

# Candidate 1 evidence

## **How convincing is the cosmological argument?**

In this dissertation, I will evaluate how convincing the cosmological argument is. I will aim to examine and analyse Aquinas' Three Ways and the Kalam Cosmological Argument, evaluating their strengths and weaknesses. I will also include a discussion regarding the refined and developed views of notable philosophers such as Al-Ghazali and William Lane Craig, as well as comparing similarities to establish which is the most convincing. Additionally, I will assess counterarguments, including David Hume's empiricism - whose critique presents major challenges against the cosmological argument. Finally, I will be exploring how modern science, such as quantum mechanics and major theories like the Big Bang, has developed arguments that question the basis of the cosmological argument. In considering a variety of reasonings, from rationalism and scientific to theological and philosophical, I will consider how convincing the cosmological argument is throughout the dissertation.

The cosmological argument is a traditional argument for God's existence, drawing its conclusion from an a posteriori premise. This is due to the argument being based on what one can see in the universe. The argument overall is based upon the belief that there is a primary cause behind the existence of the universe and is based on contingency. The most popular form of the argument is the one brought up by St Thomas Aquinas. After publishing his *Summa Theologica* in the 13<sup>th</sup> century, Aquinas combined scientific studies and dilemmas that arise when questioning God, writing these 'Five Ways' in a way to better the people's understanding of the existence of God. It is believed that Aquinas' first three ways make up the best-known cosmological argument.<sup>1</sup>

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<sup>1</sup> Jordan, Anne, Lockyer, Neil, Tate, Edwin, *Philosophy of Religion for A-Level*, OCR, 2004

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Aristotle believed that a moving object would grind to a halt unless it was pushed by an external force.<sup>2</sup> Of course, on the cosmic scale, this means the universe would grind to a halt if God did not move it. So therefore, if Aristotle is correct, this implies the universe would require an ever-present force that is continuously moving it. However, nowadays, now that we know about inertia—the fact that a moving object will stay in motion in the absence of an external force—one can conclude that there is no need to hypothesize an outside force.<sup>3</sup> Aquinas' First Way is based on motion and change. As was the claim by Aristotle that everything in the universe was in motion and required something to move it, Aquinas rejected the idea that this chain of motion would go on for infinity. He believed it impossible for A to be moved by B, B to be moved by C, and so on. In *Summa Theologica*, Aquinas stated:

*“Therefore, it is necessary to arrive at a first mover, put in motion by no other; and this everyone understands to be God.”*<sup>4</sup>

This implies an all-powerful entity that does not require any sort of source of motion but has the power to cause motion. Consequently, this belief must conclude that God is the prime mover, who initiated all movement but is unmoved Himself. As an implication, the idea of an infinite regress was immediately rejected as Aquinas believed it to be illogical. If all motion and dependency was infinite, then it would result in no ultimate source. However, many have gone against Aquinas' First Way, saying that it should be deemed invalid. This may be due to being based on incorrect physics from Aristotle. Overall, I believe this argument is easy to navigate as it takes the things in our universe

<sup>2</sup> <https://classics.mit.edu/Aristotle/physics.7.vii.html> [20/03/2025]

<sup>3</sup> <https://www.gutenberg.org/cache/epub/28233/pg28233-images.html> [21/03/2025]

<sup>4</sup> <https://www.gutenberg.org/cache/epub/17611/pg17611-images.html> [18/03/2025]

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into account. I still believe that the question, 'who began the chain?' occurs. The dilemma is still present. There must be some force that, at the beginning of time, was able to start the universe's motion. Whether it was the textbook God or another powerful deity, one is not sure. However, I believe this argument is more convincing than it is not.

