Moreland on the Impossibility of Traversing the Infinite: A Critique

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Abstract: A key premise of the kalam cosmological argument is that the universe began to exist. However, while a number of philosophers have offered powerful criticisms of William Lane Craig's defense of the premise, J.P. Moreland has also offered a number of unique arguments in support of it, and to date, little attention has been paid to these in the literature. In this paper, I attempt to go some way toward redressing this matter. In particular, I shall argue that Moreland's philosophical arguments against the possibility of traversing a beginningless past are unsuccessful.

A key premise of the kalam cosmological argument is that the universe began to exist.[1] However, while a number of philosophers have offered powerful criticisms of William Lane Craig's defense of the premise[2], J.P. Moreland has also offered a number of unique[3] arguments in support of it[4], and to date, little attention has been paid to these in the literature. In this paper, I attempt to go some way toward redressing this matter. In particular, I shall argue that Moreland's philosophical arguments against the possibility of traversing a beginningless past are unsuccessful.

Before I jump into a critique of Moreland's arguments, some preliminary remarks about the kalam argument will prove helpful to clarify the target of my critique. In simplest terms, the kalam cosmological argument asserts that the universe had an absolute temporal beginning, which in turn requires a divine temporal first cause. Two sorts of philosophical argument are standardly offered for an absolute temporal beginning of the universe.[5] According to arguments of the first sort, an infinite past is impossible

because concrete infinites are impossible *in general* – i.e., it's metaphysically impossible for any infinite set of concrete entities to exist --, in which case the number of past events must be finite. By contrast, those of the second sort argue that even if concrete actual infinites are possible, they can't be traversed by successive addition. But since the past has been traversed – after all, here we are – the past must be finite. Now Moreland offers unique defenses of both sorts of arguments for a finite past. In this paper, however, I shall restrict my attention to Moreland's three arguments of the second type.[6] I'll proceed by examining these three arguments in turn, concluding that each is unsuccessful.

1. Moreland's First Argument

Moreland expresses his first argument against beginningless traversals as follows:

> ...the present moment has as its ultimate chain of causal antecedents the entire history of the cosmos. If any past event has not already been actualized, then the present moment could not have occurred. This means that the past is actual and contains a specifiable, determinate number of events. This chain of events must have had a first member. Without a first member, there could be no second, third, or *n*th member in the chain where the *n*th member is the present event. But an infinite succession of past events would not have a determinate number of members nor would it have a first member. So if the past is actually infinite, the present moment could not have been caused; that is, it could not have come to be.[7]

It will help to evaluate this argument if we express it a bit more formally:

> 1. The present moment M is actual.
> 2. If M is actual, then all the members of the set S of events that constitute M's causal chain have been actualized.
> 3. Therefore, all the members of S have been actualized. (From 1 and 2)
> 4. If all the members of S have been actualized, then S is constituted by a specifiable, determinate number of events, and S has a first member.
> 5. Therefore, S is constituted by a specifiable, determinate number of events, and S has a first member. (From 3 and 4)
> 6. If the past is beginningless, then either S is not constituted by a determinate number of events or S does not have a first member (or both).
> 7. Therefore, the past is not beginningless. (From 5 and 6)

This argument is clearly valid. Furthermore, (3) follows from (1) and (2), (5) follows from (3) and (4), and (7) follows from (5) and (6). In addition, (1) and (2) look to be impeccable. That leaves (4) and (6). But to find a problem with the argument, we need

look no further than (4). The consequent of (4) has two conjuncts, and it will help to evaluate the premise if we split it in two:

> 4a. If all the members of S have been actualized, then S is constituted by a specifiable, determinate number of events.
>
> 4b. If all the members of S have been actualized, then S has a first member.

Start with (4a). To evaluate it, we'll need to know what Moreland means by a "specifiable, determinate number of events". A natural interpretation of the language suggests that it denotes a number of events that can be specified by some natural number *n*,[8] i.e., a *finite* number of events. But if so, then (4a) asserts that the actualization of the causal sequence responsible for the present moment requires that the sequence is finite. But since that's the very point in dispute, Moreland can't just assert without argument that (4a) is true without begging the question against those antecedently unconvinced of the conclusion.

However, while Moreland doesn't explicitly offer an argument for (4a), he *does* offer a reason in support of *(4b)*, and *that* rationale can be used to support (4a) as well. Now recall that (4b) asserts that the actuality of the present moment requires that its causal chain has a first member. But why think that? Recall Moreland's reason from the passage above: "Without a first member, there could be no second, third, or *n*th member in the chain where the *n*th member is the present event."

