Fort Bend Christian Academy – Honors Apologetics

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Cosmology and Theism:

God Doesn't Care What Your Watch Says

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Introduction

The question of the universe's temporal status has been debated throughout history by theists and atheists alike. The purpose of this thesis is therefore not to answer the question of the eternality of the universe definitively, but rather to assess the various arguments regarding the question of the nature of the universe as it exists in time while addressing the implications of its possible eternality with regards to two forms of the cosmological argument for God's existence, Kalam and Falsafa. After a juxtaposition of the two arguments the possibility of their amalgamation will be considered. In order to proceed with this task, this paper will at times assume the existence of God in order to comment on his nature as he would relate to time in context of the two arguments.

The "cosmological" argument for the existence of God can best be defined through its etymology. It brings together two words – *cosmos* (the universe) and *logos* (logic): the cosmological category is that of the overall logic of the universe itself. It utilizes the cosmological logic of existence, rather than the ontological logic of essence – existence in reality is the foundation and premise for the cosmological argument. Cosmological proofs for God respond to the questions "Something (the universe) undeniably exists: How? Why?". These proofs, then, move from the existence of the universe to the existence of God, from effect to cause, and in doing so make definitive statements about both the cause and effect. Proponents of this argument not only employ logic to determine a cause of the universe, but to assert basic principles of the universe itself. This ultimately proves troublesome: if inconsistency can be found in the professed cosmology behind any given cosmological argument, that argument's

¹ Reichenbach, Bruce, "Cosmological Argument", *The Stanford Encyclopedia of Philosophy (Winter Edition)*, Edward N. Zalta (ed.), http://plato.stanford.edu/archives/win2010/entries/cosmological-argument/.

conclusion is itself undermined. Much effort, then, has been allotted by cosmologists toward proving and establishing individual cosmologies themselves to set up their own argument. The profusion of differing cosmologies brought to the table throughout history therefore might at first appear to be a counterproductive surfeit, but in actuality is crucial to the validity of the overall form of argumentation. Obviously all differing cosmologies professed throughout history cannot be true; therefore all cosmological arguments cannot be actually true, regardless of their internal consistency with relation to their cosmological premises. However, the universal conclusion from this plethora of cosmologies is without exception: in order to account for the *cosmos*, God must exist. The overarching point of cosmological argumentation should be that God's existence is necessitated in any plausibly defendable cosmic setting.

For this paper's purposes, the cosmological argument will be categorized into three groups:

- 1. Arguments that prove/assume a temporally finite universe
- 2. Arguments that prove/assume a temporally infinite universe
- 3. Arguments that are not affiliated with the temporal cosmic setting of the universe²
 This thesis will focus solely on categories one and two. Arguments in category 1 will be referred to as Kalam, and are mostly based on the principle of determination³. These arguments prove the temporal finitude of the universe in order to prove the existence of God. Category 2 arguments

² i.e. Leibniz's Principle of Sufficient Reason. This category will not be discussed.

³ "In its barest form, the principle of determination meant that since prior to the existence of the universe it was equally possible for it to be or not-to-be, a determinant whereby the possibility of being could prevail over the possibility of not-being was required; and this 'determinant'... was God." Fakhry, M. (1957), The Classical Islamic Arguments for the Existence of God. The Muslim World, 47: 139.

will be referred to as Falsafa and are mostly based on the principle of causality, proving the impossibility of an infinite regression of causes in sense of rank rather than time.⁴

Historical review

Greek Philosophers

Neither the Kalam nor Falsafa versions of the cosmological argument specifically can trace its origin to the Greeks, but both would be affected with regards to the influence of the Greek views of eternity on both Arabic and Thomist thought. When discussing the origins of the Kalam cosmological argument, it is crucial to avoid the misunderstanding that the philosophers, in arguing for an origin, were also necessarily arguing for a beginning – Aristotle's argument actually depended on the contrary. In fact, the distinction between Kalam and Falsafa really began with an acceptance or rejection of Greek philosophy, or to go further, a choice between Plato and Aristotle. Their two versions of the cosmological argument were basically the same – both were based on motion, with the most prominent difference being Plato's self-motion as opposed to Aristotle's unmoved mover as the origin for all motion. However, an additional distinction can be found with regards to the cosmic temporal setting of the argument – the same distinction found between Kalam and Falsafa. Aristotle's position on the world's eternality was clear – he thought that it had and would always exist, and therefore offered a proof based on eternal motion. Plato's cosmological outlook, however, is extremely difficult to pin: though he appears to believe in the world's past finitude, as evidenced by his creation account relayed in "Timaeus", his true cosmic temporal belief has been disputed by philosophers throughout

⁴ Category 2 (Falsafa) is best distinguished from Category 1 (Kalam) by thinking in terms of seeking a source rather than a beginning, and thus does not necessarily entail the impossibility of an infinite temporal regression, and at times sought to refute the notion, as shall be later discussed. Craig, William Lane. *Reasonable Faith: Christian Truth and Apologetics*. 3rd ed. (Wheaton, IL: Crossway, 2008), 97.

history.⁵ Regardless, the Aristotelian argument for eternity won out and would become tantamount to philosophical doctrine for the next 800 years.

Plato (428-348 B.C.E.)

The first appearance of the cosmological argument can be found in the works of the Greek philosopher Plato.⁶ In the tenth chapter of his *Laws*, Plato continues a dialogue between Cleinias and an Athenian stranger, whose discussion turns to the problem of atheism. Plato's Athenian observes that some still reject the obvious evidence for the existence of the gods found in the teleology of the universe. He then proceeds to propose a proof for the existence of the gods based on motion. To summarize, only self-motion can ultimately account for all other motion, and self-motion is manifest through life, i.e. gods (souls).

Ath. And what is the definition of that which is named "soul"? Can we conceive of any other than that which has been already given-the motion which can move itself?

Cle. You mean to say that the essence which is defined as the self-moved is the same with that which has the name soul?

Ath. Yes; and if this is true, do we still maintain that there is anything wanting in the proof that the soul is the first origin and moving power of all that is, or has become, or will be, and their contraries, when she has been clearly shown to be the source of change and motion in all things?

Cle. Certainly not; the soul as being the source of motion, has been most satisfactorily shown to be the oldest of all things.⁷

⁵ For this paper, I will follow Aristotle and Philoponus in interpreting Plato's Timaeus account literally.

⁶ Craig, William Lane. The Cosmological Argument from Plato to Leibniz. (Eugene, OR.: Wipf and Stock, 2001) 4.

⁷ Plato, and Benjamin Jowett. *Laws*, http://classics.mit.edu/Plato/laws.html/ (ch. X).

With this dialogue, Plato had introduced a new approach to theism known as the cosmological argument – an *a posteriori* proof for the existence of gods – in other words, a proof seeking a cause based upon observed phenomena, ⁸ in this case motion. Exactly what Plato believed about the self-moved mover(s)⁹ and his implications on cosmology, however, is subject to question.

First, is important to understand that Plato's self-moved mover was not a creator – a more proper job title for Plato's self-moved mover might be that of an artificer. ¹⁰ To Plato, the four elements (air, water, earth, and fire) have always existed – his Mover was certainly not God in the creationist sense. This view is portrayed in his creation account found in the dialogue "Timaeus": ¹¹

"Let me tell you then why the creator made this world of generation...God desired that all things should be good and nothing bad, so far as this was attainable. Wherefore also finding the whole visible sphere not at rest, but moving in an irregular and disorderly fashion, out of the disorder he brought order, considering that this was in every way better than the other...when he was framing the universe" 12

⁸ The opposite of this would be *a priori* reasoning, which argues from cause to effect, i.e. the ontological argument. On the advantage of *a posteriori* argumentation, thirteenth century Christian theologian Thomas Aquinas writes "When an effect is better known to us than its cause, from the effect we proceed to knowledge of the cause" (Aquinas, Thomas. *Summa Theologica*. Part 1 Question 2 Article 1)

⁹ Though Plato argued for a plurality self-moved movers, he believed in one that was the highest rank that ultimately accounted for the universe

¹⁰ Artificer – a skilled craftsman or inventor (İskenderoğlu, Muammer. *Fakhr Al-Dīn Al-Rāzī and Thomas Aquinas on the Ouestion of the Eternity of the World.* (Leiden: Brill, 2002) 9.)

¹¹ I follow the view of Aristotle and Philoponus against than that of the Neoplatonists and William Lane Craig in assuming the Timaeus creation account to be intended to be taken literally

¹² Plato, and Benjamin Jowett. *Timaeus*, http://classics.mit.edu/Plato/timaeus.html/.

Plato's god takes pre-existing elements in a state of chaos, and molds the universe from them, in a similar manner to a potter molding pre-existing clay.¹³ His cosmological argument, then, is very much teleology tainted, which is understandable in context of the fact that his teleological argument was his primary argument for God's existence.

Additionally significant in Plato's cosmology is his recognition of the self-moved mover's transcendence of time. Plato's creation account is continued in Timaeus:

"He (the self-moved mover) sought to make the universe eternal, so far as it might be. Now the nature of the ideal being was everlasting, but to bestow this attribute in its fullness upon a creature was impossible. Wherefore he resolved to have a moving image of eternity, and when he set in order the heaven, he made this image eternal but moving according to number, while eternity rests itself in unity, and this image we call time. For there were no days and nights and months and years before the heaven was created, but when he constructed the heaven he constructed them also. They are all parts of time, and the past and future are created species of time, which we unconsciously but wrongly transfer to the eternal essence; for we say that he "was," he "is," he "will be," but the truth is that "is" alone is properly attributed to him, and that "was" and "will be" only to be spoken of becoming in time" 14

This passage divulges Plato's relation of his mover to time itself. Time is defined as the "moving image of eternity" – it in a sense *is* motion. Matter already exists in a timeless sense; upon

¹³ This brings to light an internal paradox in Plato's account: pre-existing uncreated disorder (chaos) implies motion, yet Plato's whole point was that motion must have originated in self-motion, and therefore in a self-moved mover(s). There are three possible answers to the question of Plato's beliefs on the temporality of motion: 1) All motion is eternal and ordered 2) Motion itself is eternal and ordered motion is finite 3) All motion is finite and ordered. The best explanation seems to be 3 – that Plato seeks a source in both the temporal and causal-rank sense to account for all motion which is ordered, while the eternally existing "disorder" of the elements did not necessarily entail motion.

