Basic idea of cosmological arguments: there has to be a reason or cause for everything, and this is God.

# 1. Aquinas's cosmological argument

Thomas Aquinas (1225–1274): "There are five ways in which one can prove that there is a God."

The second way is from the nature of efficient causes. For we find in observable things that there is an order of efficient causes. Nevertheless, we do not find—nor is it possible—that something is the efficient cause of itself; for then a thing would be prior to itself, which is impossible. However, it is not possible that efficient causes go on to infinity. This is because in any order of efficient causes, the first is the cause of the intermediate, and the intermediate is the cause of the last, whether the intermediate cause consists of many or only one. Now if the cause is removed, the effect is removed. Therefore, if there were no first efficient cause, there would not be any final or intermediate ones. But if the series of efficient causes should proceed to infinity, there would not be a first efficient cause, and so there would not be a final effect, nor intermediary efficient causes, which is clearly false. Therefore, it is necessary to posit some first efficient cause, which everyone calls God. (Aquinas, p. 48.)

Representing the argument in numbered-premise format:

- 1. Formulate the argument
- 2. Give the *justifications* of the premises
- 3. Evaluate the argument

## 1.1 Formulating the argument

Aquinas's cosmological argument

- 1. There exists at least one causal series
- 2. Every causal series either has a self-caused member, goes back forever, or has an uncaused first member
- 3. Nothing causes itself
- 4. No causal series goes back forever
- 5. Any uncaused first member of a causal series would be God
- 6. Therefore, God exists

**Definition of Causal series:** A series of objects in which each object causes the next

## 1.2 Justifying the premises

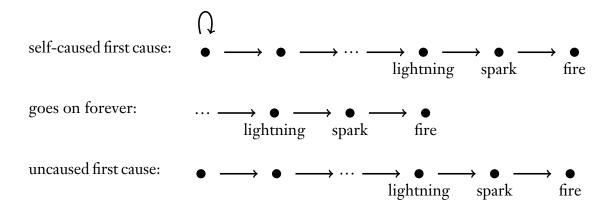
*Premise 1:* we know this from observation, e.g., a forest fire caused by a spark:

$$\bullet \longrightarrow \bullet$$
 spark fire

*Premise* 2: Extend the causal series containing the fire back as far as we can:

? 
$$\longrightarrow$$
  $\bullet$   $\longrightarrow$   $\bullet$   $\longrightarrow$   $\bullet$   $\longrightarrow$   $\bullet$  lightning spark fire

What might this series look like? There seem to be just three possibilities:



*Premise 3:* ("Nothing causes itself"):

...we never observe, nor ever could, something causing itself, for this would mean it preceded itself, and this is not possible. (Aquinas, p. 48)

*Premise 4:* ("No causal series goes back forever"):

However, it is not possible that efficient causes go on to infinity. This is because in any order of efficient causes, the first is the cause of the intermediate, and the intermediate is the cause of the last, whether the intermediate cause consists of many or only one. Now if the cause is removed, the effect is removed. Therefore, if there were no first efficient cause, there would not be any final or intermediate ones. But if the series of efficient causes should proceed to infinity, there would not be a first efficient cause, and so there would not be a final effect, nor intermediary efficient causes, which is clearly false. (Aquinas, p. 48)

*Premise* 5: ("Any uncaused first member of a causal series would be God"): The first cause would need to be very powerful to start up the whole series.

#### 1.3 Evaluating the argument

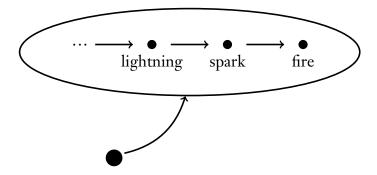
Against premise 4: couldn't the causes go back forever in time?

Against premise 5: why think the first cause must be good, or all-powerful, or unique?

# 2. Clarke's cosmological argument

## 2.1 Idea of the argument

Even if there could be an infinite causal series, the whole series needs a cause:



## 2.2 First challenge: which things need causes?

**Dependent thing** Something that could have failed to exist

**Self-existent thing** Something that couldn't have failed to exist (it exists always and necessarily)

Answer to the challenge: only dependent things need causes.

# 2.3 Second challenge: how could God precede the entire series?

Answer to the challenge: shift from *cause* to *reason* (i.e., reason for existence).

## 2.4 The argument

#### Clarke's cosmological argument

- 1. The aggregate of all dependent things is dependent
- 2. Every dependent thing has a reason
- 3. Any reason for the aggregate of all dependent things would be self-existent
- 4. Any self-existent reason for the aggregate of all dependent things is God
- 5. Therefore God exists

Justification of 1: "'tis manifest the whole cannot be necessary"

Justification of 2: this is Leibniz's "Principle of sufficient reason" (PSR). If something is capable of *failing* to exist, then there should be a reason if it *does* happen to exist.

Justification of 3: if the reason were dependent, the reason for the aggregate would be one of its own parts

Justification of 4: the reason would need to be self-existent and very powerful

Advantages over original argument:

- Evades the problem that the causes could go back forever
- PSR can be used to rebut the big bang objection

But one can object to the PSR: all explanations end somewhere; why not stop with the whole material world, rather than with God?

# 3. Paley's design argument

In crossing a heath, suppose I pitched my foot against a *stone* and were asked how the stone came to be there, I might possibly answer that for anything I knew to the contrary it had lain there forever; nor would it, perhaps, be very easy to show the absurdity of this answer. But suppose I had found a *watch* upon the ground, and it should be inquired how the watch happened to be in that place, I should hardly think of the answer which I had before given, that for anything I knew the watch might have always been there. Yet why should not this answer serve for the watch as well as for the stone? Why is it not as admissible in the second case as in the first? For this reason, and for no other, namely, that when we come to inspect the watch, we perceive, what we could not discover in the stone, that its several parts are framed and put together for a purpose... (Paley,  $R \dot{\varpi} R$ , p. 59)

- 1. The parts of the human eye are arranged to achieve the purpose of vision
- 2. If I is true, then someone designed the eye.
- 3. Only God could have designed the eye.
- 4. Therefore, God exists.

...if the different parts had been differently shaped from what they are, of a different size from what they are, or placed after any other manner or in any other order than that in which they are placed, either no motion at all would have been carried on in the machine, or none which would have answered the use that is now served by it. (Paley,  $R \not\subset R$ , p. 59)