We can thus express Moreland's reasoning here as follows:

> 1. If a casual sequence S that comprises the universe's history lacks a first member, then S lacks a second, third, etc. member.
> 2. If S lacks a second, third, etc. member, then S lacks the present event.
> 3. S contains the present event.
> 4. Therefore S has a first member.[9]

The argument is clearly valid, and (1) and (3) look impeccable. But why are we supposed to accept (2)? Unfortunately, one cannot assert (2) without assuming the past had a beginning. For if the past is beginningless, then while it would of course include the present event, it would *not* have a second, third, etc. member, any more than the sequence ...-3, -2, -1 has a second, third, etc. member. But the very point at issue is whether such a beginningless past is metaphysically possible. Pending further argument for (2), then, Moreland begs the question against those who think such a past is at least epistemically possible.

2. Moreland's Second Argument

Moreland states his second argument against beginningless traversals as follows:

> It is impossible to count to infinity. For if one counts forever and ever, he will still be, at every moment, in a place where he can always specify the number he is currently counting. Furthermore, he can always add one more member to what he has counted and thereby increase the series by one. A series formed by successive addition is a potential infinite. Such a series can increase forever without limit, but it will always be finite. This means that the past must have been finite. For the present moment is the last member of the series of past events formed by successive addition. And since one cannot reach infinity one at a time, then if the past was actually infinite, the present moment could not have been reached. For to come to the present moment, an actual infinite would have to have been crossed.[10]

We can express the argument a bit more formally as follows:

> 1. At every point in the growth of any potential infinite, one can specify its cardinal number via a natural number and increase that number by 1.
> 2. If at every point in the growth of any potential infinite, one can specify its cardinal number via a natural number and increase that number by 1, then no actual infinite can be formed from a potential infinite by successive addition.
> 3. Therefore, no actual infinite can be formed from a potential infinite by successive addition. (From 1 and 2)
> 4. Any series formed by successive addition is (at least initially) a potential infinite.
> 5. The past is a series formed by successive addition.
> 6. Therefore, the past is (at least initially) a potential infinite. (From 4 and 5)
> 7. Therefore, the past cannot be an actual infinite formed from a potential infinite by successive addition. (From 3 and 6)

The argument is valid, and (3), (6) and (7) follow from other premises. Furthermore, (1),

(2) and (5) are at least *prima facie* plausible. But why should we accept (4), viz., the claim that any series formed by successive addition is (at least initially) a potential infinite?

Suppose we grant that in the passage above, Moreland has offered a persuasive reason for thinking that any series formed by successive addition *that has a beginning* is (at least initially) a potential infinite. Furthermore, suppose we grant that he has offered a sound argument that no such series can be transformed from a potential infinite into an actual infinite by successive addition. The problem is that this line of reasoning has no obvious bearing against the prospects of a *beginningless* series formed by successive addition. Rather, all that follows is the weaker claim that if the latter series is possible, it doesn't involve the formation of an actual infinite from a potential infinite. But of course, those not antecedently convinced of the necessary finitude of the past likely *agree* with that. For if the past should turn out to be beginningless, then some infinite set of events or other has elapsed prior to *each* point in the past. And if so, then there is *no* event in the past that involved going from a state of not having traversed at least one infinite set of events to having traversed at least one such set. And if that's right, then if a beginningless past is possible, then it is a series of events formed by successive addition that does *not* involve transforming a potential infinite into an actual infinite.

Thus, those who aren't antecedently convinced of the necessity of a finite past believe that it's at least epistemically possible that (i) the past is actually infinite, (ii) it was formed by successive addition, and (iii) *the formation of the past did not involve transforming a potential infinite into an actual infinite*. But if a past of this sort should turn out to be possible, premise (4) is false. Thus, to adequately support premise (4),

Moreland must come up with a line of reasoning that rules out the epistemic possibility expressed by (i)-(iii). But as we've seen, Moreland's reasoning in the above-quoted argument fails to do that; rather, it only rules out the possibility of an actually infinite series formed by successive addition *that has a beginning*. It appears, then, that Moreland's grounds for premise (4) are inadequate as stated.

Perhaps, though, Moreland construes a beginningless past in the way he does in an attempt to be charitable. For one might worry that if, in a beginningless past, some infinite set or other is traversed before *every* event, then such a past has at least one infinite proper subset of events that *wasn't* formed by successive addition, which seems absurd.

