Aquinas’ first and second ways

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We’ve seen one argument for the existence of God which begins from the possibility of certain kinds of thoughts — the ontological argument — and another which begins from particular observed facts about the world — the design argument. The third major class of philosophical argument for the existence of God — cosmological arguments — argue for the existence of God on the basis of the fact that the world exists.

As we’ll see, cosmological arguments come in different types. We’ll be examining first a few versions from Aquinas, writing in the 13th century, and then will turn to the different version defended by Leibniz, writing four centuries later.

Aquinas’ first two arguments for the existence of God, while different, have something important in common: they both rely on the impossibility of certain kinds of infinite chains of causes.

1 The first way: from motion

The key passages in the presentation of the first argument run as follows:

“[Aquinas writes:] It is certain, and evidence to our senses, that some things are in motion. Now whatever is moved is moved by another. ... If that by which it is moved be itself moved, then this also must needs to be moved by another, and that by another again. But this cannot go on to infinity, because then there would be no first mover, and, consequently, no other mover, seeing that subsequent movers move only inasmuch as they are moved by the first mover: as the staff moves only because it is moved by the hand. Therefore it is necessary to arrive at a first mover, moved by no other; and this everyone understands to be God.”

By ‘moves’ in this passage, Aquinas means ‘changes.’ So the idea is that the fact that things are changing requires the existence of something which changes things but is not itself changed. The argument can be broken down as follows:
1. Whenever something undergoes change, it is caused to do so by something.
2. Nothing can be the cause of its own change, since something cannot have a quality both potentially and actually at the same time.
3. Whenever something changes, this change must have been brought about by something other than that thing. (follows from 1,2)
4. The chain connecting things which change and things which initiate the changes cannot be infinite.

C. There is a first mover, which initiates change but is not itself changed. (follows from 3,4)

2 The second way: from the nature of efficient cause

A second, formally similar argument relies on general facts about objects coming into existence (rather than objects changing, or acquiring new properties). Aquinas writes:

“There is no case known (neither, indeed, is it possible) in which a thing is found to be the efficient cause of itself; for so it would be prior to itself, which would be impossible. Now in efficient causes it is not possible to go on to infinity ... Therefore it is necessary to admit a first efficient cause, to which everyone gives the name of God.”

This argument may be summarized as follows:

1. Everything which has come to exist has been caused to come to exist.
2. Nothing which has come to exist can be the cause of its own existence.
3. Everything which has come to exist is caused to exist by something other than itself. (follows from 1,2)
4. It is impossible for a chain of causes of this kind to go on to infinity.

C. There must be a first cause, which causes other things to come into existence but did not itself come into existence. (follows from 3,4)

3 Initial objections

One limitation of this argument concerns uniqueness. If they are sound, the arguments show that there is at least one first mover, or first efficient cause; they do not show that there is exactly one. So they are consistent with polytheism.

A second worry about this argument is reminiscent of one of Hume’s objections to the design argument. Recall that Hume objected that the design argument might succeed in establishing that the universe had a cause of some sort, but “beyond that position he cannot ascertain one single circumstance, and is left afterwards to fix every point of his theology by the utmost license of fancy and hypothesis.” Why, even if correct, this point needn’t undercut the arguments as arguments for the bare existence of God.
A reason for thinking that the second argument is stronger than the first: premise (2) of the second argument is clearly true, while the corresponding argument of the first way seems debatable.

4 Is an infinite chain of temporal causes impossible?

A key claim of each argument is that certain kinds of infinite chains are impossible. Is this correct? What reason might there be for thinking this?

Two interpretations of premise (4) of the second way: one which rules out an infinite temporal series of causes, and one which rules out an infinite non-temporal series of causes.

While it is natural to read Aquinas’ second way as claiming that it is impossible that there be an infinite temporal series of causes, this is not what he had in mind; he did not think that it is possible to prove that the world’s history is or is not infinitely long. Nonetheless, some medieval Islamic thinkers did advance an argument (sometimes called the kalam cosmological argument) which is like Aquinas’ except that premise (4) of their argument is meant to rule out an infinitely long temporal series of causes. Let’s consider this interpretation of the argument first, even though it was not Aquinas’ intended interpretation.

Is it possible that there be an infinitely long temporal series of causes? Some arguments that this is not possible; the ‘paradoxes of infinity’; the idea that if the history of the universe is infinite, the history of the universe does not get longer as time goes on. Responses to these arguments; the possibility that space is infinitely divisible.

If you are unconvinced that an actually infinite temporal series is impossible, you might also think that it is possible to replace premise (4) (in its kalam interpretation) with a premise which just says that the universe did have a beginning, and so did come to exist. Isn’t this what contemporary cosmology tells us – and isn’t this enough to get the conclusion that there must be a cause of the existence of the universe? The plausibility of denying that the Big Bang had any cause at all.

5 Is an infinite chain of non-temporal causes impossible?

The distinction between the cause of something’s coming to exist and the sustaining cause of its existence. Is there a need to believe in sustaining causes at all? Is there any reason to think that an infinite chain of sustaining causes is impossible? The idea of ruling out this possibility in terms of some principle about the explanation of contingent things.