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Paul Draper, "A Critique of the Kalām Cosmological Argument"

Epistemology begins in doubt; ethics in conflict, and metaphysics in wonder.

In a recent book,¹ William Lane Craig offers a philosophical and scientific defense of a very old and very wonderful argument: the *kalām* cosmological argument. Unlike other cosmological arguments, the *kalām* argument bases its conclusion that the universe has a cause of its existence on the premise that the universe began to exist a finite time ago. Craig calls it the "*kalām*" cosmological argument because "*kalām*" is the name of a theological movement within Islam that used reason, including this argument, to defend the Muslim faith against philosophical objections. After being fully developed by Arab thinkers like al-Kindi and al-Ghazali, the argument eventually made its way to the West, where it was rejected by St. Thomas Aquinas and defended by St. Bonaventure.² My focus in this paper will be on Craig's philosophical defense of the argument. I will try to show that this defense fails…because it commits the fallacy of equivocation.

Compare the following two cosmological argument, each of which concludes that the universe has a cause of its existence:

- 1. Every contingent thing (including things that are infinitely old) has a cause of its existence.
- 2. The universe is contingent.
- 3. Therefore, the universe has a cause of its existence.
- 1. Everything that begins to exist has a cause of its existence.
- 2. The universe began to exist.
- 3. Therefore, the universe has a cause of its existence.

The first of these arguments is sometimes called the argument from contingency. It was suggested by Aristotle, clearly formulated by Arabic philosophers like ibn Sina, and later championed in the West by St. Thomas Aquinas. I find it completely unpersuasive. For although the second premise is clearly true (so long as "contingent" means "logically contingent"), I do not find the first premise appealing at all. If something is infinitely old, then it has always existed, and it's hard to see why something that has always existed requires a cause of its existence, even if it is logically possible that it not have existed. (Indeed, it's not even clear that something that has always existed *could* have a cause of its existence.)

The second of these arguments is the $kal\bar{a}m$ cosmological argument. This argument avoids the weakness of the argument from contingency by denying that the universe is infinitely old and

¹ William Lane Craig, *The Kalām Cosmological Argument* (New York: Harper & Row Publishers), 1979.

² For a brief but interesting history of the argument, see Craig, Part I.

maintaining that the universe needs a cause, not because it is contingent, but rather because it had a beginning. In other words, it replaces the weak premise that every contingent thing needs a cause of its existence with the compelling premise that everything that begins to exist needs a cause of its existence. Of course, a price must be paid for strengthening the first premise: the second premise—that the universe began to exist—is not by a long shot as unquestionably true as the claim that the universe is contingent.

Craig, however, provides a spirited and plausible defense of this premise. He offers four arguments in support of it, two of which are philosophical (armchair cosmology at its best) and two of which are scientific (but still interesting). Both philosophical arguments depend on a distinction between a potential infinite and an actual infinite. A potential infinite is a series or collection that can increase forever without limit but is always finite (e.g., the set of events that have occurred since the birth of my daughter or the set of completed years after 1000 BCE). An actual infinite is a set of distinct things (real or not) whose number is actually infinite (e.g., the set of natural numbers)...

The first scientific argument is based on the evidence for the Big Bang theory, which seems to many scientists to support the view that the universe had a beginning. The second scientific argument appeals to the Second Law of Thermodynamics. According to this law, the amount of energy available to do mechanical work always decreases in a closed system. Thus, since the universe as a whole is a closed system with a finite amount of such energy, an infinitely old universe is incompatible with the fact that we have not yet run out of such energy—the universe has not yet reached its "equilibrium end state." Since I'm no scientist, I will focus my attention on Craig's philosophical arguments, beginning with the second one. [Discussion of Craig's first philosophical argument is omitted from these excerpts.]