I don't know if this is why Moreland construes a beginningless past in the way he does, but such a worry is ill-founded. For such reasoning relies on an inference involving an illicit quantifier shift, reasoning from

> 1. Every point in a beginningless past is such that there exists an actually infinite set of events that existed prior to it.

to

> 2. There is an actually infinite set of events, such that it exists prior to every point in a beginningless past.

Such is the same illicit pattern of inference involved in reasoning that if every child has a mother who directly gave birth to them, then there is a mother who directly gave birth to every such child.

No, if the past is beginningless, then while an infinite subset of events exists prior to each event, *it's a new infinite every time*. To illustrate: pick any event --say, the present day -- and represent it by the integer -1. Then the set of past days traversed for each of the previous days, and including today, can be represented as follows:

...
....
.....
2 days ago: {..., -5, -4, -3}
1 day ago: {..., -5, -4, -3, -2}
Present day: {..., -5, -4, -3, -2, -1}

Thus, if a past of this sort is possible, then as is represented above, the set of days traversed at each day of the past is actually infinite. However, at each day, the set of days traversed is *different*. So, for example, the set of days traversed today contains, in addition to the set of days traversed yesterday, the new member represented by -1, viz., today. Thus, if the past is beginningless, then while the set of events traversed at each point in the past is actually infinite, it's a new set every time, as each passing event adds a new member to the previous set. Therefore, from the fact that a beginningless past doesn't involve the formation of an infinite set of events from a finite set of events, it doesn't follow that such a past includes a subset of events that wasn't formed by successive addition.

3. Moreland's Third Argument

Now let's consider the third and final unique[11] argument Moreland offers for the impossibility of a beginningless traversal:

> ...Suppose a person were to think backward through the series of events in the past...Now he will either come to a beginning or he will not. If he comes to a beginning, then the universe obviously had a beginning. But if he never could, even in principle, reach a first moment, then this means that it would be impossible to start with the present and run backward through all the events in the history of the cosmos...But since events really move in the other direction, this is equivalent to admitting that if there was no beginning, the past could have never been exhaustively traversed to reach the present. Counting to infinity through the series 1, 2, 3, ... involves the same number of steps as does counting down *from* infinity to zero through the series …, -5, -4, -3, -2, -1, 0. In fact this second series may be even more difficult to traverse than the first. Apart from the fact that both series have the same number of members to be traversed, the second series cannot even get started. This is because it has no first member![12]

Stripped down to its essentials, we can express the core of the argument as follows:

> 1. If the past is beginningless, then it's impossible in principle to traverse from the present all the way through the past.

2. If it's impossible in principle to traverse something in one direction, then it's impossible in principle to traverse it in the other direction.
3. Therefore, if the past is beginningless, then it's impossible in principle to traverse the past all the way to the present. (From 1 and 2)
4. But it's not impossible in principle to traverse the past all the way to the present (as demonstrated by the actuality of the present).
5. Therefore, the past is not beginningless. (From 3 and 4)

This argument is valid. Furthermore, (3) follows from (1) and (2), and (1) and (4) have at least *prima facie* plausibility. That leaves us with (2). Why are we supposed to accept it?

One might think that (2) has a lot going for it, since it seems that all *finite* sequences are such that if one direction can be traversed in principle (at least mentally -- leave aside worries about *actual* traversals into the past), then so can the other direction. However, one might worry that although this may be so for all *finite* temporal sequences, it's not obviously so for *infinite* temporal sequences. Perhaps, then, those not antecedently convinced will need a little more help before they can confidently accept (2).

Thankfully, Moreland doesn't leave us guessing as to his own basis for accepting (2) in the passage above. For recall that he argued there that admitting the impossibility of starting with the present and exhaustively traversing the past "is equivalent to admitting that if there was no beginning, the past could have never been exhaustively traversed to reach the present", on the grounds that "Counting to infinity through the series 1, 2, 3, ... involves the same number of steps as does counting down *from* infinity to zero through the series …,-5, -4, -3, -2, -1, 0."

