore, there must be a necessary being to provide a sufficient reason for the contingent ones.

Leibniz fills in the details of the argument in slightly different ways in different places (G VII 302-3: L 486-87; G VI 602, 612-13, 106: L 639, 646, H 127; G VII 310: P 76-77; Cf. C 533-34: P 145; C 519: L 268; G IV 106-7: L 110-11). But since there is a single idea running through these texts, a couple of substantial citations will provide enough material for our discussion. Here is a copious state-

ment of the argument, taken from *The Ultimate Origination of Things* (1697).

Besides the world or aggregate of finite things, there is a certain One dominant being which . . . not only rules the world but fabricates or makes it . . . and hence is the ultimate reason for things. For a sufficient reason for existence cannot be found merely in any one individual thing or even in the whole aggregate and series of things. Let us imagine the book on the *Elements of Geometry* to have been eternal, one copy always being made from another; then it is clear that though we can give a reason for the present book based on the preceding book from which it was copied, we can never arrive at a complete reason, no matter how many books we may assume in the past, for one can always wonder why such books should have existed at all times, why there should be books at all, and why it should be such as it is. Even if we should imagine the world to be eternal, therefore, the reason for it would clearly have to be sought elsewhere, since we would still be assuming nothing but a succession of states in any one of which we can find no sufficient reason, nor can we advance the slightest toward establishing a reason, no matter how many of these states we assume. . . . The reasons for the world therefore lie in something extramundane . . . which has absolute or metaphysical necessity. . . . Therefore, . . . since there is no reason for an existing thing except in an existing thing, there must necessarily exist some one being of metaphysical necessity . . . which is distinct from the plurality of beings or from the world. (G VII 302–3; L 486–87)

We should observe that Leibniz says that some sort of an account of the existence of the members of the series can be found within the series itself: "We can give a reason for the present book based on the preceding book from which it was copied." But he stresses that no sequence of such explanations, however long, gives a "complete" or "sufficient" reason for any of the books: "We can never arrive at a complete reason [for the present book], no matter how many books we may assume in the past; for one can always wonder . . . why there should be books at all, and why they should be written in this way."

Why can't anything in the world answer these questions? Leibniz's reply is that the world as a whole and everything in it are contingent. Nothing contingent, however, can contain a sufficient reason for its

own existence or that of anything else. Here is a shorter statement of the argument (taken from *The Monadology*, 1714) which brings this point out more clearly than the previous citation:

A sufficient reason must . . . be found in the case of contingent truths . . . that is to say, in the case of the sequence of things distributed through the universe of creatures, whose analysis into particular reasons could proceed into unlimited detail. . . . As all this detail includes other earlier or more detailed contingent factors, each of which in turn needs a similar analysis to give its reason, one makes no progress, and the sufficient or final reason will have to be outside the sequence or series of these detailed contingent factors, however infinite they may be. Thus, the final reason of things must be in a necessary substance in which the detail of the changes can be contained only eminently as in their source. It is this substance that we call God. (G VI 612–13; L 646)

Once again, Leibniz identifies the sufficient reason for a thing with its final (or complete) reason and he locates "the sufficient or final reason" outside the series of contingent things. Although the members of this series are linked by "particular reasons," their sufficient reason is in God.²⁹

Perhaps the following reconstruction captures what is essential in these passages.

The Cosmological Argument

1. If anything exists, there must be a sufficient reason why it exists.
2. But this world exists and it is a series of contingent beings.
3. Therefore, there must be a sufficient reason why this series of contingent beings exists.
4. But nothing contingent – and, in particular, neither the existing series as a whole nor any of its members – can contain a sufficient reason why this series exists.
5. A sufficient reason for any existing thing can only be in an existing thing, which is itself either necessary or contingent.
6. Therefore, a sufficient reason why this series exists must be in a necessary being that lies outside the world.
7. Therefore, there is a necessary being that lies outside the world.

The passages quoted earlier also contain a very important argument for step 4.

Proof of Step 4

- A. If each member of a series of beings is contingent, the series as a whole is contingent.

