granting much more than that his concept of God is not contradictory. We will be granting, for example, that some existing thing is as perfect as it can be. For the plain fact is that Anselm's God is a possible thing only if some *existing* thing is as perfect as it can be.

Our final critique of Anselm's argument is simply this. In granting that Anselm's God is a possible thing, we are in fact granting that Anselm's God actually exists. But since the purpose of the argument is to prove to us that Anselm's God exists, we cannot be asked to grant as a premise a statement which is virtually equivalent to the conclusion that is to be proved. Anselm's concept of God may be coherent and his principle that existence is a great-making quality may be true. But all that follows from this is that no nonexisting thing can be Anselm's God. If we add to all of this the premise that God is a possible thing it will follow that God actually exists. But the additional premise claims more than that Anselm's concept of God isn't incoherent or contradictory. It amounts to the assertion that some existing being is supremely great. And since this is, in part, the point the argument endeavors to prove, the argument begs the question: it assumes the point it is supposed to prove.

If the above critique is correct, Anselm's argument fails as a proof of the existence of God. This is not to say, however, that the argument isn't a work of genius. Perhaps no other argument in the history of thought has raised so many basic philosophical questions and stimulated so much hard thought. Even if it fails as a proof of the existence of God, it will remain as one of the high achievements of the human intellect.

## NOTES

1. An argument along the lines just presented may be found in J. Shaffer's illuminating essay, "Existence, Predication and the Ontological Argument," *Mind* LXXI (1962), pp. 307–25.

2. I am indebted to Professor William Wainwright for bringing this point to my attention.

# Five Ways to Prove the Existence of God



## SAINT THOMAS AQUINAS

Saint Thomas Aquinas (1225–1274), born near Naples, was the most influential philosopher of the medieval period. Aquinas' synthesis of Aristotelianism and Christianity was considered so successful by the Church that six hundred years later in 1879 Pope Leo XIII declared Aquinas' system to be the official Catholic philosophy. Aquinas' greatest work was the *Summa Theologiae*, and its most famous passage, reprinted here, is the five ways to prove the existence of God. In the fourth way Aquinas cites "*Metaph.* ii." The reference is to the second book of Aristotle's *Metaphysics* and serves as a reminder of Aristotle's central place in Aquinas' thought.

There are five ways of proving there is a God:

The first and most obvious way is based on change. For certainly some things are changing: this we plainly see. Now anything changing is being changed by something else. (This is so because what makes things changeable is unrealized potentiality,

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but what makes them cause change is their already realized state: causing change brings into being what was previously only able to be, and can only be done by something which already is. For example, the actual heat of fire causes wood, able to be hot, to become actually hot, and so causes change in the wood; now what is actually hot can't at the same time be potentially hot but only potentially cold, can't at the same time be actual and potential in the same respect but only in different respects; so that what is changing can't be the very thing that is causing the same change, can't be changing itself, but must be being changed by something else.) Again this something else, if itself changing, must be being changed by yet another thing; and this last by another. But this can't go on for ever, since then there would be no first cause of the change, and as a result no subsequent causes. (Only when acted on by a first cause do intermediate causes produce a change; unless a hand moves the stick, the stick won't move anything else.) So we are forced eventually to come to a first cause of change not itself being changed by anything, and this is what everyone understands by *God.*

The second way is based on the very notion of agent cause. In the observable world causes are found ordered in series: we never observe, nor ever could, something causing itself, for this would mean it preceded itself, and this is not possible. But a series of causes can't go on for ever, for in any such series an earlier member causes an intermediate and the intermediate a last (whether the intermediate be one or many). Now eliminating a cause eliminates its effects, and unless there's a first cause there won't be a last or an intermediate. But if a series of causes goes on for ever it will have no first cause, and so no intermediate causes and no last effect, which is clearly false. So we are forced to postulate some first agent cause, to which everyone gives the name *God.*

The third way is based on what need not be and on what must be, and runs as follows. Some of the things we come across can be but need not be, for we find them being generated and destroyed, thus sometimes in being and sometimes not. Now everything cannot be like this, for a thing that need not be was once not; and if everything need not be, once upon a time there was nothing. But if that were true there would be nothing even now, because something that does not exist can only begin to exist through something that already exists. If nothing was in being nothing could begin to be, and nothing would be in being now, which is clearly false. Not everything then is the sort that need not be; some things must be, and these may or may not owe this necessity to something else. But just as we proved that a series of agent causes can't go on for ever, so also a series of things which must be and owe this to other things. So we are forced to postulate something which of itself must be, owing this to nothing outside itself, but being itself the cause that other things must be.

