

History of Philosophy A: Lecture Eight

1. Back to temporal succession

Recall that a temporal succession of causes was the more *natural* way of understanding things. One cause occurred *and then it was followed by its effect*. So whilst Aquinas was talking about one thing moving another *simultaneously*, we're now meant to be thinking about one thing causing another where that cause occurs *before* the effect. Examples are straightforward enough.

Example one: Firing a gun.

Example two: Starting a car

Example three: Making babies laugh by making funny faces

So that's what we mean by causes in a *temporal* succession. This week's cosmological argument examines such temporal successions.

2. The Basic *Kalam* Argument

- (1) Everything that begins to exist is such that something causes it to exist. [Premise]
- (2) The universe began to exist. [Premise]
- (3) The universe had a cause i.e. the first cause [from (2) and (1)]
- (4) If something is the first cause then it is God [Premise]
- (5) God exists [from (3) and (4)]

There are variations on the cosmological argument. But this basic version will suffice. In medieval philosophy an argument very much like it is called the *kalam* cosmological argument. It stems from the Islamic philosophers of the time (and clearly had some influence on Aquinas)

3. Must Everything Have A Cause?

Not *everything* needs a cause – only those things that have *begun* to exist. This, of course, is why God won't need a cause. He didn't *begin* to exist, so He doesn't need a cause for His existence. But is even this more limited premise true?

Certainly that premise is doubttable. It's not *a priori* true. Unlike '2+2=4' you could imagine a world in which it was false. Can't you? Maybe? Well, you tell me. Certainly some people *claim* that they can conceive of it being false.

Most people will say it's *a posteriori* true. That, if we look around the world, we will see that it is true. After all, don't the examples indicate that we have *good empirical reasons* for thinking that it's true? Isn't it the case that everything you've encountered thus far has been caused by something? Isn't it then *reasonable* and *justified* to think that *everything* is caused for a reason?

Moreover, you might think that *it's just intuitively true*. That is, that intuitively and uncontroversially something can't come from nothing.

Some people respond at this point by either trying to cite actual examples of uncaused things or, alternatively, try to undermine the inference from all things thus far observed being caused to every, no matter what, being caused. Both options do get a little tricky. For instance, some people take quantum physics to say that quantum particles pop, uncaused, out of nowhere. If that was true, we'd have an *actual example* that demonstrated (1) was false. But this all gets really tricky, real quickly. For instance,

whilst quantum physics says you can't *predict* when particles appear that's different from saying they're not *caused* to appear. Feel free to tackle either response in your essays, but for now we'll move on.

4. Did the Universe Begin?

Is the past eternal? The worry with that is to do with the notions of *actual* and *potential* infinities. These two notions come from Aristotle and his *Physics*. There could be potential infinities.

Example: Infinitely dividing a line

Example: Counting to infinity

But could there be *actual* infinities? That is a completed series of infinity? There would appear to be problems thinking that there could be.

Example: The infinitely divided line. How did it become divided? How long did it take!

Example: Someone who has counted *all* of the numbers.

Example: Someone who has counted *back* from infinity.

Here's another puzzle of infinity that the Islamic philosophers were particularly keen on. If the universe had existed for eternity, they said, then weird paradoxes would ensue. For instance, they knew that Jupiter orbited the sun every 12 years whilst Saturn orbited it every 30 years. So Jupiter completes twice as many revolutions as Saturn does. But that means that after an *eternity* then Saturn will have completed *twice* an infinite number. How's that possible? Isn't infinite as big as can be? So, to avoid different 'sizes' of infinity we should, they said, insist that there are no actual infinite series. It is these kinds of problems that led people to think that there could be no *actual* infinities in the world – no completed infinite series. With that in mind we can see why (2) was thought to be true.

There are other reasons to think that (2) is true. For instance, our best science tells us that the Big Bang gave birth to the universe ~15 billion years ago. So the universe definitely *hasn't* existed for eternity.

There's something else to worry about. Maybe (2) is wrong, but nonetheless we can *replace* (2) with a *similar* premise which still takes us to the same conclusion. So here we are doing something a bit more complex. We're offering a *different* argument, but one that is *substantially* similar. For instance, maybe like Aquinas you think there *can* be infinitely long chains that stretch back into the past. Nonetheless, you might think there must still be some sort of *explanation* for that. That is, whilst each individual link in the chain is explained by another link in the chain, *the entire chain itself* demands an explanation. Indeed it is this version that finds a home with Leibniz and Clarke.

5. Is the First Cause God?

Let's briefly consider the final premise: does it *have* to be God? So what if there's a first cause? Surely that doesn't *entail* that the cause is all powerful, all knowing and all loving. For instance, maybe *the Big Bang* is such a cause. But the theists don't think the Big Bang counts as being the first cause. After all, what caused the Big Bang? It *can't* be at the end of the chain as it *too* needs a cause. So the suggestion is that the only thing that could be a cause, and which did not itself begin, must be something like God. If not God then what? Do you have any other candidates? *Viable* candidates?