- B. But each member of the existing series is contingent. (Second conjunct of premise 2)
- C. Therefore the existing series as a whole and each of its members is contingent.
- D. Nothing contingent can contain a sufficient reason for its own existence or that of anything else.
- E. Therefore, nothing contingent – and, in particular, neither the existing series as whole nor any of its members – can contain a sufficient reason why this series exists.

Leibniz stresses that we cannot get around this by supposing that the series is infinitely old and that a reason for each of its members can be found in preceding ones. Even if that were so, there would be no *sufficient* reason for the series, since nothing contingent, no matter how old or complex, can explain why there is anything at all or why this series exists rather than another one.

VI

In this section, I consider objections that do not purport to deny the principle of sufficient reason. One such criticism attacks premise 2. Obviously, the world exists, but how does Leibniz know that it consists of nothing but contingent beings? Maybe something within it is necessary.

Some would say that we observe things come into being and expire and thus know *a posteriori* that they are contingent. But that would not assure us that *everything* in the world is contingent, since there is far too much that we have not observed. Possibly, for example, all the composite things we perceive are contingent and destructible, but their basic elements are necessary.

As we saw in section I, however, Leibniz's identification of reality with perfection entails that a necessary being must have all and only pure perfections. And this, together with the identity of indiscernibles, implies that there is only *one* necessary being.³⁰

This raises the question how Leibniz can be sure that the world itself is not the necessary being. Even if we grant that any series of contingent substances is contingent, one might still deny premise 2 by holding, with Spinoza, that the world is a single necessary substance.

Against this there is the intuition that the world might not have

existed. That seems possible. But, in this context, it is not clear how much weight to assign this intuition, since it also seems possible (to me, anyway) for absolutely nothing to exist. Yet this contradicts the idea that there is a necessary being. If I'm wrong in thinking that it is possible for nothing whatsoever to exist, perhaps my intuition that the world is contingent is also mistaken.³¹

Perhaps. Yet Leibniz might answer that when one weighs up the number of deep intuitions that Spinozism sacrifices, it is far less costly, and therefore far more plausible, to believe that the world is a collection of contingent things than that it is a single necessary substance.

According to necessitarianism, for example, everything that is possible occurs in the actual world and nothing could have been otherwise. But this is ludicrous, says Leibniz, since what is related in any self-consistent novel or story is possible. Are we therefore to imagine

that there are certain poetic regions in the infinite extent of space and time where we might see wandering over the earth King Arthur of Great Britain, Amadis of Gaul, and the fabulous Dietrich von Bern invented by the Germans?
[FC 178–79: L 263]³²

Likewise, Leibniz thinks it flies in the face of good sense to suppose that nothing could have been otherwise.

A stubborn Spinozist might answer that the fabulous von Bern and his friends can't be found wandering in outer space, but they aren't really possible either. He might also insist that Leibniz is begging the question by just asserting that things could have been otherwise. These replies, however, don't increase the plausibility of the Spinozist's view. Surely we must agree with Leibniz that necessitarianism is counterintuitive.

Unfortunately, it is not clear that his own theory avoids this result. In every true proposition, he says, the concept of the predicate is contained in that of the subject. But, if so, how can any true proposition fail to be necessary? Leibniz struggled mightily with this question, and I shall not try to judge his answers here.³³ Nevertheless, the force of the question is evident.

Leibniz would also be likely to point out that a further cost of Spinozism is its counterintuitive doctrine that each individual is really but a mode of God. He accepts the *cogito* and thinks it shows that he is a true individual substance, not a property of something

else. A Spinozist could answer that we are each *self-conscious* modes of God and that Leibniz can therefore know his own existence without being a substance. But, although this might explain one's knowledge of one's own existence, it would not increase the appeal of the claim that you and I are just modes.

