

THE COSMOLOGICAL ARGUMENT

Introduction

Of all the various rational arguments for the existence of God, the cosmological argument seems to be the most enduring. Attacked continually by its critics, the cosmological arguments has seen a number of formulations. Some of the earliest forms of the argument were offered by Greek philosophers such as Aristotle. He posited a number of unmoved movers as the originating cause of the universe. Other proponents include both Christian and Muslim philosophers. The argument has two basic versions: the horizontal and the vertical. The horizontal (kalam) cosmological argument, which was advocated by Bonaventure, reasons back to a Cause of the beginning of the universe (i.e. an originating cause). The vertical cosmological argument, advocated by Thomas Aquinas, reasons from the being of the universe as it now exists (i.e. a sustaining cause).

Statement of the Argument

The horizontal cosmological argument reasons from the fact that the universe had a beginning. It can be stated this way:

1. The universe had a beginning.
2. Anything that had a beginning must have been caused by something other than itself.
3. Therefore, the universe was caused by something other than itself, namely God.

This version of the cosmological argument reasons that the universe is not eternal and as such must have come into existence by a cause other than itself. After all, it could not be the

cause of its own existence. Both scientific and philosophical evidence is offered to demonstrate that the universe is not eternal. First, scientists almost universally hold to the big bang theory of the origin of the universe in which the universe began in an explosion some 20 billion years ago. Coupled with the second law of thermodynamics, which indicates that the amount of usable energy is decreasing, it becomes evident that rather than being eternal the physical universe had a beginning and is slowly running down. A second line of evidence offered to show that the universe had a beginning is based upon the fact of time. It reasons that the universe cannot go back into time forever because it is impossible to traverse an infinite number of moments. In other words, before one could get to the present moment the previous moment must be passed. But before the previous moment could be passed, the one before it must be passed and so on. If there are an infinite number of moments, then it is impossible to traverse them to get to the moment of time in which we now exist. Therefore time, and the universe, must have had a beginning. Since the universe had a beginning it must have been caused to begin by a Beginner.

The vertical form of the argument, on the other hand, reasons that the universe needs a present cause to continue in existence. The argument can be stated in this way:

1. Every part of the universe is dependent.
2. If every part of the universe is dependent, then the whole universe must also be dependent.
3. Therefore, the whole universe is dependent for existence right now on some Independent Being.

Since each of its parts are dependent, or contingent, the whole universe must be dependent. If all the parts of the universe were to vanish, then the universe itself would vanish. In other words, something is keeping the universe in existence right now so that it doesn't just

disappear. There is a conserving cause of the existence of the universe. This general argument underlies the Five Ways that Aquinas uses to argue for the existence of God. It reasons from the being of experience to the Being of God.

Critics have pointed to weaknesses in both arguments. One such weakness is that the horizontal version only demonstrates that given the universe had a beginning it also had a Beginner. It does nothing to show that such a Beginner still exists. Thus, God may have created the universe, but God Himself may not now exist. While this objection cannot be levied against the vertical argument, others have been levied against it. Critics claim that the vertical cosmological argument, as stated above, commits the fallacy of composition in its second premise. Furthermore, critics assert that just as *a priori* arguments, such as Anselm's ontological argument, are invalid, so are *a posteriori* arguments in that they must import some kind of *a priori* principle if they are to be rationally inescapable. But, critics reason, there is no logical necessity involved in *a priori* arguments or principles because the opposite state of affairs is always possible. Thus, while it may be true that a necessary being would exist necessarily if it existed, it is logically possible that no necessary being exists. These criticisms are not the final word, however, because an expanded form of the argument is able not only to overcome them but it is also able to ground its conclusions in the certitude of existence.

Extended Form of the Cosmological Argument

To answer the criticisms mentioned above, an extended version of the vertical cosmological argument has been offered. This version contains both *a posteriori* and *a priori*

elements and is not subject to many of the traditional objections. The argument is stated in this way (Geisler, Norman, *Christian Apologetics*, 238-239):

1. Some things undeniably exist..
2. My nonexistence is possible.
3. Whatever has the possibility not to exist is currently caused to exist by another..
4. There cannot be an infinite regress of current causes of existence.
5. Therefore, a first uncaused cause of my current existence exists.
6. This uncaused cause must be infinite, unchanging, all-powerful, all-knowing, and all-perfect.
7. This infinitely perfect Being is appropriately called "God."
8. Therefore, God exists.
9. This God who exists is identical to the God described in the Christian Scriptures.
10. Therefore, the God described in the Bible exists.