The fourth way is based on the levels found in things. Some things are found to be better, truer, more excellent than others. Such comparative terms describe varying degrees of approximation to a superlative; for example, things are hotter the nearer they approach what is hottest. So there is something which is the truest and best and most excellent of things, and hence the most fully in being; for Aristotle says that the truest things are the things most fully in being. Now *when many things possess a property in common, the one most fully possessing it causes it in the others: fire,* as Aristotle says, *the hottest of all things, causes all other things to be hot.* So there is something that causes in all other things their being, their goodness, and whatever other perfections they have. And this is what we call *God.*

The fifth way is based on the guidedness of nature. Goal-directed behaviour is observed in all bodies in nature, even those lacking awareness; for we see their behaviour hardly ever varying and practically always turning out well, which shows they truly tend to goals and do not merely hit them by accident. But nothing lacking awareness can tend to a goal except it be directed by someone with awareness and understanding: arrows by archers, for example. So everything in nature is directed to its goal by someone with understanding, and this we call *God.*

# The Cosmological Argument

MICHAEL MARTIN

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## THE SIMPLE VERSION

In its simplest form the cosmological argument is this: Everything we know has a cause. But there cannot be an infinite regress of causes, so there must be a first cause. This first cause is God.

It is well to state the problems with this simple version of the argument, since, as we shall see, they are found in some of the more sophisticated versions as well. Perhaps the major problem with this version of the argument is that even if it is successful in demonstrating a first cause, this first cause is not necessarily God. A first cause need not have the properties usually associated with God. For example, a first cause need not have great, let alone infinite, knowledge or goodness. A first cause could be an evil being or the universe itself. In itself this problem makes the argument quite useless as support for the view that God exists. However, it has at least one other equally serious problem.

The argument assumes that there cannot be an infinite sequence of causes, but it is unclear why this should be so. Experience does not reveal causal sequences that have a first cause, a cause that is not caused. So the idea that there can be no infinite sequences and that there must be a first cause, a cause without a cause, finds no support in experience. This is not to say that experience indicates an infinite sequence of causes. Rather, the presumption of the existence of a first cause seems to be a nonempirical assumption that some people see as obvious or self-evident. From a historical point of view, however, any appeal to obviousness or self-evidence must be regarded with suspicion, for many things that have been claimed to be self-evidently true—for example, the divine right of kings and the earth as the center of the universe—have turned out not to be true at all.

Further, we have no experience of infinite causal sequences, but we do know that there are infinite series, such as natural numbers. One wonders why, if there can be infinite sequences in mathematics, there could not be one in causality. No doubt there are crucial differences between causal and mathematical series; but without further arguments showing precisely what these are, there is no reason to think that there could not be an infinite regression of causes. Some recent defenders of the cosmological argument have offered just such arguments, and I examine these arguments later. But even if they are successful, in themselves they do not show that the first cause is God.

## MORE COMPLEX VERSIONS

As I have said, major problems facing the simple version of the cosmological argument reemerge in more sophisticated versions as well. Consider, for example, Aquinas's belief that God's existence could be demonstrated by rational arguments. In the *Summa Theologiae* he presents five arguments—what he

calls ways—that he believes demonstrate the existence of God. The first three of his five ways are sophisticated versions of the simple cosmological argument presented alone. I consider ways two and three. . . .

[In] the second way . . . Aquinas attempts to show that there could not be an infinite series of efficient causes and consequently there must be a first cause. Although this notion of efficient cause is perhaps closer to our modern view of causality than the other Aristotelian concepts of cause he used, there are some important differences. An efficient cause of something, for Aristotle and Aquinas, is not a prior event but a substantial agent that brings about change. The paradigm cases of causation for an Aristotelian are heating and wetting. For example, if A heats B, then A produces heat in B; if A wets B, then A produces wetness in B. In general, if A Φs B, then A produces Φness in B. The priority of a cause need not be temporal; a cause is prior to its effects in the sense that the cause can exist without the effect but not conversely.

It is important to realize that Aquinas's argument purports to establish a first cause that maintains the universe here and now. His second way is not concerned with establishing a first cause of the universe in the distant past. Indeed, he believed that one could not demonstrate by philosophical argument that the universe had a beginning in time, although he believed that it did. This belief was a matter of faith, something that was part of Christian dogma, not something that one could certify by reason. Thus he was not opposed on *philosophical* grounds to the universe's having no temporal beginning. As the above quotation makes clear, he believed that the here-and-now maintenance of the universe could not be understood in terms of an infinite causal series.