¹⁴ Plato, and Benjamin Jowett. *Timaeus*, http://classics.mit.edu/Plato/timaeus.html/.

ordering the matter time and motion thus both begin simultaneously. The unmoved mover, "God", is timeless rather than eternal. This timeless perspective of God was largely unique to Plato, as most future proponents for the finitude of the past did so inasmuch as the pasts' relation to the world, but kept God eternally existent in time rather than timelessly existent. The timelessness of God is ultimately vital to the Kalam argument, as it allows an answering of the question of why God created when he did. Rather than answering that from eternity God willed creation to occur at a particular moment, one could answer that "particular moments" do not apply to a timeless entity.

The question that now arises is whether Plato's self-moved mover actually entailed a temporal starting point or an eternal source for motion. 15 Craig 16 concludes the latter –

"Plato does not mean 'temporally' prior, but 'logically and causally' prior... This interpretation...illuminates his remark that if the self-mover were destroyed, the heavens would come to a standstill¹⁷... The motion here is entirely simultaneous, and the ultimate mover must be moving at all times in order for motion to exist".

This perspective might be better comprehended by imagining a system of gears, in which the motion of the primary gear instantaneously causes all secondary gears to move. However, Plato did define the soul and its self-motion as "the oldest of all things" (see above), indicative of a

¹⁵ Craig, William Lane. The Cosmological Argument from Plato to Leibniz. (Eugene, OR.: Wipf and Stock, 2001) 6.

¹⁶ William Lane Craig is the modern authority on the cosmological argument

¹⁷ "Only the self-moving...never ceases to move, and is the fountain and beginning to all that moves besides... And therefore the self-moving is the beginning of motion; and this can neither be destroyed nor begotten, else the whole heavens and all creation would collapse and stand still, and never again have motion or birth" Plato, and Benjamin Jowett. *Phaedrus*, http://classics.mit.edu/Plato/phaedrus.html/.

¹⁸ Craig, William Lane. *The Cosmological Argument from Plato to Leibniz*. (Eugene, OR.: Wipf and Stock, 2001) 6-7.

temporal stance. He also used the phrase "when he was framing the universe" (see above), which suggests that it was a definite action which took place in the past. Aristotle certainly understood his tutor to come to this temporal conclusion – when discussing other philosophers' views on the eternal nature of the universe, he wrote "Plato alone presents time as generated; time, he maintains, is coeval with the heavens which, according to him, have had an origin" Aristotle's interpretation was hardly the final say, however: Plato's true cosmology has been debated by philosophers and theologians throughout history. Many interpreted Plato's Timaeus account metaphorically: in an attempt to streamline the two major philosophers, commentators on Plato and Aristotle suggested that they took "generated" in different senses, with Plato's usage not actually applying to generation in time. The sense of ambiguity found in Plato's cosmological argument is not present in his pupil's later reiteration, whose position on motion's temporality is very clear.

Aristotle (384-322 B.C.E.)

Student of Plato, Aristotle offered several different modifications to his mentor's self-moved mover cosmological argument. He began the movement of the philosophical conclusions of the cosmological argument away from Plato's polytheism²⁰ toward monotheism, and perhaps was a precursor to the later formation of Aquinas's First and Third Ways²¹ when he suggested that a possibly "singular" and entirely "unmoved" mover might have a "necessary existence" He disproved the possibility of self-motion, replacing Plato's "self-moved mover" with a "first

¹⁹ Aristotle, and Richard Hope. Aristotle's Physics. (Lincoln: University of Nebraska, 1961) 146.

²⁰ Plato believed in a plurality of self-moved movers, with one highest-ranked mover.

²¹ The Unmoved Mover and Contingency arguments, respectively (falsafa arguments)

²² Craig, William Lane. *The Cosmological Argument from Plato to Leibniz*. (Eugene, OR.: Wipf and Stock, 2001) 42.

unmoved mover", though he at different points in time asserted either a singular unmoved mover or plurality of unmoved movers with difference regarding cosmic rank. His proofs, however, lay on the basis that motion was eternal – his eternally existent unmoved mover was the only thing that could account for *eternal* motion. Eternal motion required time to be eternal as well, so Aristotle therefore included a case for the eternality of time within his overall argument.²³ He writes

"It is impossible, however, that in such a case motion should ever be generated, or that it should be corrupted, for it was always in existence: nor is this possible with duration; for it is not possible that there can be that which is prior and subsequent, on the supposition that time or duration has no existence²⁴... For duration is either the same as motion, or it is a certain passive condition of motion" ²⁵

Here Aristotle has gone so far as to suggest not only the inseparability of time and motion, but their equivalence. "Duration", as McMahon translates it, is at least contingent upon motion, if not the same thing.

Proving that motion, and therefore time, is eternal while trying to prove a first mover may at first seem counterintuitive. However, one must understand Aristotle's view of motion in context of the overall argument– Craig writes:

"...the argument does not assume the eternity of motion for the sake of the argument, but is actually dependent on it. To carry his case Aristotle must prove there exists an infinite

²³ On the inseparability of time and motion, Aristotle poses the question: "when there is nothing going on, can there be time?" Aristotle, and Richard Hope. *Aristotle's Physics*. (Lincoln: University of Nebraska, 1961) 145.

²⁴ In other words, time cannot have a beginning as any beginning entails a before and after, which are themselves contingent upon the existence of time in the first place.

²⁵ Aristotle. *The Metaphysics*.(Mineola: Dover Publications, 2007) 272.

temporal regress. Someone might argue that things moved by another do not reduce to self-movers because they were moved by another thing in the past which was moved by another thing in the past, and so on. But on Aristotle's principles such a situation could not arise, mover and moved are simultaneous²⁶. Aristotle's basic argument is that since motion is eternal, there must exist a being or beings capable of causing such an effect."²⁷ Aristotle clearly did not intend any temporal connection between his moved and mover, but rather a purely causal one. While Plato's Mover actually transcended time, Aristotle's was itself eternal in time. It might be said that, since the unmoved mover was itself eternal, it has been causing motion for all eternity. The Kalam argument, while not necessarily arguing for a timeless creator, would begin as a reaction against the Aristotelian thought on the eternity of the universe in time.

Kalam and Falsafa

While Western European thought slumbered through the dark ages, intellectual life bloomed in the Islamic East. The "Islamic Golden Age", spanning roughly between the 8th and 12th centuries, oversaw the advancement of arguments for the finitude of the world first put forth by Christian thinker John Philoponus, and the creation of the contingency argument. These arguments were each respectively propounded by the two Muslim philosophical movements that

²⁶ It important to recognize that the Greeks at the time had no concept of inertia, indeed one of the puzzling questions of the time was why a stone continued to move through the air after its release from the hand (Aristotle himself concocted a theory based on the displacement of air propelling the object forward) (Wildberg, Christian, "John Philoponus", *The Stanford Encyclopedia of Philosophy (Fall 2008 Edition)*, Edward N. Zalta (ed.), http://plato.stanford.edu/archives/fall2008/entries/philoponus/). Motion involved, if not constant physical contact, continuous moving of the moved by the mover. In a sense, however, everything was in physical contact, if not directly: Aristotle did not believe in the void (he argued motion could not occur in a vacuum), but filled outer space (beyond the moon) with a fifth celestial element (in addition to the four telluric elements of earth, water, fire, and air) known as ether. It was through this elemental medium that Aristotle's unmoved mover was able to move the heavens.

²⁷ Craig, William Lane. *The Cosmological Argument from Plato to Leibniz*. (Eugene, OR.: Wipf and Stock, 2001) 40.

arose during this period – Kalam and Falsafa. Kalam embodied the traditional, orthodox, mainstream Islamic thought, and was responsible for the establishment and furtherance of its namesake argument, an argument for God based on the finitude of the universe. Falsafa, on the other hand, represented the reformed beliefs in accordance with the Greek philosophy that had been introduced into Islamic culture, and was identified with the argument for God based on contingency. The two movements can best be differentiated by their core foundations of truth – Kalam took presupposed beliefs of Islam as their starting point for defending theism, while Falsafa was rooted in Greek philosophy and used basic reason as the starting point to reach the conclusions of Islamic beliefs.²⁸ One might say that Kalam is based in theology that uses philosophy, while Falsafa is based in philosophy to reach theology. Falsafa, grounded in Aristotelian thought, thus proved God's existence based on the Aristotelian concept of the eternality of the universe, while Kalam, rooted in the Islamic view of creation, argued for a definite beginning of the universe in time. As far as Muslim thought, the Mutakallimun²⁹ would ultimately prevail, however the Contingency argument proposed by Falasifa³⁰ Al-Farabi and Ibn Sina would fare much better in the west, where it would influence St. Thomas Aguinas' formulation of the Third Way.