A modified Spinozist could deal with these last issues and also raise other problems. He conceives of the universe as an eternal series of substances, including self-conscious ones who can know their own existence via the cogito. In his scheme, each substance is brought into existence by previous ones and each eventually expires, leaving others which remain. Because of the constitution of things, however, each substance *must* have exactly the properties it actually has: the time when it arises, the attributes it expresses, and the moment of its demise are fixed necessarily by the order of nature. Now the universe exists just in case at least one of its members does.³⁴ But since each member must exist at its appointed time, and since it is always true that at least one member exists, the universe is a necessary being: it cannot fail to be and it has its reason for being in the eternal order of its components.³⁵ Accordingly, each component substance of the universe also has a sufficient reason, not in itself nor in any finite sequence of other substances, but in the infinite sequence, taken as a whole, that leads up to it. This metaphysics seems to preserve the Spinozistic challenge without sacrificing either the cogito or our individual substancehood.

Which part of the cosmological argument would the modified Spinozist deny? To answer this, note first that the substances described above are contingent: A necessary being is eternal, because it is logically impossible that it should *ever* fail to exist (*New Essays* II.xvii, A VI.vi: RB 159, Gr 302–3; G I 140, 146, 149: L 197, 202–3). So our substances aren't necessary. And, since Leibniz defines a contingent being as one that is not necessary, it follows that these substances are contingent. But in that case the modified Spinozist is in a good position to deny 4A: as he has set things up, the series of contingent beings is necessary. This, of course, also undermines 4, which assumes that the series as a whole is contingent.

On Leibniz's definition, anything that exists only some of the time is contingent. The problem, from his opponent's perspective, is that this does not entail that if something is contingent, it might never have existed at all. Leibniz just *assumes* that. Given the as-

sumption, 4A may be defensible: if each member of a series is such that it is logically possible that it should not have existed at all, it is plausible to suppose that it is logically possible that the entire series should not have existed. Yet Leibniz's assumption can be denied, as the modified Spinozist's substances illustrate.

It will do no good for Leibniz to assert that since these substances are only hypothetically necessary, each of them is such that it might never have existed. Taken by itself, that claim doesn't justify the assumption, it simply reexpresses it. Nor will it suffice to change the definition of "contingent being" from "nonnecessary being" to "thing that might not have existed at all." This would merely turn the opponent's attack against the idea that the world is a series of contingent things (i.e., against the second half of 2). The modified Spinozist's view, after all, is that no substance is such that it might never have existed.

A better tactic would be to concede that the disputed assumption does not follow from the definition of "contingent being" and to defend 4A in terms of the unacceptable consequences of denying it. The objection to 4A was just that the modified Spinozist scheme might be true. But while that scheme eliminates *some* of the most implausible features of standard Spinozism (namely, those having to do with the cogito and our own individual substancehood), it does not eliminate all of them. It still implies, for example, that everything that is possible occurs in the actual world and that nothing could have been otherwise – a position that Leibniz regards as patently absurd. Although he may overstate his point, it does seem to sully the critique of 4A.

Another response uses premises 4D and 5 to argue that the modified Spinozist violates the principle of sufficient reason. 4D, we will recall, asserts that nothing contingent can contain a sufficient reason for its own existence or that of anything else. 5 says that a sufficient reason for an existing thing can only be in an existing thing. If every component of the universe is contingent, however, then there is nowhere to locate a sufficient reason for any substance. The modified Spinozist concedes that the reason cannot be either in the substance itself or in any finite sequence of its companions, since all of these are contingent. His view is rather that each substance "has a sufficient reason, not in itself nor in any finite sequence of other substances, but in the infinite sequence, *taken as a*

whole, that leads up to it." But even if we count this sequence as a "thing," it is not, taken as a whole anyway, an *existing* thing. At any moment, at most a *part* of the relevant sequence exists, a part which is contingent and hence incapable of supplying a sufficient reason for anything at all.³⁶ So, in fact, Leibniz would say, *no* substance in this system has a sufficient reason.

Possibly Leibniz's adversary could find a plausible way of continuing the dialogue. But I shall not attempt to do so, since the modified Spinozist has already served my purposes.³⁷

In the final section, I consider arguments for and against premise 1.