Two analogies can perhaps make the distinction between temporal and nontemporal causal sequences clear. Consider a series of falling dominos. It is analogous to a temporal causal sequence. Aquinas does not deny on philosophical grounds that infinite sequences of this sort can exist. But now consider a chain in which one link supports the next. There is no temporal sequence here. The sort of causal sequence that Aquinas says cannot go on forever but must end in a first cause is analogous to this.

The same problems that plagued the simple version of the argument plague this more sophisticated version. The first cause, even if established, need not be God; and Aquinas gives no non-question-begging reason why there could not be a nontemporal infinite regress of causes. This latter is an especially acute problem. Unless some relevant difference is shown between a temporal and a nontemporal infinite series, Aquinas's claim that an infinite temporal sequence cannot be shown to be impossible by philosophical argument seems indirectly to cast doubt on his claim that philosophical argument can show the impossibility of a nontemporal causal series. . . .

To critically evaluate Aquinas's [third way], it is useful to reformulate it in the following steps.

(1) Each existing thing is capable of not existing.
(2) What is true of each thing is true of everything (the totality).
(3) Therefore, everything could cease to exist.
(4) If everything could cease to exist, then it has already occurred.
(5) Therefore, everything has ceased to exist.
(6) If everything has already ceased to exist and there could not be something brought into existence by nothing, then nothing exists now.
(7) There could not be something brought into existence by nothing.
(8) Therefore, nothing exists now.
(9) But something does exist now.
(10) Therefore, premise (1) is false.
(11) Therefore, there must be some being that is not capable of not existing—that is, a necessary being.
(12) Every necessary being must have the cause of its necessity either outside itself or not.
(13) There cannot be an infinite series of necessary beings that have a cause of their necessity outside themselves.
(14) Therefore, there is a necessary being that does not have the cause of its own necessity outside itself and that is the cause of the necessity of other beings.
(15) Therefore, God exists.

Of the many problems with Aquinas's argument, the major one is similar to that facing the simple version of the cosmological argument considered above. Even if a necessary being is established, it need not be God, for the universe itself may be necessary. Thus the last step of the argument from (14) to (15) is unwarranted.

There are a number of particular problems with Aquinas's argument as well. In premise (2) the argument seems to commit the fallacy of composition. Just because each thing is capable of not existing, it is not obvious that the totality would be capable of not existing. Furthermore, premise (4) seems implausible in the extreme. There is no reason to suppose that just because something is capable of not existing, at some time this possibility has been realized.

In addition, the supposition in premise (7) that there could not be something brought into existence by nothing is by no means self-evident. At least, given the biblical authority of the book of Genesis, where God created the world out of nothing, it should not have seemed so to Aquinas. For if God could create the world out of nothing, one might suppose that something could be spontaneously generated out of nothing without God's help. Surely this is all step (7) is denying by the words "there could not be something brought into existence by nothing." Furthermore, recently proposed cosmological theories suggest that the universe may indeed have been generated from nothing. Although a critical evaluation of these recent theories is beyond the scope of this book, it is important to realize that such theories are being seriously discussed and debated by physicists, astronomers, and philosophers of science in respectable publications. Moreover, step (13) has all the problems inherited from Aquinas's arguments that there could not be an infinite series of efficient causes.

I must conclude, then, that these two deductive versions of the cosmological argument are unsound and therefore cannot be used to support a belief in God.

# Dialogues Concerning Natural Religion



## DAVID HUME

The Scotsman David Hume (1711–1776), essayist, historian, and philosopher, developed one of the most influential of all philosophical systems. He presented it first in his monumental *Treatise of Human Nature,* published when he was 28 years old. His *Dialogues Concerning Natural Religion* was published posthumously because of its controversial content. It remains a landmark in the philosophy of religion.

### PART II

I MUST OWN, Cleanthes, said Demea, that nothing can more surprise me than the light in which you have all along put this argument. By the whole tenor of your discourse, one would imagine that you were maintaining the Being of a God against the cavils of atheists and infidels, and were necessitated to become a champion for that fundamental principle of all religion. But this, I hope, is not by any means a question

David Hume, *Dialogues Concerning Natural Religion* (1779).