As Craig himself points out, his second philosophical argument is very similar to the argument that Immanuel Kant uses to support the thesis of his first antinomy:

If we assume that the world has no beginning in time, then up to every given moment an eternity has elapsed and there has passed away in the world an infinite series of successive states of things. Now the infinite of a series consists in the fact that it can never be completed through successive synthesis. It thus follows that it is impossible for an infinite world-series to have passed away, and that a beginning of the world is therefore a necessary condition of the world's existence.³

Craig formulates the argument as follows:

- (i) The temporal series of events is a collection formed by successive addition.
- (ii) A collection formed by successive addition cannot be an actual infinite.
- (iii) Thus, the temporal series of events cannot be an actual infinite. (from i and ii)
- (iv) Therefore, the temporal regress of events is finite. $(\text{from iii})^4$

³ Immanuel Kant, *Critique of Pure Reason*, trans. Norman Kemp Smith (London: Macmillan & Co., 1929), p. 396. Quoted by Craig on p. 189.

⁴ Craig, p. 103.

This argument is closely related to Zeno's paradoxes, which depend on the claim that one cannot complete an infinite series of tasks one at a time since that would imply an infinitieth member of the series. As it stands, the argument is unconvincing. For while it is true that one cannot start with a finite collection and then by adding one new member at a time turn it into an infinite collection (no matter how much time one has available), nothing of the sort is required in order for the past to be infinite. For if the temporal regress of events is infinite, then the universe has never had a finite number of past events. Rather, it has always been the case that the collection of past events is infinite. Thus, if the temporal regress of events is infinite, then the temporal series of events is not an infinite collection formed by successively adding to a finite collection. Rather, it is a collection formed by successively adding to an already infinite collection.

One might object that, if the temporal regress of events is infinite, then there must be some event E separated from the birth of my daughter by an infinite number of intermediate events, in which case the collection containing E and all those intermediate events would have to be an actually infinite collection formed by successively adding to a finite collection of events, namely the collection containing E as its only member. This objection fails because it is simply not true that, if the temporal regress of events is infinite, then there must be two events separated by an infinite number of intermediate events. For consider the set of natural numbers. It is actually infinite, yet every member of it is such that there is a finite number of members between it and its first member.⁵

...Notice that, if Craig is right that past events are real but future events are not, then his argument for a first event does not commit him to the position that there is a last event. For consider the following parallel argument for the conclusion that there will be a last event:

- (a) No set of real things is actually infinite.
- (b) If there will be no last event, then the set of all real events occurring after the birth of my daughter is actually infinite.
- (c) Therefore, there will be a last event.

Since future events are not real, the second premise of this argument is false. If there is no last event, then the set of all real events occurring after the birth of my daughter is merely potentially infinite—not actually infinite. This collection can increase in size indefinitely, but it will always be finite. Past events, on the other hand, are all real. So if there is no first past event, then the set of all real past events is actually infinite, not potentially infinite. Craig concludes that, although there may be no last event, there must be a first event, and hence, since matter cannot exist without events occurring, it follows that the universe has not always existed—it began to exist.

...let's assume, for the sake of argument, that [the arguments for the second premise of the *kalām* argument] succeed and hence that the universe did begin to exist. Must we then conclude that the

⁵ Cf. Quentin Smith, "Infinity and the Past," in *Theism, Atheism, and Big Bang Cosmology*, ed. William Lane Craig and Quentin Smith (Oxford: Clarendon Press, 1993), pp. 78–83; Antony Flew, "The Case for God Challenged," in *Does God Exist?: The Great Debate*, ed. J. P. Moreland and Kai Nielsen (Nashville: Thomas Nelson Publishers 1990), p. 164; and Keith Parsons, "Is There a Case for Christian Theism?" in *Does God Exist?: The Great Debate*, p. 187

kalām argument succeeds? This would be a profound result. Granted, this argument doesn't get us all the way to God's existence. But accepting its conclusion does require rejecting naturalism—since nothing can be a cause of its own existence, a cause outside the natural world would be required.

As wonderful as this conclusion is, I do not believe that Craig's defense of the $kal\bar{a}m$ argument justifies accepting it...This is because Craig commits the fallacy of equivocation. The verb "to begin" has a narrow or strict sense and a broad or loose sense. In the narrow sense, "to begin" means "to begin within time." When used in this way, "x begins to exist" implies that there was a time at which x did not exist and then a later time at which x exists. But "to begin" can also mean "to begin either within or with time." When used in this way, "x begins to exist" does not imply that there was a time at which x did not exist, because the past may itself be finite in which case something that begins to exist at the first moment in time is such that there never was a time at which it did not exist.—it begins with time rather than within time. Now consider the two premises of the $kal\bar{a}m$ argument in light of this distinction.