VII

Some believe that the principle of sufficient reason involves an incoherent conception of explanation.³⁸ On their view, one can explain something only by appealing to something else. Thus, one might explain why the water boiled by referring to the fire that heated it or why the roof collapsed by mentioning the unusually heavy object that fell upon it, but in no case would it make sense to say that something explained itself. Yet, as Leibniz employs the idea, there can be a sufficient reason for the existence of something only if there is a *self-explaining* being. Therefore, premise 1 is absurd.

As it stands, this argument is inconclusive. Leibniz could concede that ordinary explanations work as described, but insist that his critic just *asserts* that there cannot be a case of an extraordinary explanation. What proof is there that every possible explanation is of the garden variety?³⁹

I should also mention a criticism of 1 which, for lack of space, I cannot explore here. Kant attacks the ontological argument by claiming that existence is not a predicate.⁴⁰ This thesis, moreover, has been taken to imply that the very concept of a necessary being is incoherent, because many construe a necessary being as one that has the predicate of existence necessarily. But if the idea of a necessary being is incoherent, then so is the principle of sufficient reason: for on Leibniz's understanding, there is no sufficient reason for the existence of anything unless there is a necessary being.⁴¹

The time has long since past, however, when one could summarily dismiss the idea of a necessary being on Kantian grounds. A number of philosophers now argue that existence *is* a predicate and

many others hold that, though existence is not a predicate, *necessary existence* is. (Leibniz himself takes the first line in some passages and the second in others.) It may yet be that Kant's view, or something like it, is correct, but the critic must work to show it.⁴¹ The next tactic is not so much a refutation of 1 as a criticism of 4, but since it leads to a problem with 1, I consider it here.

Many commentators charge that the cosmological argument erroneously assumes that the series of contingent things is something over and above its constituents. They would locate this error in the proof of step 4, which contrasts the members of the series with the series as a whole.⁴² Leibniz states that there could be a reason within the series for each of its members without that constituting a reason for the series as a whole. Yet there isn't any difference here: the series *is* the totality of its members, and so if each member has a reason, the series *ipso facto* has one. Thus, the argument rests on a distinction without a difference.

I cannot see that Leibniz makes this mistake, however. He distinguishes *each* member of the series from the series as a whole, but that's impeccable. He also says there can be a reason for each of the members without that constituting a sufficient reason for the series. But that isn't because he distinguishes the series from its members; it's because he distinguishes *a reason* from a *sufficient reason*. As he insists, the presence of a reason, or contingent cause, for each thing in the series doesn't explain why this series exists and therefore does not provide a sufficient reason for anything. The critic supposes that there is a distinction without a difference because he focuses on the wrong distinction.

This reply, however, is very likely to raise suspicions about premise 1. Part of the appeal of the premise, I suspect, is that many people assume that there must be a causal explanation of all events in terms of ones that precede them, and they unwittingly confuse this with the presence of a sufficient reason for everything. But once one sees the difference, one can easily doubt premise 1 and question whether there is a truly *sufficient* reason for anything. What proof is there that there is an explanation of why this world exists rather than a different one or none at all?

Leibniz tries to answer this by giving arguments for the principle of sufficient reason. He deduces it *a priori*, for example, from his definition of truth. A proposition is true, he says, just in case the concept of

the predicate is contained in that of the subject, and this entails that whatever is true has a sufficient reason [C 519: L 268, C 401-2: P 93; C 11: P 172].⁴³ Likewise, in a famous passage supporting the principle, Leibniz tells Arnauld that either truth is a concept containment, "Or else I do not know what truth is" (G II 56: L 337).⁴⁴

This obviously invites the question why we should identify truth with concept containment. And it is very tempting to suppose that Leibniz's real motivation for this is his desire to be able to prove the principle of sufficient reason *a priori*!⁴⁵

Leibniz also gives a proof that whatever exists has a sufficient reason using definitions of a sufficient reason and a requisite (A VII ii 483. Cf. Gr 263, 267, G VII 393: L 698, A VI. ii 118). His claim is that whatever exists must have all of its necessary conditions (or requisites) posited and that the complete set of a thing's necessary conditions is its sufficient reason. Therefore, whatever exists has a sufficient reason.