An important distinction at the heart of the difference between the Mutakallimun and the Falasifa that must be made prior to comprehensive discussions of their arguments was their differing philosophies of how creation relates to God. The basic argument of the Mutakallimun

²⁸ Craig, William Lane. *The Cosmological Argument from Plato to Leibniz*. (Eugene, OR.: Wipf and Stock, 2001) 49

²⁹ Muslim practitioners of Kalam (singular mutakallim)

³⁰ Muslim practitioners of Falsafa (singular Failasuf)

stemmed from the principle of determination: as the universe does not have to exist, some willful determinant (God) must favor its existence over its non-existence. The Falasifa followed the principle of causality: everything, including the universe, requires a cause, in the purely existential rather than temporal sense. Their disagreement on the temporal nature of creation led to two radically extreme views about the nature of reality. The Mutakallimun, in order to answer the Falsafa charge that God must "change" to create the universe in time, created a belief called metaphysical atomism, which held that all atoms are constantly being recreated by God. Therefore, God is always creating the world: change and time occur when God recreates them differently, thus there is no secondary source of causality, a point fervently argued by Mutakallim Al-Ghazali. Farabi and the Falasifa held a belief at the other end of the metaphysical spectrum known as emanationism. Emanationism states that the universe and things that exist were never created, but inevitably existed eternally as "emanations" of the divine being, in a manner similar to which rays of light emanate from the sun.³¹ This belief allowed them to account for the eternal existence of the universe: the cosmos are coetaneous with their creator. On the other hand, it also led to the charge that emanation required the existence of the universe – the universe itself was necessarily existent. Some Falasifa, like Ibn Sina, would actually embrace this charge, contending that the universe necessarily existed not insofar as its own essence dictated, but in the sense of its relation to its creator. Both dilemmas, however, ultimately rested on a faulty view of God – an eternal God rather than a timeless one. An eternal God would either have to create from eternity (requiring creation to be necessary in relation to its cause) or at a particular moment in eternity (requiring God to change in order to perform the act of creation). A timeless deity, on the

³¹ Yaran, Cafer S. *Islamic Thought on the Existence of God: with Contributions from Contemporary Western Philosophy of Religion*. (Washington, D.C.: Council For Research In Values and Philosophy, 2003) ch. 6.

other hand, could overcome both objections – there is no "time" for creation to either eternally emanate from him or to change to create: his timeless will caused creation.

Kalam

Though a Muslim school of thought, the worldview behind Kalam can also be fabricated into a general category that spans all three major monotheistic religions: men of the Kalam mindset considered their own religious doctrine ultimately superlative to any truths arrived at by human reason or philosophy (most pointedly, to any truths put forth by Aristotle), yet wished also to render their doctrines of faith philosophically tenable.³² Each religion's doctrine of the world as created in time therefore led the Mutakallimun to prove God based upon the world as a non-eternal, created thing, the argument for God that would characterize and ultimately be identified with them as the Kalam cosmological argument. The Kalam argument's reasoning is simple, and Craig's summation of Al-Ghazali's version is as follows:³³

- 1. Everything that begins to exist requires a cause for its origin
- 2. The world began to exist
- 3. Therefore, the world has a cause for its origin its creator

The concomitant nature of the conclusion is easily evident: the meat of the argument lay in the Mutakallimun's varying sub-proofs of the second premise, many of which were taken directly from Philoponus.

John Philoponus (490-570 C.E.)

³² "Rather than adopt the traditionalist attitude that one knows his faith to be true without knowing how it can be true, the Mu'tazilites (Mutakallimun) chose to defend the faith by use of reason and thus to render their beliefs intellectually respectable" Craig, William Lane. *The Kalām Cosmological Argument*. (Eugene, OR: Wipf and Stock, 2000) 4.

³³ Ibid., 49

The existence of eternity in reality, a tenant of Aristotelian thought, remained widely unchallenged until the work of Christian theologian John Philoponus in the sixth century. Philoponus's influence lay largely in his refutation of Aristotle's proofs for the eternality of the universe. He did this in two distinct ways: asserting the finitude of the power present in the universe to prove it perishable, and refuting eternal motion to prove it generated. His method mostly consisted of taking Aristotle's own points and turning them against him to highlight the philosopher's inconsistency³⁴. His proofs based on the finitude of power in the universe were preserved through his archnemesis Simplicius, who references them while attempting to defend Aristotle.

Philoponus's Proofs:

- A. Proofs of the generation of the universe from the finitude of power within it: 35
 - 1. Finite bodies cannot have an infinite capacity

This first point is Aristotle's, from which he concludes that the cause for eternal motion is not housed in the heavens, but rather in God. Philoponus takes this argument and instead uses it to point out the world's perishability as far as its own nature is concerned. Since the world itself is a finite body, it itself does not have the capacity for infinite motion or duration in time.

2. Dependence on matter shows the world of finite capacity and perishable so far as its own nature is concerned

Anything made of matter is in need of matter for its being, and anything in need of something cannot possess an infinite capacity – therefore the world is perishable. Simplicius responds with

³⁴ Wildberg, Christian, "John Philoponus", *The Stanford Encyclopedia of Philosophy (Fall 2008 Edition)*, Edward N. Zalta (ed.), http://plato.stanford.edu/archives/fall2008/entries/philoponus/.

³⁵ Philoponus et al., *Place, Void, and Eternity.* (Ithaca, NY: Cornell UP, 1991) 107-128.

a question: "Why should that which is in need of an imperishable substrate be regarded as perishable?"³⁶

3. The world is perishable because matter requires changes of form

Matter cannot sustain any form indefinitely; therefore anything consisting of matter must be perishable, i.e. the universe.³⁷ Simplicius' reply is that should all matter require change of form, the "matter" of the heavens, the extraterrestrial element ether, would change into the terrestrial elements, and vice versa, which does not happen.³⁸ However, Simplicius was unaware that Philoponus did not hold to this Aristotelian definition of matter, but rather regarded matter as the three dimensional extension and completely rejected the fifth element.³⁹

4. At least the world is perishable as far as its own nature is concerned, even if God can override the natural tendency to perish

Philoponus is driving home his point that the world is perishable as far as its own nature is concerned. Left to its own nature, it will cease to exist, irrespectively of whether another nature (God's) will actually sustain it *in perpetuum*.

5. The whole has finite capacity because the parts have, as is shown by their dependence on the whole and by the fact that they must be smaller than the whole.

The underlying point which these arguments are based on is that a finite body is also necessarily perishable. Aristotle had stated, with which Philoponus would agree, that the infinite capacity for the world's eternal existence could be found in God. However, Philoponus's point is, again, that

³⁶ Philoponus et al., *Place, Void, and Eternity.* (Ithaca, NY: Cornell UP, 1991) 113.

³⁷ Philoponus devised his own theory of matter as the entire three-dimensional extension of space, while Simplicius held to the Aristotelian theory of matter comprising of five elements. Ibid., 114-115

³⁸ Ibid. 114

³⁹ Ibid. 115

the world is perishable purely as far as its own nature is concerned, and offers further argumentation elsewhere for its actual future destruction. The relevance of this argument to the past finitude of the world is as follows: if the world is perishable by nature, it must be completely finite insofar as its own nature dictates. Finite beings have a beginning, and the world is finite, again only insomuch as its own nature dictates, as the infinite power to sustain the universe infinitely might be housed in God. However, Philoponus argues, though it can be reasoned that God can override the world's natural tendency to perish and make it endless, it is impossible for him to override its natural tendency to begin and make it beginningless. ⁴⁰ In other words, despite his omnipotence God does not have the power to change past events, as they have already occurred.

- B. Proofs of the generation of the universe from the impossibility of eternal motion:
 - If the universe were eternal, the generation of any object in the sublunar world would be proceeded by an infinite series of generations. An infinite cannot be traversed.
 Therefore, if the universe were eternal, none of the objects presently existing in the sublunar world could ever have been generated.
 - 2. The eternity of the universe would imply an infinite number of past motions that is continually being increased. However, an infinite cannot be added to.
 - 3. The number of the revolutions of the heavenly bodies are multiples of one another, and therefore eternity would imply infinite numbers of past motions in varying multiples. However, infinite numbers cannot be multiplied.⁴¹

⁴⁰ Philoponus et al., *Place, Void, and Eternity.* (Ithaca, NY: Cornell UP, 1991) 99.

⁴¹ Craig, William Lane. *The Kalām Cosmological Argument*. (Eugene, OR: Wipf and Stock, 2000) 9.

Each of these arguments are themselves based on Aristotelian principles about infinity: the infinite cannot be traversed⁴², added to, or multiplied. In holding time and motion to be eternal, Philoponus charges Aristotle with contradicting his own definitions of infinity.

It can be said that the above proofs constitute the first formulation of the Kalam cosmological argument for God's existence. For nearly a millennium, the academia had generally accepted the Aristotelian views on eternity as the paramount cosmology. Through formulating an argument against Aristotle specifically on the world's past and future eternity, Philoponus had for the first time offered a serious contention to Aristotle and effectively rendered the Christian doctrine of creation philosophically respectable, though not as far as the Genesis account specifically. However, this achievement ultimately did not have far reaching consequences in Christianity – the Emperor Justinian would disband the Athenian school of philosophy within the same year of Philoponus' publication. 43 Theology rather than philosophical debate would ultimately crush Simplicius and Aristotle as the church established the Christian doctrine of a finite past throughout the West. The major influence of these rebuttals of universally accepted Aristotelian philosophical thought would rather be found in their discovery and embracement by the vehemently anti-Greek Arabic Mutakallimun. These Muslim theologians opposed the intrusion of the philosophers' ideas into Islam and would further develop Philoponus's arguments for the finitude of the world.

Al-Kindi (801-873 C.E.)