The foundation of the argument is the certainty of its first premise, that existence is undeniable. From this *a posteriori* premise, the necessity of a uncaused Cause, not only for the beginning of the universe but also its current existence, can be deduced via the principle of causality.

The First Premise

The existence of things is undeniable. That something exists is undeniable because, while I may deny the existence of other things, I cannot deny my own existence. In order to deny my existence I must exist, which is self-defeating. This does not mean my own existence is rationally inescapable, it is logically possible that I do not exist. But since I do exist, my existence is undeniable. It is evident then that the existence of something is certain and undeniable.

The Second Premise

My nonexistence is possible. While it is true that my existence is undeniable, this does not mean that my nonexistence is impossible. It is possible for me not to exist. That is, my existence is not necessary. Not only is this true of my own existence, it is also true of all the existing things of my experience. The being, or existence, discovered in experience is neither impossible, in that it does exist, nor necessary, in that it is possible not to exist. Thus it is possible for all the beings of my experience not to exist, including my self. This can be demonstrated in several ways.

Change

That the being of experience is only possible being is evident from the principle of change. There are three possible positions on change. First, Parmenides held that change is simply illusion. He reasoned that for a being, i.e. the real, to change it must become what it is not. But what a being is not is non-being, which is nothing. Thus change is not real because for change to be possible the opposite of real, the non-real, must be real. But this is a contradiction. Thus change is simply illusion. Heraclitus, on the other hand, rejected this idea. He argued that everything is in flux, all is becoming. There is nothing in being that is permanent. Between these two extremes is the concept of change based upon act and potency. The former alternatives are clearly insufficient.

First of all, change is a fact of experience. Denying change is a denial of an universally perceived experience and it is also self-defeating. No one can even claim to have come to know that their experience is unchanging because coming to know is a change in knowledge.

Furthermore, total illusion about ourselves and about the world is impossible.

The second alternative is also false. The nature of change itself precludes that everything is becoming. After all, in every change there must be something that changes and something that remains the same. In other words, change is something that happens to a subject of the change. If there is no common subject in change, if change were simply becoming something else, then there is no true continuity, no identity. One thing exists and then another thing exists. The former thing is simply gone. There is no relation of the new thing to the former thing, there is no connection of identity. In fact, if change were annihilation and recreation it would imply the existence of an ever present Creator to produce the new thing out of nothing. Thus true change requires a subject of change, an element common to the thing prior to change and to the thing after the change which gives the thing its identity. For example, a seed buried in the ground grows into a tree. If, however, someone first planted a seed, then replaced the seed with a seedling, and finally replaced the seedling with a tree, it cannot be said that the seed changed into a tree. There is no common identity. It is evident then that change requires a common subject. But it is also the case that that by which the initial stage differs from the terminal stage cannot be really identical with the common subject. There must be an element that has the potential, or potency, to be other than what it is. In change, something is lost (the original state of being) and something is gained (the new state of being).

This composition of being is best understood in the relation of act to potency. Act is any sort of activity, actuality, determination of perfection. It is waling as compared with the inactivity of sitting, or what the carpenter does to a piece of wood when he is at work, or a billiard ball

rolling as compared to being at rest. Potency, on the other hand, is not in itself act, rather it is the capacity for act. For example, while neither a baby nor a doll has knowledge of biology, the baby has the capacity, when fully developed, to learn biology, the doll does not. Potency is the capacity to become.

There are several principles that apply to act and potency. First, act and potency are distinct in their order. That is, as things in relative opposition to one another they are necessarily distinct. Second, act and potency are not strictly beings but principles of being. As beings in themselves act and potency could not be found combined within a single being. Rather, act is that by which a being is or is some kind of thing or exists according to some modification. Potency, on the other hand, is that by which a thing can be or can be some kind of a thing or can exist according to some modification. Third, potencies cannot be found in and of themselves, they can only be found in some relation to act. Finally, act and potency divide being in general. That is, the things of our experience are composed of potency and act and are not simply potency or act. There is no third alternative between being and non-being. Thus a changeable being is composed of both act and potency. In change, the common subject is in act and continues in act throughout the process. The element or principle which changes in the being, however, moves from potency to act. Thus it is clear from this analysis that changing beings, the beings of our experience, are composed. There is also another way in which to demonstrate that the beings of our experience are composed.

