A Beginning without End: An Aristotelian Defence of the Kalam*

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Abstract

In recent times, William Lane Craig's version of the Kalam Cosmological Argument has become one of the most, if not the most popular arguments for the existence of God. Consequently, it has also invited extensive criticism. One of the key modern objections to the Kalam has been made by Alex Malpass and Wes Morriston, who argue that on Aristotle's definition of an actual infinite, the beginningless past is not an actual infinite, whereas, if one were to accept William Lane Craig's definition of actual and potential infinites as well as his temporal ontology, then both the future and the past are either actually or potentially infinite, which is an undesirable consequence for Craig. In this paper I argue that one can argue for the finitude of the past even on Aristotle's definition of an actual infinite.

Keywords: Kalam Cosmological Argument, Actual Infinite, Potential Infinite, Aristotle.

Sonu Olmayan Bir Başlangıç: Kelam'ın Aristotelesçi Savunusu
Öz

Son yıllarda, William Lane Craig'in geliştirdiği Kelam Kozmolojik Argümanı, Tanrı'nın varlığını savunan en popüler argümanlardan biri haline gelmiştir. Bu durum, aynı zamanda yoğun eleştirileri de beraberinde getirmiştir. Kelam Kozmolojik Argümanı'na yöneltilen modern itirazlardan biri Alex Malpass ve Wes Morriston tarafından ortaya konulmuştur. Bu eleştiride, Aristoteles'in "bilfiil sonsuz" tanımına göre, başlangıcı olmayan bir geçmişin bilfiil bir sonsuz olmadığı, ancak William Lane Craig'in bilfiil ve bilkuvve sonsuz kavramları ile onun zaman ontolojisi kabul edildiğinde, hem geçmiş hem de gelecek ikisi birden ya bilfiil ya da bilkuvve olarak sonsuz olmaktadır. Bu ise Craig için istenmeyen bir sonuçtur. Bu çalışmada Aristoteles'in bilfiil sonsuz tanımı üzerinden bile geçmişin sonlu olduğu yönünde bir savunma yapılabileceğini öne sürüyorum.

Anahtar Kelimeler: Kelam Kozmolojik Argümanı, Bilfiil Sonsuz, Bilkuvve Sonsuz, Aristoteles.

Introduction

Scholarly work in an academic discipline like Natural Theology was never known to be everyone's favourite pass-time. However, with the advent of the internet, and the curiosity of the general public surrounding the God question, it has gained at least some significant amount of popularity. Add to that the popularity of arguably the most famous Christian Apologist, William Lane Craig, and what results is a poster boy argument for the existence of God. This argument, called The Kalam Cosmological Argument, is by no means new. First Cause arguments of its kind have been discussed since ages. The catch however is that human knowledge has progressed a lot since the early days of the Kalam. Advances in the Natural Sciences but particularly in Mathematics (such as Set Theory) have allowed it to once again bask in the glory of relevance. As a result of its new-found fame, the Kalam has also encountered some novel objections. One such objection is the objection most recently stated by Alex Malpass and Wes Morriston. They argue, in essence, that the past and the future are symmetrical. Thus, if one wishes to argue for a first cause based on the finitude of the past whilst holding to an infinite future, they must provide some symmetry breaker. In this paper I argue that such a symmetry breaker is not required, rather even if the infinite past and the infinite future are both considered to be similar kinds of infinites (namely potential infinites), that's all one requires to derive a scenario famously considered to be absurd. I first explain the issue in more detail, then I state my argument and defend its premises. Further I explain the difference between mine and a similar argument and why I think Malpass and Morriston's objection to that argument is unsuccessful. I then briefly discuss mu argument's implications for another existing response to their objection and end with some concluding remarks.

Actual and Potential Infinite

The Kalam cosmological argument as made by William Lane Craig[1] takes the following form…

a) Whatever begins to exist has a cause.

b) The universe began to exist.

[1] William Lane Craig, *Reasonable Faith: Christian Truth and Apologetics*, 3rd ed. (Wheaton, IL: Crossway Books, 2008), 111.

c) Therefore, the universe has a cause.

One of the arguments given in defence of the second premise is the impossibility of an *actual infinite*. Craig's definition of an actual infinite allows him to assert that an infinite past would be an actual infinite, and since he argues that actual infinites are impossible, so too an infinite past is impossible, thereby supporting premise (b). When questioned about his belief in an infinite future, he responds by saying the future is what he understands to be a *potential infinite.*

Craig defines actual and potential infinites the following way...