⁴² Another way to put this might be that infinity cannot be completed: you can never reach the end of infinity, which, according to Philoponus, is what the existence of the present proceeding from an infinite past would entail.

⁴³ Philoponus et al., *Place, Void, and Eternity.* (Ithaca, NY: Cornell UP, 1991) 152-153.

Categorizing Al-Kindi into Kalam or Falsafa is problematic: he is unique among the Muslim thinkers in that he rejected what he considered to be a false dichotomy between religion and philosophy. 44 "Kindi stands historically as the bridge between Kalam and Falsafa, and it was his conviction that revelation and philosophy attain identical truths, albeit in different ways". 45 Though he was a philosopher deeply attuned to the ideas of Aristotle, he nevertheless refuted the philosopher by proving God's existence through the Kalam technique of demonstrating that the universe was created in time. In a style similar to Philoponus's, he took Aristotle's own concessions about infinity and used them to highlight the internal absurdities of his doctrines on eternal motion and infinite time and space. He offers three proofs for creation: an argument from the combination of space, motion, and time, an argument from composition, and an argument from time. 46

1. Argument from space, motion, and time: "It has now been explained that it is impossible for a body to have infinity, and in this manner it has been explained that any quantitative thing cannot have infinity in actuality. Now time is quantitative, and it is impossible that time have infinity in actuality, time having a finite beginning. Things predicated of a finite object are also, of necessity, finite. Every predicate of a body, whether quantity, place, motion, or time – that which is segmented through motion – and the sum of

⁴⁴ "While they (the mu'tazilites) take their point of departure from the Qur'an and tradition and use whatever philosophical tools they feel are appropriate to explain or support their faith, Al-Kindi, it appears, begins from a philosophical body of literature and tradition, accommodating it to religious doctrine wherever he can and asserting religious dogma wherever he must, but essentially aiming for a coherent, philosophical affirmation of the truth" Alfred L. Ivry and Ya'qūb Ibn-Isḥāq Al-Kindī. *Al-Kindi's Metaphysics: a Transl. of Ya'qūb Ibn Ishāq Al-Kindī's Treatise On First Philosophy (al-Falsafah Al-Ūlā)*. (Albany: State University of New York Press, 1974) 28.

⁴⁵ Craig, William Lane. *The Cosmological Argument from Plato to Leibniz*. (Eugene, OR.: Wipf and Stock, 2001) 61.

⁴⁶ Ibid.

everything which is predicated of a body in actuality, is also finite, since the body is finite. Therefore, the body of the universe is finite, and so is everything inferior predicated of it."

Al-Kindi begins his arguments by explaining that an actual infinity cannot exist in reality. "...a body is not eternal; and let us now say that it is not possible, either for an eternal body or for other objects that have quantity or quality, to be infinite in actuality, infinity being only in potentiality" This itself is an Aristotelian notion – in his *Physics*, Aristotle asserted "but an infinity in its completeness (an actual infinity)...must be quantitative" he too denied the existence of an actual infinite in reality. However, Aristotle continues "It is also clear that, if we deny the infinite all together, many impossible consequences would follow. Thus, time would have a starting point and a stopping point". ⁴⁹Aristotle created the category of the potentially infinite to account for such situations in which he considered it necessary. Kindi allows time to be potentially infinite, but argues that as it is not actually infinite yet quantifiable, time must be actually finite. He goes on to say that body, time, and motion are limited by each other as they necessitate each other: if one is finite, the other two must be finite as well, and as finite must have been created.

2. Argument from composition: "Body is...composite, and if there was not motion there would not be body, and body and motion thus are not prior to one another." 50

⁴⁷ Alfred L. Ivry and Yaʻqūb Ibn-Isḥāq Al- Kindī. *Al-Kindi's Metaphysics: a Transl. of Yaʻqūb Ibn Ishāq Al-Kindī's Treatise On First Philosophy (al-Falsafah Al-Ūlā)*. (Albany: State University of New York Press, 1974) 67-69.

⁴⁸ Aristotle, and Richard Hope. *Aristotle's Physics*. (Lincoln: University of Nebraska, 1961) 49.

⁴⁹Ibid., 52.

⁵⁰ Alfred L. Ivry and Yaʻqūb Ibn-Isḥāq Al- Kindī. *Al-Kindi's Metaphysics: a Transl. of Yaʻqūb Ibn Ishāq Al-Kindī's Treatise On First Philosophy (al-Falsafah Al-Ūlā)*. (Albany: State University of New York Press, 1974) 73.

Al-Kindi borrowed heavily from Philoponus in his second proof⁵¹, in which he described the composition of bodies as requiring motion and time. This proof served to counter the thinking that the universe could have existed in a timeless, motionless state before God moved it and thus started time: body and motion are inseparable.

3. Argument from time: "...the temporally infinite can never be traversed so as to reach a definite time. However its termination at a definite time exists..."52

His third argument rests on the point that an infinite cannot be traversed, a case that Kindi believed would be required with an infinite past as "termination at a definite time exists". As the given moment of time has actually arrived, an infinite past would imply a traversal of the infinite, which is impossible. Therefore, the past must be finite.

Establishing the world as finite, Al-Kindi proceeds to complete the Kalam argument through proving the impossibility of "a thing to be the cause of the generation of its existence"⁵³. Kindi reasons:

"If a thing were non-existent, and its essence were non-existent, then it would be nothing, and its essence would be nothing, and nothing is neither a cause nor an effect, for both cause and effect are predicated only of something which has existence of some sort.

Therefore it is not the cause of the generation of its existence, since it is no cause whatsoever"

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⁵¹ Craig, William Lane. *The Cosmological Argument from Plato to Leibniz*. (Eugene, OR.: Wipf and Stock, 2001) 64.

⁵² Alfred L. Ivry and Yaʻqūb Ibn-Isḥāq Al- Kindī. *Al-Kindi's Metaphysics: a Transl. of Yaʻqūb Ibn Ishāq Al-Kindī's Treatise On First Philosophy (al-Falsafah Al-Ūlā)*. (Albany: State University of New York Press, 1974) 74.

⁵³ Ibid., 76.

⁵⁴ Ibid.

In other words, nothing cannot cause something – there must be some first eternally existent cause. Kindi probably included this for completeness' sake, as there would be no serious contention to the causal premise until the 18th century. In order to distinguish this from the Falsafa principle of causation, one must understand the difference in what "cause" meant to the Mutakallimun and the Falsafa. In context of the Kalam argument, a cause was free and preceding its effects, while Falsafa required a cause to necessarily accompany its effect.⁵⁵

Saadia Gaon (882-942 C.E.)

Jewish philosopher of religion, most of Saadia Gaon's Kalam arguments were restatements of those of Philoponus or Al-Kindi. His most significant argument, based on the traversal of infinity, is very similar to Al-Kindi's, and thus will not be repeated. One of his more unique contributions lied in his analysis of Zeno's paradox and his application of it to this argument. He presented it as follows:

"It has come to my notice that a certain heretic in conversation...objected to this proof (finitude of the world based traversal of infinity). He said: 'It is possible for a man to traverse that which has an infinite number of parts by walking. For if we consider any distance which a man walks, be it a mile, or an ell, we shall find that it can be divisible into an infinite number of parts"56

In response, Gaon asserted that infinite divisibility was a matter of the imagination rather than reality. It could be said that he denies even the *actual* existence of a potential infinite to dismiss the paradox's challenge to the argument from time. A modern response to Zeno's Paradox that

⁵⁵ Craig, William Lane. *The Kalām Cosmological Argument*. (Eugene, OR: Wipf and Stock, 2000) 11.

⁵⁶ Sa'adia, Ben Joseph, Alexander Altmann, and Daniel H. Frank. *The Book of Doctrines and Beliefs*. (Indianapolis: Hackett Pub., 2002) 57.

accepts the existence of the potentially infinite might reply that one can traverse the potential infinite, but not the actual infinite. An actually infinite amount of time could not be traversed just as an actual infinite distance could not, while both a potentially infinite distance and time by divisibility can.⁵⁷ Regardless, an infinite past, according to Gaon, would constitute an actual infinite.

Al-Ghazali (1058-1111 C.E.)

Perhaps no other theologian was as opposed to ideas outside of his religion as Al-Ghazali. He presented the strongest version of the Kalam cosmological argument and offered serious refutation to the Falsafa argument, almost completely negating its validity in Muslim thought. To Ghazali, the advocacy of an eternal universe was tantamount to the promotion of atheism. His argument is as follows:

- 1. Everything that begins to exist requires a cause for its origin
- 2. The world began to exist
 - a. There are temporal phenomena in the world
 - b. These are preceded by other temporal phenomena
 - c. The series of temporal phenomena cannot regress infinitely
 - d. Therefore, the series of temporal phenomena must have had a beginning
- 3. Therefore, the world has a cause for its origin: its creator

⁵⁷ Craig, William Lane. *The Kalām Cosmological Argument*. (Eugene, OR: Wipf and Stock, 2000) 40.

⁵⁸ Craig, William Lane. *The Kalām Cosmological Argument*. (Eugene, OR: Wipf and Stock, 2000) 43.

Unlike Kindi, Ghazali based his argument off temporal phenomena rather than time itself.⁵⁹ Time may regress infinitely, but it would be absurd to say occurrences in time do.⁶⁰ The Falasifa must admit the finitude of the universe in time, if not time per se. For Ghazali, God is not simply the first temporal cause, but the total, continuous cause, evidenced by his belief in metaphysical atomism. According to Ghazali the one and only cause of everything was God – secondary causality simply did not exist. The movement of God is not the first temporal cause, it is the only temporal cause – temporal phenomena cannot occur without God causing them.