Aquinas' second way is based upon causation. He observed that nothing in this universe can be the cause of itself and must have a cause to exist. For example, a tree cannot create the seed from which it grew, it is nothing but an effect of the seed. Therefore, according to Aquinas, the universe needs an uncaused cause. In similar fashion to his first way, Aquinas consequently rejects an infinite series of causes. As an implication, everything must require a cause, excluding one thing, that being God. Consequently, this means the universe must have a beginning and modern theories such as the Big Bang, were the effect of a superior being, which Aquinas believed to be God. Nonetheless, there are still a handful of counterarguments, which go against Aquinas' second way. The most common argument against this way is the question, why must this uncaused cause be God? Aquinas believed infinite regress to be illogical, resulting in the belief of a first cause. However, one may believe that Aquinas is doing nothing but assuming this first cause, that everything traces back to, is the Christian God. This implies that Aquinas is leaping to conclusions and making assumptions that the first cause is the omnibenevolent, omniscient, omnipotent God in world religion. This raises the question that Aquinas' argument does not actually prove the existence of God, but rather just a holy entity being labelled as 'God.' Another question that arises is why is there only one cause everything in this universe links to? How does one know that there are not

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multiple causes? On a much deeper level, one can ask oneself, how do we know the universe is not incomprehensible? Why must the universe have an ultimate creator, cause, or explanation? Aquinas' second way has failed to prove this potential theory that the universe may be meaningless and unfathomable. I believe this second way is rather similar to Aquinas' first way. I, too, believe it impossible for the universe to have come from nothing or for the chain of causation to be infinite. If everything in the universe has a cause and some form of source, then bringing up the argument of the universe being unintelligible to humans looks absurd. Why is it that everything has a cause, but the universe may not? This counterargument looks like nothing but a way to desperately disprove Aquinas' argument, with no factual evidence or thought going into it. Due to this, I believe Aquinas' second way is believable and credible.

Finally, Aquinas' third way is based upon contingencies and necessities. Aquinas believed that everything in this universe is either a necessary being or a contingency. A contingency, as described by Aquinas, is an object or being that relies on other objects or beings for its existence. Based on this definition, most things in the universe are a contingency as they depend on other things for their existence. For example, humans rely on oxygen to exist, therefore we are a contingency. Trees rely on water to exist, therefore are a contingency. Aquinas stated that things in this universe come into existence as easily as they cease to exist, meaning that it is possible for these objects to exist and not exist at any time. However, as Aquinas argued in his second way, nothing can come from nothing. This leaves one conclusion for Aquinas to focus on, that being that something must always exist. This being must, therefore, be necessary, meaning nothing could exist if this necessary being did not exist. Of course, Aquinas argued this

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necessary being must be God, an external power that does not need to comply with time and space within this universe. An implication of this is that everything in this universe relies on God for its existence. In other words, no God means no universe. However, one may believe this argument is ludicrous. Aquinas saying that a necessary being must exist in order to for us humans to exist could be deemed ridiculous. One can argue that the things that created the things that exist today, do not need to remain existing for eternity. In my opinion, this third argument of contingency is more complex than the first two. The counterargument that God having to be eternal does make sense, but only to a certain extent. Nevertheless, I still think that Aquinas' argument that God exists at all times makes more sense. I believe that if God were to disappear or to suddenly stop existing, the universe would fall into anarchy and chaos as the necessary being, believed to be the creator and cause of all, has now vanished. One could argue that for honourable deeds and positive contingencies to keep existing, God needs to exist alongside as well. This claim of a necessary cause is not found only in Aquinas' arguments, but also within the arguments of a Persian polymath, Al-Ghazali. Ghazali developed the Kalam Cosmological Argument – a development of the wider cosmological argument. It ultimately attempts to prove the existence of God through exploring scientific proposals, and particularly the rejection of infinity.

In the 11<sup>th</sup> century, Al-Ghazali published 'Tahafut al-Falasifah' (Incoherence of Philosophers). Within this publication, Al-Ghazali critiqued the Avicennian school and stated that philosophers, such as Ibn Sina, had strayed away from Islamic teachings on God's role in our universe. The word 'Kalam' itself means to 'argue' or 'discuss,' and during Ghazali's lifetime, the argument had been thrown around and moulded into

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several deductive and rational approaches in understanding God and our world. Al-Ghazali, however, critiqued these beliefs as they contradicted Islamic teachings. Al-Ghazali, therefore, attempted to prove God's existence whilst balancing Islamic faith as well as reason and general philosophy.