Essence and Esse

The beings of our experience can be demonstrated to be composed by the answers to two questions. *What is it?* and *Is it?* In other words, while one can define a unicorn, there are none that actually exist as such. Thus, what a thing is is different than that a thing is. In fact, a thing's essence, its whatness, is that which limits it to be the kind of being that it is. But in order for a being to be limited to a particular kind it must first be. That is, the potential to be a horse cannot be the cause of a horse's existence. There must be some other principle that causes a thing to be. Thus, what makes a thing to be is the real principle in the thing that corresponds to the "is" of a judgment, it's act of existing. It is evident, then, that essence and the act of existing (esse) are really distinct, not as spatial or integral parts, nor as essential parts, but as purely intelligible principles. For example, things come to be and cease to be, but essence (form) cannot change - *horse* cannot change into cow, and *cat* cannot change into dog. Nevertheless, a horse or a dog can die, but what it means to be a horse, or what it means to be a dog, cannot die. What it means to be a horse is always the same. Thus, in accordance with the law of non-contradiction, horse is horse and cannot be non-horse. In fact, if a thing's essence and its act of existing were really identical then the-thing-which-is would exist necessarily. This distinction between essence and esse demonstrates that the beings of our experience are composed beings. They have both essence and esse. Essence is the potential for existence, it is not existence in itself.

Possible Being

It is clear from what has been said above that the beings of our experience are composed

beings that have the capacity for change. This being the case it is evident that the beings of our experience are only possible beings, for if a being can change it must have both act and potency. But essence is the potency to be a certain kind of thing. Thus, changing beings have the potential to be a certain kind of thing but this potential to be must be actualized in order to be. But no being can actualize its own potential for existence because it would have to exist while it does not exist and this is a contradiction. In other words, *esse* cannot cause itself and essence cannot cause *esse*. Thus any being that is composed of both actuality and potentiality has the possibility of never being actualized to be. It is a possible being.

The Third Premise

That which has the possibility of not existing is currently caused to exist by something other than itself. That a being merely has the possibility to exist does not explain why it exists. Now there are three options to explain how something can exist. It can be self-caused, uncaused, or caused by another. But a self-caused being is impossible because to cause its own existence requires that it exist prior to itself, which is a contradiction. Therefore a possible being cannot be self-caused. Neither can a possible being be uncaused, since a mere possibility cannot cause anything. Something cannot come from nothing. The only option left for possible beings is that they are caused to exist by another. An analysis of causality will make this point clear.

Cause and Effect

One way of stating the third premise is to say that every effect must have a cause. This statement is sometimes mistakenly asserted as every *thing*, or being, must have a cause. That is not, however, what is being said in this premise. There is no principle which states that all beings are beings that must be caused, it is only effects that need causes. This is so by definition for an effect is that which is brought about by a cause. In other words, a cause is that which affects a transition from potentiality to actuality. The third premise is claiming that possible beings are effects. This is demonstrated by the fact of composition. Things that are composed are composed of diverse elements. Now diverse things, because they are diverse, must have a cause of their composition. That which has the potency for composition cannot compose itself, it is only a potency. Thus possible beings are the effect of a cause.

Current Causality

Possible, or contingent, beings are not only dependent upon a cause for their becoming, but also for their continuing existence. This is evident from the fact that there are only three kinds of being: possible, impossible, and necessary. Now possible beings are those that have the potential for existence. Possible beings include things such as men, rocks, and unicorns. They are possible, but not necessarily actual. Impossible beings are those that involve a contradiction and thus cannot exist. Impossible beings would include such things as square circles. A necessary being is a being that cannot not exist. It must exist necessarily because a necessary being has no potency for non-being, it is pure actuality. Furthermore, a necessary being would be changeless

because it has no potency for change. Since a possible being is a changing being it cannot be a necessary being. Nor can it become a necessary being, because a necessary being cannot become. It has no potency to become, it is pure actuality. Thus a contingent, or possible, being must either go out of existence or remain a contingent being. It is clear, then, that contingent beings need a sustaining cause for their continuing existence.

The Fourth Premise

There cannot be an infinite regress of current causes of existence. That an infinite regress of causes is impossible is demonstrated in the following argument: If something is being caused at the present moment by something else, and that something else is being caused by a third thing, and so on, then either we come to a first cause of the series that is uncaused or there is no ground of causality for the effects here and now present. This point is clear in the concept of time, for in order to arrive at the present moment one must arrive at the previous moment. But in order to arrive at that previous moment one must arrive at the moment before that, and so on. Now if time is infinite, then the present moment could not yet have been reached. Therefore, time must have a beginning. The same can be said of motion. An infinite series of moved movers cannot account for present motion. Now the first mover must be unmoved or it must be self-moved, which is impossible. Neither is it any help to postulate a circular series causes because either the series as a whole receives its causality outside itself, or within itself. But if it receives it from outside itself then there is either an uncaused cause or another infinite regress that has no grounds. If the series receives its causality from itself, then it is a contradiction. Finally, if the

series is uncaused, we have arrived at the uncaused Cause of all being. It is evident then that an infinite regress of causes is impossible.