Another important contribution of Ghazali is his answering of the Falsafa challenge to Kalam: "Why then does His (God's) will specify that the world shall be created at one particular time, rather than bring about its existence from eternity?" If time is finite, God would have to have chosen one moment to create above all others, which is impossible as all moments are the same. Ghazali responds by presenting a hypothetical scenario: a starving man is presented with two identical dates, and told he can only have one. How will he choose? In reality, rather than gazing indecisively for eternity, the man will actually take one or the other, as "...it is the very nature of the will to simply choose, even when options are identical". Ghazali thus obviates this challenge by asserting that it would simply be God's will that the world was created at a

⁵⁹ Ibid., 49.

⁶⁰ Ghazali granted the Falsafa presupposition that time could potentially regress infinitely, but it is absurd to say that temporal events can, if they all spring from a source of change in a non-infinite hierarchal regression, e.g. the regression of the falsafa argument.

⁶¹ Al-Alousi, Ḥusām Muḥyī Al-Dīn. The Problem of Creation in Islamic Thought: Qur'an, Hadîth, Commentaries, and Kalâm, 238-239.

⁶² Craig, William Lane. *The Cosmological Argument from Plato to Leibniz*. (Eugene, OR.: Wipf and Stock, 2001) 56.

particular moment.⁶³ Ultimately, Ghazali rightly believes that the question is invalid – "according to us, time... [was] created"⁶⁴ Questions of time do not apply to the actions of a timeless entity.⁶⁵

The aforementioned modern answer to this question would simply be that God is outside of time, and that God did not change to create at any "moment" as he did not exist in a moment by moment temporal sense prior to creation. To many of Ghazali's predecessors, God was eternal, not timeless. He did not transcend time, as Plato asserted and Ghazali suggested, but existed "forever", creating the universe *in* time. The universe had a beginning in time, time itself did not: to most Mutakallimun, God existed from eternity, choosing to create at some moment in eternity.

Falsafa

"Falsafa" is the Arabic word for "philosophy", a fitting term for a Muslim school of thought that based so much of its beliefs on Aristotle. The cosmic worldview of the Falsafa thus featured an eternal universe with an eternal God creating or "emanating" from eternity. Fourth century theologian St. Augustine spelled out the distinction of the Falsafa argument from Kalam – he writes:

"They (the philosophers) somehow contemplate a beginning in causation rather than a beginning in time. Imagine, they say, a foot that has been in the dust since eternity: a

⁶³ Ibid., 57

⁶⁴ Al-Ghazali, and Michael E. Marmura. *The Incoherence of the Philosophers*. (Provo (Utah): Brigham Young UP, 2000) 20.

⁶⁵ Craig, William Lane. The Kalām Cosmological Argument. (Eugene, OR: Wipf and Stock, 2000) 48.

footprint has always been beneath it, and nobody would doubt that the footprint was made by the pressure of the foot''66

Naturally, their arguments for the existence of God were posed in context of this eternal worldview, though not necessarily proving the world's eternity over its finitude in the arguments themselves.

Prominent philosopher Al-Kindi, though himself a promoter of Kalam argumentation for God's existence, characterized the Falasifa's mindset as opposed to that of the Mutakallimun and perhaps covertly suggested the reasoning behind the Mutakallimun's aforementioned disgust of Falsafa:

"We ought not to be ashamed of appreciating the truth and of acquiring it wherever it comes from, even if it comes from races distant and nations different from us. For the seeker of truth nothing takes precedence over the truth..."⁶⁷

From this it can be inferred that at least part of the reason the Mutakallimun (Ghazali in particular) were so opposed to philosophy was that they were abhorrent, or even embarrassed, of the idea that truth could be found anywhere other than their own Islam.

Al-Farabi (872-950 C.E.)

The Contingency argument traces its roots to the Falsafa school of thought. The argument's founder Al-Farabi inserted categories of necessity of existence into theistic philosophy.⁶⁸ "Existents are of two kinds. In one of them, when the thing itself is considered, its

⁶⁶ Augustine. The City of God. Book X Ch. 31.

⁶⁷ Ivry, Alfred L., and Yaʻqūb Ibn-Isḥāq Al- Kindī. *Al-Kindi's Metaphysics: a Transl. of Yaʻqūb Ibn Ishāq Al-Kindī's Treatise On First Philosophy (al-Falsafah Al-Ūlā)*. (Albany: State University of New York Press, 1974) 58.

⁶⁸ Craig, William Lane. *The Cosmological Argument from Plato to Leibniz*. (Eugene, OR.: Wipf and Stock, 2001) 76.

existence is not necessary; this is called 'possible of existence'. In the second, when the thing itself is considered, its existence is necessary; this is called 'necessary of existence'."⁶⁹An object's placement into one of these categories was determined by its essence (the thing itself considered). For Al-Farabi, the sole necessary being was God, in whom essence and existence were inseparable. The Contingency argument employed this relationship between necessary and contingent beings to prove the existence of God.

<u>Ibn Sina (980-1037 C.E.)</u>

The contingency argument's mantle was next taken up by Ibn Sina, who reformed Farabi's necessary/possible being distinction to conclude the logical necessity of the necessary being. Sina was first and foremost a Failasuf – "...it cannot be denied that for him...God's highest gift to man was not faith but reason" His unorthodox ideas would ultimately be rejected in the Muslim world, as they were singled out along with Farabi's in Ghazali's crushing rebuttal of philosophy in Islam. His lasting influence lay in the rediscovery of his works in the west, where his version of the argument from contingency would be discovered by Aquinas and developed into the Third Way. ⁷¹

Craig schematizes Sina and Farabi's cosmological argument from contingency as follows:⁷²

- 1. Whatever has being either must have a cause for its being, or have no cause for it
 - a. If it has a cause, it is contingent
 - b. If it does not have a cause, it is necessary

⁶⁹ Al-Farabi. *Uyun al-masail*

⁷⁰ Avicenna, and A. J. Arberry, Avicenna on Theology, (Dubai: Kazi Publications, 2007) 6.

⁷¹ Craig, William Lane. *The Cosmological Argument from Plato to Leibniz*. (Eugene, OR.: Wipf and Stock, 2001) 92.

⁷² Ibid., 96

- 2. Every being is either contingent or necessary
- 3. If it is necessary, then it exists
- 4. If it is contingent, then a necessary being exists because
 - a. A contingent being requires an existential cause
 - b. If this cause is also a contingent, then there is also a series of contingent reasons
 - c. Such a series cannot be infinite
 - d. Therefore, such a series must terminate in a necessary being
- 5. Therefore, a necessary being exists

The difference between Sina and Farabi's versions of the argument largely lay in their possiblenecessity distinction.⁷³ To Farabi, anything that had the possibility of not existing at some time
was contingent, while the necessary being existed eternally, and could not *not* exist. On the other
hand, Sina defined contingent beings as being "caused" in the fullest Falsafa sense of the word,
that which necessarily accompanies its effect. Sina writes: "Considered in its essence it is
possible, considered in its relation to that other being it is necessary, and, the relation to that
other being considered as removed, it is impossible"⁷⁴ To Ibn Sina, even contingent beings were
"actually necessary" in relation to their necessary cause, and possible only in their essence alone,
a definition that coincided with his doctrine of emanation. It is only the being which is both
actually necessary and "logically necessary" in its essence itself that could fully be called
necessary – God. This unique perspective of logical necessity introduced an ontological tinge to

⁷³ Yaran, Cafer S. *Islamic Thought on the Existence of God: with Contributions from Contemporary Western Philosophy of Religion*. (Washington, D.C.: Council For Research In Values and Philosophy, 2003) ch. 6.

⁷⁴ Ibn Sina, *Al-Najat Fi al-Hikmah al-Mantiqiyyah wa al-Tabi'ah al-ilahiyyah*, 2nd ed., ed. Muhie al-din Sabri al-Kurdi (Cairo: al-Saada Press,1938), 224.

the cosmolgical argument, which would later be identified and challenged by Immanuel Kant in the 18th century.

Al-Ghazali would reject Farabi and Sina's argument from contingency on the grounds that contingency and necessity necessitate each other, and thus one could conclude the necessity of the universe from the existence of God⁷⁵, a thought repulsive to traditional Kalam. The Falasifa, in turn, rejected Kalam cosmology, holding that God did not at any point create the universe and time, citing the inevitable question that they believed must arise – why did God create when he did, why did he create sooner rather than later, or later rather than sooner? God would himself have to be bound by time in order to perform the act of creation. Ironically, through refuting Farabi and Sina's positions in his work "Tahafut al-Falasifa" (Incoherence of the Philosophers), Ghazali himself promoted them. Farabi and Sina were in a sense intellectual aristocracy, using Greek terminology unfamiliar to ordinary Muslims. Ghazali had by stating them in a coherent and accurate way rendered the philosophers' arguments comprehensible to the general public.⁷⁶

St. Thomas Aguinas (1225-1274 C.E.)

Probably the most influential Christian thinker in the history of the Falsafa cosmological argument is St. Thomas Aquinas, who based three of his five Ways to prove God's existence on the argument. It should be said that, though his Ways were reformulations or clarifications of

⁷⁵ In other words, the universe would too necessarily exist, rather than it coming into existence from God's own free will. "If it is possible to reason from a contingent world to a necessary God, it may be equally thought possible to reason from a contingent God to a necessary world" (Goodman. *Creation*, 77).