Proof that Whatever Exists Has a Sufficient Reason

Definition 1: A sufficient reason is something which, if it has been posited, the thing exists.

Definition 2: A requisite is something which, if it has not been posited, the thing does not exist.

1. If a requisite of a thing has not been posited, the thing does not exist. (By Definition 2)
2. Therefore, whatever exists has all of its requisites posited.
3. If a thing does not exist, some requisite or other of it has not been posited.
4. Therefore, if all the requisites of a thing have been posited, the thing exists. (By contraposition of 3)
5. Therefore, all the requisites of a thing constitute a sufficient reason for it. (By Definition 1)
6. Therefore, whatever exists has a sufficient reason.

The argument is faulty on two counts. First, as Sleight points out, step 3 begs the question: this claim does not follow from either of Leibniz's definitions.⁴⁶ Second (and more pertinent to the cosmological argument), the proof does not show in particular that the set of a thing's requisites must include something to answer the question: Why does this series exist rather than another or nothing at all?⁴⁷ As we know, however, Leibniz thinks a sufficient reason *must* answer these questions.

Leibniz's ontological and cosmological arguments 375

Next, Leibniz thinks that the principle has *a posteriori* support, because no one has ever produced an event that lacks a reason.

I have often defied people to . . . produce any one uncontested example in which [the principle of sufficient reason] fails. But they have never done it, nor ever will. Yet there is an infinite number of instances in which it succeeds, or rather it succeeds in all the known cases in which it has been employed. From which one may one may reasonably judge that it will also succeed in unknown cases . . . according to the method of experimental philosophy which proceeds a posteriori, even if it were not also justified by pure reason, or a priori. (G VII 420: L 717)

Leibniz's point seems to be that since a cause has always turned up in known cases, there probably is one in unknown cases. Let's grant this for the sake of argument. How does it support the principle of sufficient reason? Even if we have found *a reason* for everything we have investigated, we have not found a *sufficient reason* for anything; for surely we haven't discovered empirically why this world exists rather than an entirely different one or none at all. Is Leibniz forgetting his distinction between a reason and a sufficient reason? Or is he leaping from causal relations between events to a sufficient reason for the very fact of existence?

Another suggestion is that he is merely arguing that no one is likely to cast doubt on the principle of sufficient reason by finding an event without a cause. On this weaker reading, however, the argument does not even attempt to support the thesis that concerns us, namely, that there is an explanation of why there is anything at all and of why this world in particular exists.

Finally, Leibniz attempts to vindicate the principle pragmatically by arguing that it is indispensable to our epistemic pursuits. He says, for example, that much of physics and ethics rests on it and that there can be no inductive arguments without it, nor any conclusions drawn in civil matters. Ultimately, he thinks "whatever is not of mathematical necessity . . . must be sought [in the principle of sufficient reason] entirely" (G VII 301: L 227). However clear this may have seemed to Leibniz, it would certainly require a wholesale defense today.

Rationalist that he was, Leibniz thought the truth of the principle of sufficient reason should be evident to anyone who reflects carefully about it. In moments of frustration, he would even declare that

the principle is so obvious that it doesn't need proof (G VII 419:L 717). Yet, as we know, it is a thesis which many thoughtful and intelligent people have rejected.

I close with an observation about the connection between this topic and Leibniz's modal proof. Leibniz sought to justify the concept of a necessary being by recourse to the principle of sufficient reason. But what is uncertain about the former is also uncertain about the latter, namely, whether it makes sense for anything to contain its own reason for existence. To prove the possibility of a necessary being, then, one cannot take the principle of sufficient reason for granted: one must prove it. And that is something that neither Leibniz nor anyone else has ever done.