The Fifth Premise

Therefore, a first uncaused cause of my current existence exists. This follows logically from the arguments stated above. I undeniably exist and I exist contingently. Now if my existence is dependent upon another for its actualization, then there must be a being of pure actuality which ultimately actualizes all potential being, either by direct causation or secondary causation. This pure actuality is an uncaused being because it has not potential to be actualized. It is pure act. Furthermore, it is a necessary being because it has no potential not to exist. Thus, my existence is currently sustained by an uncaused and necessary being of pure actuality.

The Sixth Premise

This uncaused cause must be infinite, unchanging, eternal, all-powerful, all-knowing, and all-perfect. As demonstrated above this uncaused cause is a necessary being. But a necessary being is pure actuality with no potentiality. Thus a necessary being is changeless, infinite, and eternal. It is changeless for whatever changes must have the possibility for change, but a necessary being has no possibility whatever. Also a necessary being is infinite because only that which has potentiality can be limited. Potentiality is the principle of limitation by which a thing is the kind of thing itself. But if a being is pure actuality with no potentiality, it has no principle of limitation. Finally, a necessary being is eternal because it has no possibility for becoming or

for non-existence. If a necessary being exists it, does so eternally.

Not only is a necessary being infinite, unchanging, and eternal, it is also all-powerful, all-knowing, and all-perfect. A necessary being is all-powerful. That is, power is the ability to effect change in another and this is precisely what the uncaused cause is, that which causes the very being of all that exists. Power is what can cause something to be or not be in some way or another and in a necessary being, which is infinite, there is no limit to causal power in regards to possible effects. Of course, it is not possible to do the impossible, such as cause square circles to exist, but that which is possible to achieve a necessary being has unlimited power to achieve it.

A necessary being is also all-knowing. This is evident from the fact that knowing beings exist. Now any being that comes to know must be a changing being and thus dependent. But a dependent being needs a cause for its existence. But the effect cannot be greater than the cause for the cause cannot give what it does not have. Thus a necessary being, as the cause of knowing must be knowing. Furthermore, because a necessary being is infinite there are no limits in its being and thus there are no limits to its knowledge. Thus, a necessary being is all-knowing.

Finally, a necessary being is all-perfect. It is evident that there are values or goods in this world, i.e. things desired for their own ends. Now perfection is unlimited value or good. But a cause cannot give what it does not have, therefore if there is value in an effect there must be value in the cause. But in a necessary being there is no limit in the cause of value and thus a necessary being is unlimited in value, it is perfect. Another way of demonstrating this is through degrees of perfection. In order to assert that something is less than perfect, there must be a standard of perfection by which to measure a thing's degree of perfection. Thus a recognition of

imperfection is also a recognition of perfection. But perfection is unlimited value and only a necessary being exists without limits. A necessary being then is all-perfect.

The Final Premises

This infinitely perfect Being is appropriately called "God." By "God" is meant that which is worthy of the worship, submission, admiration, and ultimate commitment of human beings. Now nothing has more intrinsic value than the ultimate source and ground of all being and value. Thus, it is appropriate to refer to the Necessary Being that is the source of all being, value, and personhood as God. Therefore, God exists. Not only does God exist, but a particular God exists. This God who exists is identical to the God described in the Christian Scriptures. The Bible describes God in terms that are identical with a Necessary Being that is the source of all other being: eternal (Col. 1:16; Heb. 1:2), changeless (Mal. 3:6; Heb. 6:18), infinite (I Kings 8:27; Isa. 66:1), all-powerful (Heb. 1:3; Matt. 19:26), all-knowing (Ps. 147:4; Acts 15:18), and all-perfect (Matt. 5:48). Therefore, the God described in the Bible exists.

Conclusion

If the arguments given above are sound, then not only is it the case that God exists, but it is precisely the God of the Bible that exists. Interestingly enough, the Bible itself points to the cosmological argument in Psalm 19 and Romans 1. Thus, not only is the existence of God revealed in Scripture but it also is revealed in nature. The certainty of the cosmological argument rests on the certainty of existence itself.