⁷⁶ Al-Ghazali, and Michael E. Marmura. *The Incoherence of the Philosophers*. (Provo (Utah): Brigham Young UP, 2000) xv.

those cosmological arguments of his predecessors, Aquinas brought a unique perspective to the question of the argument's temporal setting. This uniqueness can be found in the juxtaposition of his method with his beliefs: though he personally believed in the finitude of the past (as per Catholic doctrine at the time), his arguments for God's existence assume the contrary in a seemingly specious manner. Yet it is important to recognize the fact that Aguinas himself did not disagree with the finitude of the universe, nor accept either the atomism of Kalam or the emanationism of Falsafa – he in fact offers a refutation of emanationism in his "Summa Theologica". 77 His rejection of Kalam argumentation is based the following grounds: after personally considering both sides, Aquinas came to the conclusion that reason alone could not prove the eternality of the universe one way or the other. However, he did not only dismiss Kalam argumentation as faulty, but also as superfluous – should the universe be finite, as Aguinas believed, it would be undeniably obvious that a God must exist – the position presupposing a finite universe wasn't even worth debating: "The most efficacious way to prove that God exists is on the supposition that the world is eternal. For, if the world and motion have a first beginning, some cause must clearly be posited to account for this origin of the world and of motion."⁷⁸ Aguinas considered belief in a finite universe fundamentally inseparable with belief in God (though not necessarily the converse), and furthermore believed that it could only be realized through divine revelation.⁷⁹ However, Aquinas writes "It is clear that there is no

⁷⁷ Aguinas, Thomas. *Summa Theologica*. Part 4 Question 45.

⁷⁸ Aquinas, Thomas. Summa Contra Gentiles, Book 1 ch.13. p.30.

⁷⁹ Craig, William Lane., and Quentin Smith. *Theism, Atheism, and Big Bang Cosmology*. (Oxford, England: Clarendon, 1993) 256.

contradiction in saying something made by God has always existed"80 and therefore considers his arguments valid – Aquinas believed that, as past and future events did not actually exist, an eternal past would not constitute an actual infinity.81 Under him, the cosmological pendulum would swing back from the dominance of temporal-regression based argumentation.

Aquinas attributes his first two Ways to Aristotle.⁸² They deal with motion (change) and causation, respectively.

The First Way

- 1. Things are changing
- 2. Everything that is changing is either self-changed or changed by another
- 3. Nothing is self-changed
- 4. The series of things changed by another cannot be infinite
- 5. Therefore, the series of things changed by another must be finite and terminate in a first unchanging cause of change

Though Aquinas attributes this Way to Aristotle, he reads his own meanings into this kinematics-based proof.⁸³ While Aristotle's proof was based purely on physical motion, arguing up to a prime mover, Aquinas's reiteration can more correctly be said to be centered around

⁸⁰ Aquinas explains: "If it be impossible that something caused by God has always existed, it will be so either because God could not make [it] or because such a thing could not be made, regardless of God's ability to make it." (Aquinas, Thomas. *On the Eternity of the World*) 1) In light of God's omnipotence, none would disagree with the first point, as to the second, Aquinas does not come to a definite conclusion but cites arguments for both sides.

⁸¹ Craig, William Lane., and Quentin Smith. *Theism, Atheism, and Big Bang Cosmology*. (Oxford, England: Clarendon, 1993) 25.

⁸² Summa Contra Gentiles 1 13 2

⁸³ Craig, William Lane. *The Cosmological Argument from Plato to Leibniz*. (Eugene, OR.: Wipf and Stock, 2001) 164. I follow Gilson and Joseph Owens and Stephen Weber in taking Aquinas to have intended a metaphysical interpretation rather than a purely physical interpretation of this proof.

metaphysical change, which itself encompassed physical motion.⁸⁴ This metaphysical change involved the transition from potentiality to actuality – "For motion is nothing else than the reduction of something from potentiality to actuality".⁸⁵ Aquinas provides the example of fire making wood, which is potentially hot, actually hot. When it is actually hot, it cannot be potentially hot, but rather is potentially cold. As it is impossible for the potential to actualize itself, so too is it impossible for a thing to move itself, which is what self-motion would entail. Therefore, nothing is self-moved, or self-changed. This series of change cannot regress infinitely – in the hierarchal sense, as motion from mover to moved occurs simultaneously: nothing would be moving now if the ultimate unmoved source of motion did not exist.

As everything in the universe is in motion, motion and being in the universe are inseparable, therefore, as motion must arise from an ultimate unmoved mover (as nothing is self-changed), so must being. In other words, Aquinas proceeds from Aristotle's cause of movement to his own cause of being. 86 Aquinas therefore moves the conclusion of the argument from motion away from the Greeks' artificer-mover to what can fully be called a creator-God, albeit a creator of a possibly temporally eternal universe.

The Second Way

- 1. We observe in the world causes ordered in a series.
- 2. Something cannot be self-caused
- 3. Such a series cannot be infinite

⁸⁴ Craig, William Lane. *The Cosmological Argument from Plato to Leibniz*. (Eugene, OR.: Wipf and Stock, 2001) 162.

⁸⁵ Aquinas, Thomas. Summa Theologica. Part 1 Question 2 Article 1

⁸⁶ Craig, William Lane. *The Cosmological Argument from Plato to Leibniz*. (Eugene, OR.: Wipf and Stock, 2001) 165.

4. Therefore, there must be a first cause

The Second Way can be said to be the foundational Falsafa argument. While the First Way dealt with the cause of change, and the Third the cause of being, the Second deals directly with causality itself. Here, the causal principle is asserted: there does exist in the world a causal regression. For Aguinas, the causal system regressed from humans to celestial bodies to God: "Aguinas believes that in human procreation the sun and the heavenly bodies constitute a hierarchy of efficient causes that work through men as instrumental causes in the generation of new persons". 87 Aquinas's absurd and archaic Aristotelian astronomical system aside. given modern scientific context a causal series might be appropriately identified.⁸⁸ The possibility of one's existence depends on many causes above oneself, such as the existence of the sun for heat required to live. The existence of the sun, in turn, could be said to depend its proper placement and conditions in the universe. It is in this modern scientific sense that one can conclude the existence of an existential causal regression.⁸⁹ In this regression, if one eliminates one cause, all contingent effects are eliminated: if the sun did not exist, the earth would not feel its heat, and humans could not exist. Nothing in this regression can be self-caused, as self-causation is impossible: an object's essence cannot cause its existence, or, as stated previously, the potential cannot actualize itself. The existence of this causal regression can therefore be accounted for in two ways: it can regress an infinite causal chain, or can end in an uncaused being. Aquinas concludes the latter – "But if in efficient causes it is possible to go onto infinity, there will be no

⁸⁷ Craig, William Lane. *The Cosmological Argument from Plato to Leibniz*. (Eugene, OR.: Wipf and Stock, 2001) 177.

⁸⁸ Ibid.

⁸⁹ One must continually bear in mind that Aquinas is using the Falsafa sense of the word cause, that which necessarily accompanies its effect. (Ibid. 55.)

first efficient cause, neither will there be an ultimate effect, nor any intermediate efficient causes; all of which is plainly false". 90 Thus, a first cause must exist that accounts for the causal chain – this must be God, as it accounts for the existence of the universe. 91

As with all his Ways, St. Thomas Aquinas's Third way, dealing with contingency and necessity, is largely misrepresented or misunderstood. ⁹² Here the argument will be divided into two parts: the first part proving the existence of necessary beings, and the second proving the existence of one absolutely necessary being. It can be presented as follows:

The Third Way

Part 1

- 1. There exists in the world beings whose existence is merely possible, or contingent
- 2. In an infinite amount of time, all possibilities would be realized, including the possibility that all possible beings ceased to exist
- 3. Something still exists
- 4. Therefore not all beings are contingent beings some necessary being(s) must exist that cannot not exist

Part 2

1. Necessary beings must get their necessity from somewhere else

⁹⁰ Aquinas, Thomas. Summa Theologica. Part 1 Question 2 Article 1

⁹¹ Craig, William Lane. *The Cosmological Argument from Plato to Leibniz*. (Eugene, OR.: Wipf and Stock, 2001) 180.

⁹² William Lane Craig writes: "Thomas of Aquino is one of those philosophers whom nearly everybody quotes but whom few understand. Probably more ink has been spilled over his celebrated Five Ways for proving the existence of God than over any other demonstrations of divine existence, and yet they remain largely misunderstood today." (Ibid., 158.)

- 2. There cannot be an infinite regression of necessary beings getting their necessity from other necessary beings
- 3. Therefore, there must be an absolutely necessary being that is the cause of necessity in other things

Crucial to comprehension of these points is the contingency-necessity distinction of the Falasifa. Possible beings' existences depend upon, or are contingent upon, other factors in order for them to exist, and therefore do not have to exist. Necessary beings must always exist. In an infinite time with infinite possibility, the possibility of all possible beings non-existing would occur. Something still exists, therefore there must exist necessary beings that must exist, and can recreate possible beings. Aquinas believed there were many such beings, which included heavenly bodies, angels, and matter itself⁹³. The second part of the argument utilizes the same infinite series of rank line of reasoning applied in the First and Second Ways – there cannot exist an actual infinite amount in reality, and an infinite series of necessary eternally existent beings certainly would constitute an act infinite.