What to make of Moreland's rationale for (2)? Now Moreland is clearly correct to say that there is the same number of steps in each direction of a beginningless history. However, it isn't clear that he's right in saying that sameness in *number of steps* entails sameness in *difficulty of traversal*. In fact (and quite unlike finite traversals), there are

several asymmetries in direction of traversal that seem relevant to difficulty or ease of traversal in a beginningless past:

(i) *Going forward, there is an endpoint to reach; not so going backward*. One might believe that no infinite spatial or temporal distance is crossable on the grounds that one cannot reach the end of that which has no end. This seems clearly true. Still, while this difficulty arises for the case of starting at the present and traversing through a beginningless past, it does not arise in the case of a traversal from a beginningless past to the present. For unlike the former, the latter *has* an endpoint, viz., the present moment. Therefore, while both traversals involve the same number of steps, one has a difficulty that the other lacks. Here, then, is one asymmetry in difficulty of traversal for actual infinites that casts doubt on Moreland's rationale for (2).

(ii) *Going forward, you don't have to begin at some point; not so going backward*. One might think that no infinite is traversable on the basis of Moreland's argument, discussed previously, that if one begins an infinite count from 0 or 1 to infinity, then one will at every point be counting a finite number *n*. Suppose we grant this. Still, while this difficulty applies to the case of starting at the present and traversing through a beginningless past, it does not apply to the case of a traversal from a beginningless past to the present moment. For unlike the former, the latter *has* no starting point. Therefore, while both traversals involve the same number of steps, one has a difficulty that the other lacks. We therefore have another asymmetry in difficulty of traversal for actual infinites that casts doubt on Moreland's rationale for (2).

(iii) *Going forward, some infinite traversal or other is completed at each point; not so going backward*. One might think that no infinite is crossable on the basis of Moreland's argument, discussed previously, that if one tries to count to infinity by beginning at some point -- say, with the number 1 or 0 -- then one will never get over the hurdle of going from having counted a finite set to having counted an infinite set. Again, grant that this is true. The problem is that while this difficulty applies to the task of starting with the present moment and mentally traversing all the events of a beginningless past, it doesn't apply to the task of never starting -- but always counting -- from a beginningless past and then stopping with the present moment. For unlike the former task, there is no such hurdle in the latter task. For before *every* point in a beginningless past, some infinite set of events or other has *already* been traversed -- one is always on the other side of the hurdle, so to speak. Therefore, while both traversals involve the same number of steps, one has a difficulty that the other lacks. We therefore have yet another asymmetry in difficulty of traversal for actual infinites that casts doubt on Moreland's rationale for (2).

Prima facie, then, there is reason to doubt that Moreland is right about his rationale for (2): given the asymmetries mentioned above, it appears that Moreland owes us an explanation as to why they have no bearing on ease or difficulty of traversing a beginningless past. Pending such an explanation, Moreland's rationale for (2) is undercut. And pending another basis for (2), then, Moreland's third unique[11] argument against beginningless traversals is likewise defeated.

This is not quite the end of the matter, however. For as we saw in the passage above, Moreland thinks there is an asymmetry in direction of traversal that results in a different sort of asymmetry in difficulty of traversal. But unlike the three discussed above, Moreland thinks this asymmetry makes a traversal from past to present *more* difficult than a traversal from present to past. As Moreland puts it in the passage above: "In fact this second series [i.e., counting down the negative integers and ending at 0] may be even more difficult to traverse than the first [i.e., starting with 0 or 1 and then counting through all the natural numbers]. Apart from the fact that both series have the same number of members to be traversed, the second series cannot even get started. This is because it has no first member!"

Our discussion of Moreland's first two arguments provides the basis for a reply to his reasoning above. First, we saw in our discussion of Moreland's first argument that while it's true that a beginningless traversal could never "get started", those who are antecedently open to the possibility of beginningless traversals are not committed to the claim that it could. Rather, by the very nature of the case, a beginningless series has no beginning point from which it "got started". For if such a past is possible -- which is the very issue under dispute -- then it has always been going, in the sense that for *every* event, there is another event that preceded it. Furthermore, while Moreland has offered arguments for the necessity of a start or beginning for all traversals, we saw that these arguments are question-begging.

Second, we saw in our discussion of Moreland's second argument that while it may be true that in traversing such a series one never gets to a point where a "first" infinite is traversed, this is only because some infinite temporal segment or other is

already crossed at *every* point in a beginningless past. We also saw that one is guilty of an illicit quantifier shift if from this one reasons that such a past would absurdly contain an infinite segment that was not formed by successive addition. Thus, Moreland's additional remarks in the passage above add nothing to his case against beginningless traversals.