NOTES

- 1 I wish to thank Robert Almeder, Holly Thomas, and Donald Rutherford for suggestions about the issues in this paper. The notes contain an English translation (where I know of one) followed by a reference to an edition of the original text. Translations are from the cited English translation, though possibly with some changes. Where no English edition is cited, the translation is mine.
- 2 This proof was also a favorite of St. Augustine, from whom Leibniz derived it.
- 3 The ontological argument was first proposed by St. Anselm of Canterbury (1033–1109) and was subsequently embraced by Descartes, Leibniz, and Spinoza, to name only a few. Unlike the others, Spinoza used it to support the heretical view that God is actually the universe itself, which he regarded as a single, all-encompassing substance with infinite attributes. The ontological argument has been criticized by a host of philosophers, including Gaunilo (a cohort of Anselm), Aquinas, Gassendi, and Kant. Gaunilo attempted to reduce it to absurdity by claiming that the reasoning would work as well for a perfect island. The most famous criticism, however, is Kant's, who objected that existence is not a real predicate. "X exists," he said, does not add anything to the concept of x. It merely "posits" an x, i.e., says there is something that exemplifies the concept of x. One can therefore never establish a thing's existence *a priori* via its concept or definition. Though Kant's criticism has convinced many, the ontological argument still has distinguished defenders. Some have replied, for example, that Kant's point does not hold for *necessary existence*, the special kind of existence possessed only by God. For references and discussion, see Plantinga, *The Ontological Argument*.

- 4 Leibniz very frequently uses OA1 to formulate the argument. But his extensive remarks on a letter from Jaquelot make clear that he also regards OA2, OA3, and other variations as acceptable reconstructions (G III 442–54). Sometimes he expresses a preference for versions which do not mention the perfections, though he doesn't make much of it (G IV 358–59: L 386). Cf. G IV 405: D 145.
- 5 In other words, necessary existence is existence in the highest possible degree.
- 6 In connection with the cosmological argument, Leibniz also gives other proofs of the perfection of a necessary being (G VI 602 and 106: L 639 and H 127).
- 7 This distinction corresponds to Leibniz's definition of a necessary truth as one whose opposite implies a contradiction and a contingent truth as one that is not necessary (G III 400: AG 193; G VI 612: L 646; G VII 108ff; G VI 106: H 127).
- 8 At G IV 402: D 143, Leibniz rejects the idea of a perfect body because "a body being limited by its essence cannot include all perfections."
- 9 Leibniz would have agreed with Hartsorn that the contingent existence of God is senseless. Since God is supposed to be a necessary being, the proposition that he exists is either a necessary truth or a contradiction.
- 10 This is noted by Adams, "Presumption and the Necessary Existence," p. 21.
- 11 Reasons for skepticism about this, however, can be found in Adams, "Presumption."
- 12 My reconstruction most closely mirrors Leibniz's statement of the proof at A.VI.iii 572. In the Hague version, in place of "an identity" Leibniz uses the equivalent notion of a proposition "known per se" (*per se nota*) (G VII 261: A.VI.iii 578: L 167).
- 13 How Leibniz finally meant to analyze compossibility is still disputed among scholars.
- 14 For example, van Inwagen, "Ontological Arguments," p. 382; Mates, "Leibniz on Possible Worlds," p. 346; *Philosophy of Leibniz*, pp. 61–62; Malcolm, "Anselm's Ontological Arguments," p. 59; and Wittgenstein and Quine, *passim*.
- 15 As if matters were not bad enough, Mates points out that even in a single language, a sentence that is atomic may seem synonymous with one that is not (e.g., "Zeus is bald" and "Zeus does not have hair on his head"). Mates, "Leibniz on Possible Worlds," p. 346.
- 16 Leibniz assumes that sentences that are not of the subject/predicate form can be converted into equivalent ones that are.
- 17 For an excellent discussion of Leibniz's conception of an ideal language, see chap. VIII.