Though Hume would offer a considerable confutation to Falsafa cosmology that causation *could* regress infinitely,⁹⁴ Aquinas's third way circumvents this rebuttal: the impossibility of an infinite regression of infinite beings is incontrovertible, as it would entail an actually infinite amount of beings *eternally existing*, which, as one does not observe there to be an infinite number of such beings in the universe, is entirely impossible. An undefined cause could pass in and out of existence in an infinite time, but by definition a necessary being could

⁹³ Craig, William Lane. Reasonable Faith: Christian Truth and Apologetics. 3rd ed. (Wheaton, IL: Crossway, 2008)

⁹⁴ Donald Palmer, *Does the Center Hold? Second Edition*, Second Edition ed. (Mountain View, CA: Mayfield Publishing Company, 1996), 158.

not: necessary beings are eternal, according to Aquinas, as they cannot not exist. Aquinas's Third Way, then, can be viewed as a specification of his Second Way of causation as it relates to the relationship between necessity and possibility that unquestionably overcomes the infinite causal regress question Hume poses to the Cosmological argument.

Before proceeding, one must return to an additional critical point regarding the philosophers – it can be argued that they were truly the crux of the debate on the proper temporal premise to the cosmological argument. In context of Philoponus, the Mutakallimun, the Falasifa, and Aquinas, one can see that picking the proper temporal setting of the cosmological argument rested more on an acceptance or rejection of Aristotle and the eternal premise he proposed rather than the arguments themselves. Both Falsafa and Kalam can be shown to be internally consistent, but the choice of which argument to accept depends on one's view of the universe's ultimate temporality.

St. Augustine (354-430 C.E.)

Augustine's discussion of time is critical to a defendable version of both the Kalam and Falsafa cosmological arguments. In his "Confessions", he poses the following question: "What was God doing before he made heaven and earth?" Should God be eternal in time, he would have to change to create the heavens and the earth, to which the Mutakallimun would reply that he willed creation to occur at a particular moment from eternity, while the Falasifa would conclude that creation must be eternal, spawning their aforementioned theory of emanation.

Augustine, however, arrives at a different conclusion: the question does not even apply to God, as he transcends space and time. He writes:

⁹⁵ Augustine. *Confessions*, book 11, ch. X.

"In the eternal...nothing passes away, but the whole is simultaneously present...but no temporal process is wholly simultaneous...For thou madest that very time itself, and periods could not pass by before thou madest the whole temporal procession" ⁹⁶

Time then is created by God, whether it is eternal or not, and God therefore himself must be transcendent of time. The "God" both the Kalam and Falsafa cosmological arguments prove requires this view in order to negate legitimate arguments to each of their conclusions – an eternal God in time would either have to change to create a finite world or necessarily create the world from eternity, both of which are impossible.

David Hume (1711-1776 C.E.)

The first philosopher to offer a serious confutation to the cosmological argument was David Hume in the 18th century. Hume's theory of knowledge allegedly undermines the entirety of the cosmological argument. According to Hume, "causes and effects are discoverable, not by reason but by experience". 97 He explains:

"Adam, though his rational faculties be supposed, at the very first, entirely perfect, could not have inferred from the fluidity and transparency of water that it would suffocate him, or from the light and warmth of fire that it would consume him. No object ever discovers, by the qualities which appear to the senses, either the causes which produced it, or the effects which will arise from it; nor can our reason, unassisted by experience, ever draw any inference concerning real existence and matter of fact" 98

⁹⁶ Ibid., book 11 ch .XI, XIII.

⁹⁷ David Hume, *Enquiry Concerning Human Understanding (Great Books in Philosophy)* (Buffalo, N.Y.: Prometheus Books, 1988), 30.

⁹⁸ Ibid.

As we do not observe the creation of the universe personally, Hume contends, we have no basis in experience to logically infer anything about its cause. To be clear, Hume is not saying that the universe itself was uncaused – "…I never asserted so absurd a Proposition as that anything might arise without a Cause" He is rather asserting the futility of attempting to establish the notion of universal causality as a premise – as we do not experience all cause-effect relationships, we cannot logically validate the causal premise of the cosmological argument.

Hume also rejects the notion of the impossibility of an infinite regression of causes. According to Hume, the concept of a beginning to any series was arbitrarily imposed by the finite human mind: no matter how far one regresses temporally or causally, one can always imagine another preceding event or cause. The potency of this rebuttal, however, depends on how one views causation: in a horizontal series, such as the temporal regression advocated by Kalam, this is a serious contention, while in a hierarchal vertical series of causes as advocated by Aquinas's Second Way, it is not necessarily valid. However, there is no sense-experience with which we can prove this hierarchal series, so Hume concludes that we must remain skeptical about the third premise, and when one must settle for skepticism, the argument is not necessarily a proof.

Immanuel Kant (1724-1804 C.E.)

18th century philosopher Immanuel Kant attacked the cosmological argument, arguing that it reduced to the ontological, which he had concluded to be invalid. Kant concedes that the

⁹⁹ George Finger Thomas, *Religious Philosophies of the West* (New York: Charles Scribner's Sons, 1965), 203.

¹⁰⁰ Donald Palmer, *Does the Center Hold? Second Edition*, Second Edition ed. (Mountain View, CA: Mayfield Publishing Company, 1996), 158-159. A vertical regression of causes (causation in the Falsafa sense) occurs simultaneously, and logically requires an ultimate cause for the echelon to even exist.

argument does start out from experience, in his view a valid form of argumentation.¹⁰¹ However, he argues against what he accuses to be the ontological assumption that there must necessarily exist a highest order, or "most real"¹⁰² being, whether it be in a causal, motive, or existent series. He writes:

"In order to ground itself securely, this (cosmological) proof gets a footing in experience...but avails itself of this experience only to make a single step, namely to the existence of a necessary being in general...For absolute necessity is an existence from mere concepts...Thus it is really only the ontological proof from mere concepts that contains all the force of proof in the so-called cosmological proof". 103

This rejection of the cosmological argument as ontological would nullify that argument's validity in the eyes of most of the philosophical world. However, in his objection to the proof, Kant himself does not confront the logical problems inherent in an infinitely regressing series, namely the impossibility of an actual infinite. Necessary being is not an idea conceived as a premise of the argument but is rather the conclusion of the argument: the only way to account for the existence of possible beings, which according to Kant we experience and therefore can assert as a premise, is to conclude a necessary being that allows the sustained existence of possible beings in an infinite universe. It seems that one might even properly accuse Kant of basic equivocation of logical necessity and actual necessity. Regardless of whether Kant's disproof of logical

¹⁰¹ "...the (cosmological)proof really starts out from experience, so it is not carried out entirely *a priori* or ontologically" Immanuel Kant, *Critique of Pure Reason (The Cambridge Edition of the Works of Immanuel Kant)*, 0 ed. (New York: Cambridge University Press, 1999), 570.

¹⁰² Immanuel Kant, *Critique of Pure Reason (The Cambridge Edition of the Works of Immanuel Kant)*, 0 ed. (New York: Cambridge University Press, 1999), 570.

¹⁰³ Immanuel Kant, *Critique of Pure Reason (The Cambridge Edition of the Works of Immanuel Kant)*, 0 ed. (New York: Cambridge University Press, 1999), 571

necessity is valid, the concept does not even pertain to the cosmological argument. There actually exists a temporal, motive, causal, or being regression, which must actually be accounted for, yet Kant contented himself with redefining necessary being, and himself posed no answer to the problems posed by cosmological argument.

Thesis Proof

Many contemporary philosophers and theologians view the question of the eternity of the world as tantamount to the question of God's existence. Following in the footsteps of Aquinas, they reason that if time is finite and the world did not always exist, the undisputed conclusion must be that God created it (therefore leading them to reject its past finitude). Should the world be eternal, the conclusion arrived at is usually along the lines of "The universe is all there is and all there will be". Both these statements have been shown to be false: there are legitimate arguments for and against the existence of God in both worldviews. There are also legitimate arguments for and against both worldviews themselves, as has been shown by the historic struggle between Kalam and Falsafa. Ultimately, through the cosmological argument, both an eternal and finite universe can be shown to necessitate God to account for its existence.

First, suppose a finite past:

How did the universe, and time itself, come into existence? If the world began to exist, it must either be self-caused or caused by another – clearly, nothing that begins to exist can be *un*caused. Furthermore, anything that begins to exist has to have a cause for its origin: finite beings cannot be self-caused. Therefore the finite world has a cause for its origin: its creator, God.

Now suppose an infinite past:

We observe things to change: in the universe, everything changes. Change can arise in being in one of two possible ways: it is self-changed, or it is changed by another. Nothing can be self-changed, therefore all beings in the universe are changed by another. This regression of changers cannot continue to infinity, or be circular. Therefore, a first changer that is entirely unchanged must exist to account for change in the universe, God.

There exists in the universe an existential causal regression. The continued existence of man is contingent upon the continued existence of the earth, which in turn is contingent upon the continued existence of the sun, etc. This causal regression either regresses infinitely, or ends in a being that is either self-caused or uncaused. It cannot regress infinitely as it would entail an actually infinite amount of causers. Nothing can be self-caused, for this would entail a potential actualizing itself, which is impossible. The universe cannot itself be uncaused, as it is limited and therefore not omnipotent. Therefore, the existential causal regression must end in a being which is itself entirely uncaused, God.

Being may be defined into two categories: that which is necessarily existent, which at all times must exist, and that which is possibly existent, which at all times may or may not exist. In

an infinite amount of time, all possibilities would be realized, a premise the atheist cannot logically deny. As all possibilities are realized, possible beings fall out of existence. There would be a time in eternity in which all possible beings do not exist, from which nothing more could proceed. However, something still exists. Therefore a necessary being(s) must exist in order to account for existence in eternity. A necessary being, however, must get its necessity from somewhere else, in a series that cannot regress to infinity, as it would constitute an actually infinite number of necessary beings, which is absurd. The series must terminate in an absolute necessary being that is the cause of necessity in other things, God.