"An actual infinite is a collection of definite and discrete members whose number is greater than any natural number 0, 1, 2, 3. . .This sort of infinity is used in set theory to designate sets that have an infinite number of members, such as {0, 1, 2, 3 . . .}. The symbol for this kind of infinity is the Hebrew letter aleph: ℵ. The number of members in the set of natural numbers is ℵ0. By contrast, a potential infinite is a collection that is increasing toward infinity as a limit but never gets there. The symbol for this kind of infinity is the lemniscate: ∞."[2]

His definition is significantly different from how Aristotle defines actual and potential infinites. Aristotle's definitions are as follows...

"*The infinite series in potentiality*: The series is not actually ever completed. What makes the series infinite is simply the fact that a next step in the series is always possible.

The infinite series in actuality: We conceive of the series as completed."[3]

This difference has inspired philosophers such as Alex Malpass and Wes Morriston[4] to raise the objection that even on the presentist ontology of time, Craig's understanding of what actual infinites entails that the future is actually infinite. In their own words...

"As far as the actual infinite is concerned, a beginningless series of past events and an endless series of future ones are in the same boat. We think (and we expect most friends of the Kalam argument to agree) that an endless series of events, each of which will occur, is at least metaphysically possible.

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[2] Craig, *Reasonable Faith*, 116.

[3] Henry Mendell, "Aristotle and Mathematics," in *The Stanford Encyclopedia of Philosophy* (Fall 2019 Edition), ed. Edward N. Zalta, URL = https://plato.stanford.edu/archives/fall2019/entries/aristotle-mathematics/supplement3.html/.

[4] Alex Malpass and Wes Morriston, "Endless and Infinite," *The Philosophical Quarterly* 70, no. 281 (2020). https://doi.org/10.1093/pq/pqaa005.

But then an actual infinity of events occurring one-after-another is plainly possible, in which case the possibility of a beginningless series of past events should not be rejected merely on the ground that it would be an actual infinite."[5]

However, if Craig were to accept Aristotle's definition of actual and potential infinites, then that would render both the past and the future as potentially infinite thereby preventing him from proving a finite past. Malpass and Morriston's objection thus attempts to point out that the past and future are symmetrical.

I will not comment on whether Craig's rebuttal of the same is successful. I will instead further argue that on presentism, one can argue for a finite past using Aristotle's definition of an Actual infinite, as long as creation ex-nihilo is possible.

Finitude of the past

To Craig an infinite past (under his own definition) is an actual infinite and hence impossible.

However, we can formulate a more modest argument for the finitude of the past using Aristotle's definition of an Actual Infinite in the following way…

  i.   Hilbert's hotel is impossible. (assumption)
  ii.   If creation ex-nihilo is possible, then if a beginningless series of events is possible, then the actualisation of Hilbert's hotel possible.
  iii. Creation ex-nihilo is possible.
  iv.   A beginningless series of events in time is impossible. (from i, ii and iii)

We will now look at each premise and some objections, however this paper will not be arguing for the impossibility of Aristotle's actual infinite, rather we will be assuming it, consequently also assuming premise (i).

What's different?

The key difference between this argument for the finitude of the past and Craig's argument is that this argument concludes an absurdity (namely Hilbert's Hotel) regardless of whether the past is considered an actual or a

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[5]Malpass and Morriston, "Endless and Infinite," 19.

potential infinite. It only requires that an actual infinite as understood by Aristotle is impossible.

Premise (ii)

Proponents of the Kalam use a version of the Hilbert's hotel where the infinite rooms exist all at the same time, thus satisfying the definition of an actual infinite as understood by Aristotle. Critics of the Kalam rightly remark that the infinite past does not satisfy that definition and therefore the impossibility/possibility of the Hilbert's hotel is immaterial to whether or not the past is finite.

However, Hilbert's hotel can easily be modified in the following way…

Consider the scenario where a hotel room is actualised for every day that passes. In a beginningless past, an infinite number of days have passed. While it is correct that on presentism the instantiated past is not actual anymore, however the hotel rooms would still be actual (unless they dematerialise for some reason). This scenario would therefore lead to the construction of Hilbert's hotel, i.e. the hotel with infinite rooms. Thus, we can argue for premise (ii)...

1.) If premise (iii) then it is possible that a hotel room can be actualised for each day that passes.

2.) If it is possible that the past is beginningless then it is possible that an infinite number of hotel rooms would be actualised.

3.) It is possible that the past is beginningless.

4.) Therefore, it is possible that an infinite number of rooms (Hilbert's hotel) can exist, if premise (iii) is true. (i.e. if creation ex nihilo is possible).