- 18 Although Leibniz is sure that there are simple concepts, he often expresses uncertainty about whether we humans can discover any of them (G IV 423–25; L 292–93; C 513; p. 7. But cf. G III 582; L 664).
- 19 A concept is “conceived through” the ones that make it up, or are part of its analysis. The concept, *man*, for example, is conceived through the concepts, *rational* and *animal*, which are each part of its analysis. If a concept is conceived through itself, it has no “parts” and it is therefore simple.
- 20 Cf. the material quoted at Mates, “Leibniz on Possible Worlds,” p. 58, where the analogy is to explaining the meaning of a word by reference to a series of other words, none of which the speaker understands. As Couturat points out, however, Leibniz later gives up such analogies. C 430n. For more on this topic, see my next note.
- 21 It is also important to mention that Leibniz eventually rejects ^{STREP}premise 7 of his “infallible” argument. According to his later views, the analysis of every contingent proposition involves an infinite, and hence non-terminating, sequence of steps. Nevertheless, he does not abandon the idea that complex concepts are constituted from simples. Instead, after about 1686, he maintains that the analysis of necessary truths terminates in primitive ideas, whereas that of contingent truths “converges” upon them. For he still takes it as evident that the complex presupposes the simple, even where analysis cannot reach the latter in a finite number of steps.
- 22 What Leibniz says, specifically, is: “If being of itself is impossible, then all beings by others are too.” But since he equates being of itself with necessary being, and beings by others with nonnecessary beings, he would take this principle to be equivalent to the one stated in main text. Using the latter reduces technical terminology and simplifies the exegesis.
- 23 His proof that only a necessary being could provide a sufficient reason for contingent ones is contained in his cosmological argument, which I explore in section V. (Note that this part of the cosmological argument is *a priori*.)
- 24 Russell, *Critical Exposition*, p. 173; Rescher, *Philosophy of Leibniz*, pp. 66–67; and Craig, *The Cosmological Argument from Plato to Leibniz*, p. 277 n. 3.
- 25 G III 452: “The possibility of a circle is proved through its cause, viz. by the movement in a plane of a straight line one point of which remains at rest.” G VII 294: L 230: “The concept of a circle set up by Euclid, that of a figure described by the motion of a straight line in a plane about a fixed end, affords a real definition, for such a figure is evidently possible.”
- 26 Many different kinds of cosmological argument have been given, including ones by Aristotle, Aquinas, Descartes and others. Aristotle argued

from the observed fact of movement to the need for an unmoved mover. Aquinas, relying on Aristotle, reasoned that there must be an unmoved mover and an uncaused cause, which he identified with God. Aquinas based another proof on the existence of contingent, perishable beings. Whatever is capable of perishing, he said, at some time does perish. If *all* things were like this, however, there would have been a time at which they all perished. But then there would have been nothing to cause the things that now exist. So there must be an imperishable, necessary being. Descartes noted that his idea of God represents (i.e., mentally depicts) an infinite degree of reality. But, he argued, since the cause of an idea must possess at least as much reality as the idea represents, the idea of God can only be caused by God himself. He also offered a variation on this, which begins with his famous cogito – “I think, therefore I exist” – and concludes that God is the cause of Descartes’s existence. Descartes’s cosmological proofs occur in his third *Meditation*. Relevant selections from Aristotle and Aquinas, along with references and commentary, are in Burrill, *The Cosmological Arguments*. For detailed discussion of a wide variety of cosmological proofs, see Craig, *The Cosmological Argument*.

- 27 Other references are: C 533; P 145; G VII 309; P 75; G II 56; L 337; G VII 301; L 226–27; C 519; L 268; G VI 127, 413–14; H 147, 419. In the *Moradology* and elsewhere we are told that even the existence of God has a sufficient reason, though a necessary being “has its reason for its existence in itself” (G VI 614; L 647). Also see G VI 602; L 639 and G VII 310; P 77. But cf. G VII 303; L 487.
- 28 C 533; P 145: “A cause is simply a real reason.” Gr 269: “Nothing is without a reason is understood of the efficient, material, formal and final cause.” Although Leibniz often equates “reason” with “cause,” he sometimes treats a cause as a special kind of reason which is external to the thing and which produces it. On this usage, eternal truths, like those of mathematics and the existence of God, have reasons but not causes. For instructive discussion, see Parkinson, *Logic and Reality*, pp. 62–67 and Mates, *The Philosophy of Leibniz*, pp. 158–60.
- 29 Some other passages in which Leibniz distinguishes a reason from a sufficient (full, final, complete) reason are G VII 310; P 77 and G IV 107; L 111. Cf. Gr 267.
- 30 Leibniz usually proves this point in a different way. Typically, he takes it for granted that all worldly things are contingent and reasons from their interconnectedness to the extramundane existence of a single necessary being (G VI 613; L 646 and G VII 305; L 489). Obviously, however, that won’t meet the objection we have just considered. The argument in the main text, on the other hand, *does* meet the objection (and perhaps