5. Conclusion

I have argued that Moreland's unique arguments against beginningless traversals depend upon one or more of the following dubious assumptions: that all traversals require a start or a first member; that any series formed by successive addition is (at least initially) a potential infinite; that traversing a beginningless past must involve the transformation of a potential infinite into an actual infinite; and that it's just as easy or hard to traverse a sequence in one direction as it is to traverse it in the other. For this reason, the proponent of the kalam cosmological argument will have to look elsewhere for support of the premise that the universe began to exist.

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Notes

1. Here I'm referring to the core of the kalam argument as commonly expressed by William Lane Craig: (1) Whatever begins to exist has a cause of its existence. (2) The universe began to exist. Therefore, (3) the universe has a cause of its existence. For Craig's most recent, thorough defense of the kalam argument, see William Lane Craig and William Sinclair, "The Kalam Cosmological Argument", in William Lane Craig and J.P. Moreland, eds. *The Blackwell Companion to Natural Theology* (Malden, MA: Wiley-Blackwell, 2009), pp. 101-201.

2. Criticisms of the premise by Wes Morriston, Graham Oppy, Quentin Smith and Paul Draper are representative. See, e.g., Wes Morriston, "Must the Past Have a Beginning?", *Philo* 2:1 (1999), pp. 5-19; "Craig on the Actual Infinite", *Religious Studies* 38:2 (2002), pp. 147-166; "A Critical Examination of the Kalam Cosmological Argument" in Ray Martin and Christopher Bernard, eds. *God Matters* (New York: Longman, 2002), pp. 95-108; "Must Metaphysical Time Have a Beginning?", *Faith & Philosophy* 20:3 (July 2003), pp. 288-306; Graham Oppy, *Arguing About Gods* (New York: Cambridge University Press, 2006), pp. 137-154; William Lane Craig and Quentin Smith, *Theism, Atheism, and Big Bang Cosmology* (Oxford: Oxford University Press, 1993); and Paul Draper, "A Critique of the Kalam Cosmological Argument", in Louis Pojman and Michael Rea, eds. *Philosophy of Religion: An Anthology*, 5th ed. (Belmont, CA: Thomson Wadsworth, 2008), pp. 45-50.

3. Uniqueness here is often a matter of degree, and no doubt reasonable people will disagree as to whether one or more of Moreland's arguments discussed here are sufficiently different from those discussed elsewhere. I leave such matters for each reader to decide. Here I will just register my opinion that I find Moreland's arguments discussed here to be sufficiently different, interesting, and developed so as to merit evaluation in their own right.

4. See especially J.P. Moreland, "The Kalam Cosmological Argument", in Michael Peterson, William Hasker, Bruce Reichenbach, and David Basinger, eds. *Philosophy of Religion: Selected Readings*, 2nd ed. (New York: Oxford University Press, 2001), pp. 196-208; "A Response to a Platonistic and a Set-Theoretic Objection to the Kalam Cosmological Argument", *Religious Studies* 39:4 (2003), pp. 373-390.

5. In addition to the two philosophical arguments, proponents of the kalam argument often advance two scientific arguments. According to the first, the evidence for the Big Bang indicates an absolute beginning to the universe; according to the second, the 2nd Law of Thermodynamics indicates that the universe is running down, in which case it must've been "wound up" with an initial input of matter-energy, and the latter was the beginning of the universe. Moreland discusses both in "The Kalam Cosmological Argument", pp. 203-205. For a recent defense of these arguments, see especially Craig and Sinclair, "The Kalam Cosmological Argument", pp. 125-182. For a recent criticism, see e.g. Oppy, *Arguing About Gods*, pp. 144-154.

6. As Moreland acknowledges in "The Kalam Cosmological Argument", his defense of the first sort of argument is largely derivative of Craig's. However, Moreland offers a novel defense of the argument in "A Response to a Platonistic and a Set-Theoretic Objection to the Kalam Cosmological Argument". I hope to address Moreland's unique defense of this argument on another occasion.

7. Moreland, "The Kalam Cosmological Argument", p. 201. Moreland mentions that he first heard this argument from Dallas Willard.

8. This reading is supported by his use of such language in his discussion of actual infinites in his book from which the article under discussion was extracted: *Scaling the Secular City* (Grand Rapids, MI: Baker Books, 1987), p. 20. There, he says that, "a finite set has a *definite* number of elements which can be *specified* by counting the number of members in the set and assigning the appropriate number to that set. Thus, our set A had n=2 elements, and B had n=5." This interpretation is further supported by his use of such language on p. 29. In his argument there against the possibility of counting to infinity, he writes that at any point in such a count, one "can always *specify* the number he is currently counting. Furthermore, he can always add one more to what he has counted and thereby increase the series by one. Such a series can increase forever without limit, but will always be finite." Italics mine in both passages.