5.) Therefore, premise (ii) is true.

On Creation Ex Nihilo and Premise (iii)

What should we make of the possibility of creation ex-nihilo?

I do not intend this paper to be a paper on the existence of God although it certainly has implications relevant to that discussion. I instead intend this paper to be read by Theists and Atheists alike as a contribution to the discussion on the impossibility/possibility of a beginningless past, irrespective of one's take on the God question. Keeping that in mind, I recognize and consider the following possible takes on premise (iii)...

Those who think Premise (iii) is true

Many Philosophers reading this may already believe in the existence of God due to other arguments found in the literature. Such philosophers may already be motivated to think that creation ex-nihilo is possible, and hence can follow along with the rest of the argument.

On the other hand, many philosophers reading this are going to be non-theists who either deny or do not see any reason to accept the first premise of the Kalam. Such philosophers would also find themselves open to the possibility of creation ex-nihilo and can follow along with the rest of the argument.

Those who think Premise (iii) is false

Are there good reasons to think that creation ex-nihilo is impossible? One could either use the argument in this paper as a refutation of creation ex-nihilo instead of a refutation of a beginningless past, or one must give separate reasons to think that creation ex nihilo is impossible. On the other hand, there are potential ways to independently motivate the possibility of creation ex nihilo.

To think that creation ex-nihilo is impossible would be to assert that everything that begins to exist has a *material* and an *efficient cause*, as asserted by Felipe Leon[6] in his attempt at critiquing classical theism. I will briefly examine this assertion. I will call it the material cause assertion (MCA)…

Firstly, the onus of justification would be on the one making such a mammoth assertion.

The traditional causal premise requires only that things which begin to exist have an efficient cause, they may or may not have a material cause.

Aristotle understands Efficient and Material cause the following way…

"The material cause or that which is given in reply to the question 'What is it made out of?' What is singled out in the answer need not be material objects such as bricks, stones, or planks.

The efficient cause or that which is given in reply to the question: 'Where does change (or motion) come from?'. What is singled out in the answer is the whence of change (or motion)."[7]

An efficient cause can therefore simply be understood as the producer of the effect, whereas the material cause are the building blocks of the effect (if any).

This leads to the revelation that the traditional causal premise is more modest as it does not require the existence of two kinds of causes for everything which begins to exist but rather only one, and explains everything the MCA could possibly explain. The MCA requires for there to be a material as well as an efficient cause to achieve what the traditional causal premise achieves without needing to appeal to the existence of a material cause.

Therefore, the issue with adopting the MCA as opposed to being open to the possibility of creation ex-nihilo is simply that the latter option is more modest and hence more parsimonious.

There are other more restricted causal premises that have been developed but this is not the place to discuss them.

A proponent of the MCA might resort to sensory experience and assert that since everything which comes into being around us seems to have a material cause, therefore we should favour the MCA over the traditional causal premise.

One could however ask what about our conscious experiences themselves? The only reason to think that our conscious experiences themselves would have a material cause is if one already assumes some kind of reductive materialism as an ontology. While there are plenty of good arguments for the immateriality of the mind, they are beyond the scope of this paper. However, what is relevant is that to adopt the MCA one must go very far from being simply a neutral inquisitive observer of the discourse and hence further sacrifice parsimony. Thus, the MCA requires more metaphysical commitments than the traditional causal premise.

Moreover, if one were to modify the MCA to assert only that everything which comes into being has a material cause, not necessarily an efficient cause, in that case they face a different problem. When discussing something

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[7] Andrea Falcon, "Aristotle on Causality," in *The Stanford Encyclopedia of Philosophy* (Spring 2023 Edition), ed. Edward N. Zalta and Uri Nodelman, URL = https://plato.stanford.edu/archives/spr2023/entries/aristotle-causality/.

which began to exist, by citing the material cause, they will have only answered the question "what is this effect made out of", as opposed to the more important question of "what has produced this effect?" If the causal premise of the kalam is denied, then it becomes inexplicable why effects are not produced uncaused all the time, the addition of a material cause would only restrict the number of possible effects, it would however still be susceptible to this critique.

What then to think about Premise (iii)?

It is clear that the most modest and parsimonious view to adopt is to be open to the possibility of creation ex-nihilo. One could, as I mentioned earlier, treat the argument I presented to be an argument against creation ex-nihilo instead. However, the considerations I highlighted above should also be kept in mind. For example, if one thinks that denying creation ex-nihilo would result in some kind of reductive materialism, a position they are not comfortable accepting, then that would be a motivation to accept premise (iii).