- occurs at G VII 310: P 77.) But unfortunately it rests on some uninviting neoplatonic ideas, which contemporary defenders of the cosmological proof may wish to avoid.
- 31 To be sure, Leibniz attacks Spinoza's proof that the world is necessary. But the question now is not so much whether Spinoza has proved this as whether Leibniz has ruled it out.
- 32 Dieterich von Bern is an important figure in German epic literature. Hailed for victories over his rival, Siegfried, Dieterich also battles a series of giants, dwarfs, and water sprites, and gloriously serves Queen Virginal. Discerning and judicious, yet dauntless in the execution of vengeance, Dieterich has been called "the heroic ideal of the twelfth and thirteenth centuries." Robertson and Reich, *A History of German Literature*, pp. 67–68.
- 33 I have discussed some of his most important answers in Blumentfeld, "Supplementalism, Counterparts, and Freedom"; "Leibniz on Contingency and Infinite Analysis"; "Necessity, Contingency, and Things Possible in Themselves."
- 34 Plantinga, *God and Other Minds*, pp. 19–20.
- 35 Of course, the universe is not a necessary *substance*, because it isn't a substance at all, only a vast collection of them. The problem, however, is that it is apparently a *necessary* collection.
- 36 Granted, "The universe exists" is always true. But for any substance, *s*, "The infinite sequence leading up to *s* exists" is always false!
- 37 I use the imaginary opponent only as a foil, not to test the limits of his resources. Anyone who thinks I have given him short shrift, may of course carry on the defense.
- 38 Flew, *God and Philosophy*, p. 83 and Russell, "A Debate on the Existence of God," p. 173.
- 39 Many philosophers say that it is obvious that all explanation is irreflexive. But if they wish to establish their point, they will have to do a lot more than that. (Along the way, incidentally, they will need to cope with recent arguments against their view by Robert Nozick, *Philosophical Explanation*, pp. 116–21.)
- 40 Kant, *Critique of Pure Reason*, pp. 504–5. For a brief explanation of Kant's point, see note 3.
- 41 The following gives some indication of the variety of contemporary positions on the relevant issues. Nathan Salmon, "Existence," holds that existence is a predicate, though he rejects the ontological argument on other grounds. Malcolm, "Anselm's Ontological Arguments," and Hartshorne, *Man's Vision of God*, support the argument by distinguishing existence from necessary existence, whereas Alston, "The Ontological Argument Revisited," takes a modified Kantian position.

- Van Inwagen, "Ontological Argument," on the other hand, argues that anyone who wants to claim either that [the ontological argument] is sound or that it is unsound faces grave difficulties."
- 42 A particularly nice statement of this kind of objection, together with some good responses, is in Edwards, "The Cosmological Argument," pp. 113–20.
- 43 At G VI 414: H 419, Leibniz says that the principle of sufficient reason is "contained in the definition of the true and the false" and "that it is even necessary that that which has no sufficient reason should not exist."
- 44 The statement is a classic case of leading with one's chin.
- 45 This is argued by Mondadori, "Reference, Essentialism, and Modality in Leibniz's Metaphysics," p. 90 n14. Cf. Couturat, *La Logique*, pp. 208–18. Robert Sleight, on the other hand, thinks the theory of truth is grounded in Leibniz's conviction that it is needed to account for the identity of substances over time. Sleight, *Leibniz and Arnauld*, p. 90. If Sleight is correct, then the defense of the principle of sufficient reason that we are now considering rests on whether Leibniz's theory of truth really is required to explain the identity of individuals.
- 46 Sleight, "Leibniz on the Two Great Principles of All our Reasonings," p. 203.
- 47 Of course, if something occurs, everything required for it occurs. But is it required that anything provide a full (final, complete, sufficient) explanation? That is the question.