9. An anonymous referee pointed out that there are alternative formulations of Moreland's argument here, depending on how one glosses "the *n*th member" in the passage quoted above: as the present event, or as the *n*th member in the sequence (for some natural number n>1). One might thus interpret Moreland's argument alternatively as:

> 1. If a causal sequence S that comprises the universe's history lacks a first member, then S lacks a second, third, etc. member.
> 2'. If S lacks a second, third, etc. member, then S lacks an *n*th member (for any natural number n>1).
> 3'. S has an *n*th member (for some n>1).
> 4. Therefore, S has a first member.

However, this formulation of the argument is obviously question-begging, as (3') assumes the past is finite (for any such member is finite, and is preceded by only a finite number of members). One could of course

generate other variations of the argument by swapping out just one of (2) and (3) with one of the two alternate readings of these premises above, but then the argument would clearly be invalid. To be charitable, therefore, I will spend time in the text only on the interpretation of Moreland's argument that strikes me as at least not *obviously* question-begging.

10. "The Kalam Cosmological Argument", p. 201.

11. Throughout the article, I have emphasized that Moreland offers three *unique* arguments for a beginningless traversal. One main reason why I say this is because, strictly speaking, Moreland offers four such arguments. However, I have left discussion of the fourth argument out of the text for three reasons: (i) It's not sufficiently different from Craig's version of the argument, which is presented in compressed form in his "Professor Mackie and the Kalam Cosmological Argument", *Religious Studies* 20 (1985), pp. 367-375; (ii) it's not contained in the primary article of Moreland's discussed in this paper ("The Kalam Cosmological Argument"), but is instead contained in his apologetics text, *Scaling the Secular City*; and (iii) It seems to me that Wes Morriston has offered decisive criticisms of the argument ("Must the Past Have a Beginning?", *Philo* 2:1 (1999), pp. 5-19). I therefore relegate discussion of the argument to an endnote.

Moreland offers an Aristotelian solution to one of Zeno's paradoxes as the basis of his fourth and final argument against a beginningless past. Moreland sets up Zeno's Dichotomy paradox as follows:

> ...Consider a runner who begins at some point A and who wishes to reach the midpoint between A and B. But before he can reach this midpoint, he must reach the midpoint of the midpoint. In order to move from any point to any other point, a runner must traverse an infinite number of points and this is impossible. Thus, [concludes Zeno] motion is an illusion. (p. 30)

Moreland then argues that a structurally identical paradox applies to the hypothesis of a beginningless universe: if the past were beginningless, then the prospects of traversing all the events of the past to reach the present moment would be like those of Zeno's runner on the assumption that his task involved the traversal of an *actual* infinite: one couldn't even *begin* such a task, much less *finish* it. Moreland thus thinks Zeno's Dichotomy paradox and his paradox for a beginningless past are structurally similar. His next step is to argue for a solution to the former, and then to reason that, by analogy, the solution to the latter is similar. Thus, he argues that the most plausible way to solve Zeno's Dichotomy paradox is to distinguish between an actual and a potential infinite, and to assert that the racer's task only involves the traversal of a potential infinite. And since all spatial distances that are merely potentially infinite are traversable in principle, the racer can traverse the whole track. (ibid.) Similarly, the set of temporal distances in the universe's past is potentially infinite only, and thus finite.

I find Moreland's argument unpersuasive, as it's not clear that the two paradoxes are sufficiently relevantly similar to conclude that their solutions are similar. As Morriston points out (ibid.), the runner's task has a *beginning* or *starting point*; not so for a beginningless past. And the worry is that this feature, which generates the problem in Zeno's Dichotomy paradox, doesn't necessarily apply to a beginningless past. In other words, *if the requirement of a start is merely a feature of Zeno's thought experiment*, and not *an essential property* of beginningless traversals *in general*, then the stated grounds for thinking Zeno's runner's task is impossible do not provide adequate grounds for thinking that traversing a beginningless past is impossible. Now of course one might reply that it *is* an essential property of all traversals that they have a starting point. But the problem is that *that's the very issue in dispute*. For it's part of the very concept of a beginningless past that it involves traversing an infinite without a starting point. Therefore, whether or not such traversals are impossible, one cannot just assert the impossibility of a traversal that lacks a starting point without begging the question against the antecedently unconvinced.

12. *Ibid.*, pp. 201-202.