The Flaw In Loke's Version of a Similar Argument

A somewhat similar argument to mine has been made by Andrew Loke. He puts it as follows...

"Suppose this is how Hilbert's Hotel is constructed: there exists a 'hotel room builder' who has been building hotel rooms at regular time intervals as long as time exists. Suppose there also exists a 'customer generator' which has been generating customers who checked in the hotel at regular time intervals as long as time exists. Suppose that the hotel rooms and the customers continue existing after they have been built and generated, respectively. Now if the actual world is one in which the universe is past eternal, then there would have been an actual infinite number of time intervals, and an actual infinite number of hotel rooms and customers occupying the rooms. In other words, if the actual world were one in which the universe is past-eternal, then there would be a world in which an actually infinite number of things have been actualized."[8]

There is a crucial difference between my version and Loke's version. Loke's version suffers from a fatal flaw, namely that he misses that the scenario is only possible if creation ex nihilo is possible or if an actually

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[8] Andrew Loke, "No Heartbreak at Hilbert's Hotel: A Reply to Landon Hedrick," *Religious Studies* 50 (2014): 47–50, 49. https://doi.org/10.1017/S0034412513000346.

infinite amount of building material already exists. If an actually infinite amount of building material already exists, then he has already sneaked into his world an actual infinite, thus it shouldn't be surprising if another actual infinite can be actualized in that world. If Loke were to respond by saying that the hotel room creator could be God, even then God would either have to create an infinite number of rooms by an actually infinite amount of pre-existing building material, or he would have to create them ex nihilo.

Moreover, let us say the premise in my argument which states that 'creation ex nihilo is possible' is replaced with a premise that states 'God is possible'. If one attempts that then they must independently motivate the possibility of God, for otherwise the interlocutor could deny the premise that 'God is possible' instead of concluding that a beginningless past is impossible. However, that runs into another issue. Since God is normally understood to be modally necessary, independently motivating the mere possibility of God would be the same as independently motivating his actuality, which defeats the purpose of using the Kalam argument in the first place.

On Malpass and Morriston's Objection to Loke's Version

Malpass and Morriston raise an interesting objection to Loke's version. It goes like this…

"A hotel room builder with restricted omnipotence has the ability to spend any finite number of those past times creating hotel rooms (formula A), but not to devote every one of an infinite number of past times to creating hotel rooms (formula B). That is, a builder with restricted omnipotence could make it the case that the totality of past room-creation events is numbered from 1 to n, for any n, but not that there is a unique past room-creation-event for every n. To insist that the builder have the ability to do the latter is precisely to insist on violating the restriction on omnipotence that the defender of the Kalam argument just appealed to in order to respond to Cohen."[9]

Earlier in the paper, they describe the restriction referred to in the above paragraph as follows…

"They will say that God could make a hotel all in one go such that the hotel rooms are numbered 1 to n, for any n (formula A), but he could not make a hotel all in one go where every single natural number corresponds to a

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[9] Malpass and Morriston, "Endless and Infinite," 17.

unique room (formula B). We can put it in a slogan like this: *each is possible, but not all.*"[10]

Thus, their objection is as follows; if God could actualize every hotel room, it thereby follows he could actualize the entire Hilbert's hotel as well, and if one was to restrict his omnipotence, then simply the ability to actualize every room would not translate to the ability to actualize the entire hotel. I shall call this objection the 'Objection to Loke' (OTL).

I find this objection rather perplexing. For it seems to me that this response undermines the original objection they raised against Craig (I shall refer to it as OTC). The slogan they mention is extremely helpful for it makes it easier to see the issue. Following their lead, I would like to propose the following two slogans:

Slogan C: *'Every equals All'*

Slogan L: *'Every does not equal All'*

These two slogans seem to me to be the theme of their entire paper. As is clear, both of these cannot be simultaneously held, which they rightly point out, yet their OTC and their OTL, each rely on a different slogan. This means that if they believe slogan C is correct, then while their OTC would hold up, their OTL would be undermined. However, if they believe slogan L, then while their OTL would hold up, their OTC would be undermined. Thus, irrespective of which option they choose, the Kalam remains undefeated.