The second premise is that the universe began to exist. All of Craig's arguments in favor of this premise, including his scientific ones, would be unsound if one interpreted "began to exist" in the second premise as meaning "began to exist within time." For nothing in these arguments counts against a relational view of time. And on a relational view of time, a first temporal event is simultaneous with a first moment in time. This would mean that, if the temporal series of past events is finite, then the universe began to exist with time. Indeed, if anything, the arguments in favor of the second premise support a beginning with time. For if an infinite regress of events is an actual infinite and for that reason impossible. Moreover, one of Craig's scientific arguments appeals to an interpretation of the Big Bang Theory according to which time did not exist "before" the big bang. So the most that Craig has established is that the universe began to exist with time.

The first premise is that anything that begins to exist has a cause of its existence. What does "begins to exist" mean here? Craig defends this premise by claiming that it is an "empirical generalization enjoying the strongest support experience affords."⁶ But experience only supports the claim that anything that begins to exist within time has a cause of its existence. For we have no experience whatsoever of things beginning to exist with time.⁷ Such things would require timeless causes. And even if it is conceptually possible for a temporal event to have a timeless cause, we certainly have no experience of this. Of course, Craig also claims that premise (1) is intuitively obvious—that it needs no defense at all. But it is far from obvious that a universe that begins to exist with time has always existed—for any time *t*, the universe existed at *t*. And once again, it's far from obvious that something that something that has always existed requires a cause for its existence. It's not even clear that such a thing *could* have a cause of its existence.

⁶ [Fn. 9 in the original] Craig, p. 145. Craig also suggests here that premise (1) could be defended by appealing to an a priori category of causality. Such Kantian maneuvering does not seem very promising in this context. For in order to reconcile it with the realism presupposed by the $kal\bar{a}m$ argument, one would need to claim that the causal principle must, as a necessary precondition of thought, hold without exception in the noumenal world!

⁷ [Fn. 10 in the original] Cf. Quentin Smith, "The Uncaused Beginning of the Universe," in *Theism, Atheism, and Big Bang Cosmology*, p. 123.

So in order to be justified in believing both of the premises of the argument—justified, that is, solely on the basis of Craig's defense of those premises—we would need to equivocate on the meaning of "begins to exist." We would need to use this term in the narrow sense in the first premise and in the broad sense in the second premise. But then the conclusion of the argument would not follow from its premises. Thus, Craig commits the fallacy of equivocation.⁸

Do my objections to Craig's defense of the *kalām* argument prove that it is doomed? I don't think so. The argument remains promising. Perhaps, for example, it could be shown that an absolute theory of time is correct, and that such a theory, together with scientific or new philosophical evidence against an infinitely old universe, implies a beginning of the universe within time. Or perhaps it could be shown that the universe began to exist with time and that even something that begins to exist with time requires a cause of its existence. So my conclusion is not that the *kalām* argument should be dismissed. It is just that it has not yet been adequately defended. I still *wonder* whether the argument is a good one.

⁸ [Fn. 11 in the original] In "The Caused Beginning of the Universe" (in *Theism, Atheism, and Big Bang Cosmology*) Craig denies that his inference is equivocal on the grounds that "our conviction of the truth of the causal principle is not based upon an inductive survey of existents in space-time, but rather upon the metaphysical intuition that something cannot come out of nothing" (p. 147). Of couse, he did appeal to such a survey in his book, but Craig claims that this was just "a last-ditch defense of the principle designed to appeal to the hard-headed empiricist who resists the metaphysical intuition that properly grounds our conviction of the principle" (p. 147, note 13). This response to the charge of equivocation is not at all convincing. For metaphysical intuitions about contingent matters are notoriously unreliable—that's why so many contemporary philosophers are, quite justifiably, "hard-headed empiricists." Further, at the risk of committing the genetic fallacy, it is worth pointing out that it is probably our experience of things beginning to exist within time that causes some of us to have the metaphysical intuition that something cannot come out of nothing.