What is existence? Existence entails existence in the present: things that existed in the past but have ceased to exist do not exist and things that will exist at some time in the future do not exist. Time can be thought of as change in existence; the present is the set of all existence. Existence in the present is existence. If all things that exist are possible, then the very existence of the present is only possible. How, then, does it exist for eternity? A necessary being is an eternal being, one upon which the affirmation of existence always had and will hold true for the present. Some necessary being must exist that mandates the present (which is existence itself) in order for the present to be necessary and exist from eternity. The present, encompassing existence, would not be necessary if all its components were only possible. Therefore there must be some actually necessary being that mandates the existence of the present in order for it to be from eternity. This necessary being, whose essence is identical to his existence, is God. God, who entails omnipotence, is the only conceivable entity that could necessitate existence. The only way for the present to exist in eternity is through God.

We can thus present the following combined cosmological argument for God's existence:

1. The universe is either

- A. Finite (with a beginning in time)
 - i. Everything that begins to exist has a cause for its origin
 - ii. The world began to exist (If rejected continue to B)
 - a. Present existence in eternity would entail the traversal of an infinite past to reach the present, which is absurd
 - b. The world does not have the infinite capacity required to sustain it eternally
 - iii. Therefore the world had a cause for its origin: its transcendent creator
 - iv. Therefore, for the world to be finite and exist, God must exist
- B. Eternal (without a beginning in time)
 - i. The First Way
 - a. Things are changing
 - b. Everything that is changing is either self-changed or changed by another
 - c. Nothing is self-changed
 - d. The series of things changed by another cannot be infinite
 - e. Therefore, the series of things changed by another must be finite and terminate in a first unchanging cause of change
 - ii. The Second Way
 - a. We observe in the world causes ordered in a series.
 - b. Something cannot be self-caused

- c. Such a series cannot be infinite
- d. Therefore, there must be a first cause

iii. The Third Way

- a. There exists in the world beings whose existence is merely possible, or contingent
- b. In an infinite amount of time, all possibilities would be realized,
 including the possibility that all possible beings ceased to exist
- c. Something still exists
- d. Therefore not all beings are contingent beings some necessary being(s) must exist that cannot not exist
- e. Necessary beings must get their necessity from somewhere else
- f. There cannot be an infinite regression of necessary beings getting their necessity from other necessary beings
- g. Therefore, there must be an absolutely necessary being that is the cause of necessity in other things

iv. A Proposed Argument from the Present

- a. The universe exists in the present
 - i. The past does not exist
 - ii. The future does not exist
- The present cannot exist in eternity "insomuch as its own nature dictates" if it is comprised of only possible beings

- The present, essentially a possible existent, would necessarily fall out of existence in eternity
- ii. The present does exist
- c. Something must account for the universe's existence in the present
 - i. Two types of beings exist: Necessary and Possible
 - a. Possible beings cannot account for existence in the
 present because they do not have to exist in the
 present
 - b. Necessary beings must exist in the present
 - ii. The being that accounts for the universe's existence in an eternal present must be necessary
- d. Necessary beings must get their necessity from somewhere else
- e. There cannot be an infinite regression of necessary beings
 - The series of necessary beings must end in a logically and actually necessary being
- f. God is the only necessary being who necessarily exists and thus can account for existence in the present in eternity.
- g. Therefore, for the present to exist in eternity, God must exist
- 2. Therefore, as God must exist in either a finite or eternal universe, and one of these universes actually exists, God exists

This argument can be compressed as follows:

1. The universe is either

- a. Finite
 - i. Kalam argument
- b. Eternal
 - i. Falsafa arguments
 - 1. The First Way (Motion)
 - 2. The Second Way (Causation)
 - 3. The Third Way (Being)
 - 4. An argument from the eternal present
- 2. Therefore, God exists

Modern science provides the facts that the universe is limited in size, and that it began in its current form around 13.7 billion years ago with the big bang. However, despite the scientific evidence presented for the universe's definite beginning, many atheists continue to hold to the theory of an eternal universe. The big bang, though lending itself to Kalam, does not necessarily disprove the contra. The stubborn atheist who objects to both philosophy and science in favor of the world's past eternity can therefore be challenged with Falsafa argumentation to render his/her atheism incompatible with any cosmic temporal worldview.

Rebuttals

Objections to A:

i. Everything that begins to exist has a cause for its origin – This principle cannot be demonstrated as we cannot experience all causation to determine it to be true (Hume).

Reply: Hume does grant, however, that certain truths can be known for certain, namely the mathematics and sciences. 104 But cannot the principle of causation be expressed mathematically? Very well, Hume's new standards for certainty shall be applied. In mathematical terms, 0+0 does not and can never = 2. But does not mathematics describe reality, and should not reality reflect this principle? This mathematical statement basically translates to "nothing can come from nothing", e.g. the causal principle. If Hume is to stick to his rebuttal, he must necessarily remain skeptical of the maths and sciences as well, which is absurd.

The atheist might further ask "What caused God?" The question of causation does not apply to God, as he is outside of space and time, and did not begin to exist. As Ghazali put it, *temporal phenomena* require a cause, and everything in the universe including the universe itself is bound by time. Additionally, to question God's causation one must first assume his existence. On this premise Craig writes "Most people do not really need convincing". ¹⁰⁵

ii. The world began to exist: a. Present existence in eternity would entail the traversal of an infinite past — An infinite past would not constitute an actual infinite, but a potential infinite Reply: The atheist who objects that the world and time itself can be eternal can be presented with the argument based on the impossibility of the traversal of infinity. The set of infinite presents in an infinite past would constitute an actual infinity, while the set of infinite presents in a finite past would constitute a potential infinity, an infinity by divisibility. Either the universe is finite as the infinite cannot be traversed, or some cause must be posited to account for this otherwise impossible traversal.

¹⁰⁴ George Finger Thomas, *Religious Philosophies of the West* (New York: Charles Scribner's Sons, 1965), 204.

¹⁰⁵ Craig, William Lane. *The Kalām Cosmological Argument*. (Eugene, OR: Wipf and Stock, 2000) 148.

ii. The world began to exist: b. The world does not have the infinite capacity required to sustain it eternally – The world not need possess this capacity all at once, but can infinitely regenerate its finite capacity to sustain its existence for eternity

Reply: The universe is limited, as it depends on matter for its existence, which requires change of form. As it is limited, it is not omnipotent; whatever is not omnipotent possesses only limited power, therefore the world cannot regenerate its existential capacity.

The Falsafa objections to the Kalam argument are as follows: 1) should the universe be finite, God would have to change in order to create the universe and 2) God would have to choose which moment to create from an infinite number of similar moments, which is absurd – therefore the past cannot be finite, and the Kalam argument is not a valid argument for God's existence. However, both objections rely on a faulty view of God – God would be eternal rather than timeless, as portrayed by Plato and Augustine. If necessary, the atheist at this point may be redirected to the Falsafa cosmological argument.

Objections to B:

i. The First Way If the universe always existed, there is no contradiction in saying that change too regresses infinitely

Reply: This objection rests on a faulty interpretation of change. Change does regress infinitely temporally in an infinite universe, but not causally, as nothing can be self-actualized. There must be an ultimate source of change eternally existent to account for other change.

ii. The Second Way – There can exist an infinite existential causal regression in the universe.

Reply: Should there exist an infinite simultaneous existential causal regression, there would be an actually infinite amount of causers existing in the present, which is absurd.

Objection: The Universe can end the causal regression as the self-caused entity

Reply: The universe itself cannot cause things to exist, and itself is not an exception to the causal rule as it is finite in being (there does not exist an actual infinite amount of being in the universe). The uncaused source of causation must transcend the universe to cause the universe.

iii. The Third Way – The very idea of necessary existence is an ontological concept, which has been proven to be indemonstrable. (Kant)

Reply: The cosmological argument proves necessary being based on possible being, which is experienced. The argument proceeds from a cosmological observation (possible beings exist) to logically deduce an ontological one (a necessary being must exist). Regardless, an explanation does exist for the existence of possible beings. As it is logically affirmed that there cannot be an infinite regression of possible being (one being in the chain could not exist, therefore causing all subsequent beings to not exist), there must actually be a necessary being to account for the continued existence of possible beings.

iv. A proposed argument from the present - a. The present cannot exist in eternity "insomuch as its own nature dictates" if it is comprised of only possible beings – The present has to exist by definition for eternity, it is itself necessary. The present, the set of existences, will always have some value, whether it be eternally constant, zero at one point, or varying at another.

Reply: If nothing existed, nothing could ever come from nothing, and there would be no present. It seems that the present is itself contingent upon existence, while time (change in present) is contingent upon motion (change in existence). Therefore, if existence is not necessary in and of itself, the present too is similarly unnecessary, and what is not necessary cannot be

exist to necessitate the present.

Objection: The universe itself is the necessary eternal being that necessitates the present.

Reply: The universe is made up of the sum of contingent beings, and therefore if the contingent beings ceased to exist, the universe itself would as well, therefore the universe is not necessary. Something outside the universe, then, must account for the existence of the universe and the present in eternity, God.

Conclusion

It has thus been shown that one can prove God's existence in both a finite and infinite universe. Which temporal setting of the cosmological argument, then, ought to be used to prove God's existence? If the atheist will not accept the finite worldview, the theist can proceed to show the requirement of God in the infinite worldview. If the atheist does accept the finite worldview, he/she can be confronted with the Kalam argument and required to explain how something can cause itself to exist from nothing. If the atheist sticks to the eternal worldview, there are a whole slew of Falsafa arguments for the theist to choose from to show the requirement of God's existence to. The theist can henceforth prove the necessity of God's existence both based on and regardless of whatever cosmic temporal presupposition the atheist happens to entertain.

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