Their concern with Craig is that if one asserts that 'there will be a potentially infinite number of future events' then one must also assert that 'there has been a potentially infinite number of past events' (as does Aristotle), whereas, if one asserts 'there has been an actually infinite number of past events' then one must also assert 'there will be an actually infinite number of future events.' Thus, the slogan in use here, is slogan C, *every* event being actualized is the same as *all* the events being actualized. However, as I argued throughout this paper, if one were to adopt Aristotle's understanding, it can still be argued that the beginningless past is impossible as long as Hilbert's hotel is impossible (and creation ex nihilo is possible). To that they may respond similar to how they responded to Loke, i.e. the actualization of *every* room does not translate to the actualization of *all* the rooms. Seems fair

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[10] Malpass and Morriston, "Endless and Infinite," 16.

enough right? No. For the slogan in use now, is Slogan L, which, if they accept, undermines their original concern with Craig.

Thus, Malpass and Morriston's supposed conquest of the Kalam, relies on two objections, the OTC and the OTL, each of which rely on two mutually inconsistent assumptions, namely slogan C and slogan L respectively. Unless they think one can hold to inconsistent set of propositions, they *have* (or *will have*, whichever tense they prefer) failed.

Implications for the Varieties of Finitism

One interesting alternative method of dealing with the Malpass-Morriston objection is to differentiate between varieties of finitism as attempted by Mohammad Saleh Zarepour[11]. However, my argument has implications that affect the distinctions made by him. He proposes that actual infinities are of four different types. The two types relevant to this paper are what he refers to as type (a) and type (b1). The distinction is as follows…

"Type (a) = There is a moment of time t such that every member of the collection exists at t.

Type (b1) = There is a moment of time t such that every member of the collection exists either at t or at some moment of time before t."[12]

He argues that while the absurdity of Hilbert's Hotel might prove that type (a) actual infinities are impossible, it does not inform us about the possibility/impossibility of type (b1) actual infinities. A beginningless past would be a type (b1) actual infinite whereas the traditional Hilbert's hotel would be a type (a) actual infinite.

However, based on the argument I presented above, given the possibility of creation ex-nihilo, the construction of Hilbert's hotel is made possible if type (b1) actual infinities are possible. Thus, it can be argued…

I. The existence of a type (a) actual infinite is impossible because Hibert's Hotel is impossible.

II. If the existence of a Type (b1) actual infinite and creation ex-nihilo are possible, then the construction of Hilbert's hotel is possible.

III. Creation ex-nihilo is possible.

IV. Therefore, If the existence of a type (b1) actual infinite is possible then the existence of a type (a) actual infinite becomes possible.

V. Therefore, the existence of a Type (b1) actual infinite is impossible.

Thus, the implication of my argument is that the distinction between the two varieties of finitism mentioned above is nullified.

Conclusion

In conclusion, I have argued that the second premise of the Kalam Cosmological Argument can be defended even if one adopts Aristotle's definitions of Actual and Potential Infinites, one does not need to adopt Craig's definition and then argue against Malpass and Morriston's symmetry objection, instead one could just sidestep that objection. I also briefly argued that it is more parsimonious to be open to creation ex-nihilo as opposed to denying it. I then consider a similar argument to mine and why I think it is flawed and also discuss Malpass and Morriston's objection to that argument. I conclude by showing that my argument leads to distinctions between certain varieties of finitism being nullified.

REFERENCES

Craig, William Lane. *Reasonable Faith: Christian Truth and Apologetics*. 3rd ed. Wheaton, IL: Crossway Books, 2008.

Falcon, Andrea. "Aristotle on Causality." In *The Stanford Encyclopedia of Philosophy* (Spring 2023 Edition), edited by Edward N. Zalta and Uri Nodelman.   URL = https://plato.stanford.edu/archives/spr2023/entries/aristotle-causality/.

Leon, Felipe. "13 The Problem of Creation Ex Nihilo: A New Argument against Classical Theism". *Ontology of Divinity*, edited by Mirosław Szatkowski, Berlin, Boston: De Gruyter, (2024): 291-304. https://doi.org/10.1515/9783111332536-016

Loke, Andrew. "No Heartbreak at Hilbert's Hotel: A Reply to Landon Hedrick." *Religious Studies* 50 (2014): 47–50. https://doi.org/10.1017/S0034412513000346.

Malpass, Alex, and Wes Morriston. "Endless and Infinite." *The Philosophical Quarterly* 70, no. 281 (2020). 830-849. https://doi.org/10.1093/pq/pqaa005.

Mendell, Henry, "Aristotle and Mathematics", *The Stanford Encyclopedia of Philosophy* (Fall 2019 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2019/entries/aristotle-mathematics/>.

Zarepour, Mohammad Saleh, "On the Varieties of Finitism," *Faith and Philosophy: Journal of the Society of Christian Philosophers* 38:3, (2021) 302-312.