*“Every being which begins has a cause for its beginning; now the world is a being which begins; therefore, it possesses a cause for its beginning.”<sup>5</sup>*

This quote from Al-Ghazali displays the similarity in his beliefs with Aquinas – the universe requires a cause. Additionally, this quote rejects the concept of an eternal universe, challenging philosophical claims that argue in support of an infinite history of the universe. Furthermore, this quote supports the Principle of Sufficient Reason – the idea that everything requires an explanation if it exists. Thus, if the universe is seen to be a contingent, then it requires a reason for its existence rather than not having one at all. One of the primary claims that Al-Ghazali put forward was the belief that the universe is contingent. This means that the universe did not need to be the way it is and is not necessary – it could have not existed. Thus, Al-Ghazali concluded that if everything, including the universe is a contingency, there must be something that caused the existence of these contingencies – something that is necessary, self-reliant, and external.

Al-Ghazali rejected Aristotelian beliefs which stated the universe is eternal and that it had no beginning. Similar to Aristotle, Ibn Sina (Avicenna) argued that the universe had always existed in some form, but Al-Ghazali stressed the idea that the universe requires

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<sup>5</sup> Al-Ghazali, Abu Hamid, *Incoherence of the Philosophers*, Translated by Michael E. Marmura, University of Chicago Press, 2002

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a creator and logically, cannot be eternal. In other words, the universe cannot be infinite. Infinity can be broken into two – actual infinity (the concept that things can go on forever, not having an origin) and potential infinity (the concept that things can get closer and closer to, but never reach, an infinite state). Al-Ghazali believed the universe was ex-nihilo (created from nothing) and that its creation occurred sometime in the universe's existence. This is because of the contradiction that occurs when imagining an eternal universe - if the universe were eternal, it would mean that an infinite number of events would have had to occur in order to lead to the present day, hence creating an incoherent cycle. This implies that there would have had to have been an infinite number of wars, famines, etc. Ultimately, the idea of an eternal universe does not make sense; I believe it is merely philosophers attempting to find the simple answer to the universe's creation, instead of going after the more complex route.

In 1979, the American philosopher, William Lane Craig, published his book 'The Kalam Cosmological Argument'. The first half of Craig's modernized Kalam argument is referred to as a syllogism. In other words, it is a deductive argument which states:

- Premise 1 - Everything that begins to exist has a cause
- Premise 2 - The universe began to exist.
- Conclusion - Therefore, the universe has a cause. <sup>6</sup>

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<sup>6</sup> Craig, William Lane, *The Kalam Cosmological Argument*, Barnes & Noble New York, 1979  
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Deductive arguments, by nature, involve the reasoning that if the premises are all true, then the conclusion must also be true. The second point in the syllogism implies that Craig is firm in his belief that it is possible for humans to comprehend the universe's origin, as opposed to accepting it as a raw fact as Bertrand Russell stated:

*"I should say that the universe is just there, and that's all"<sup>7</sup>*

This quote implies that Russell takes the universe's origins to be simply unexplainable and there is no need to delve deeper into seeking out a cause that explains the creation of the universe. Ultimately, this undermines Craig's first premise and weakens his argument. This implies that if Russell's beliefs are valid, then Craig must attempt to show the cause of the universe being God to be true. However, Russell's statement is a mere assertion and not an explanation. The fact that everything begins to exist is seen in experiencing reality, so why must the universe be an exception? Due to this, I remain convinced in Craig's belief that there is cause.

The second half of Craig's argument is the philosophical analysis of this syllogism. It consists of four attributes that Craig states the cause of the universe must have. First, the cause must be uncaused itself – linking to Aquinas' second way (causation). Craig said that in order to avoid the illogical concept of an infinite regress, there must be an uncaused being at the beginning of this chain. The second attribute is that the cause must be timeless – impossible to be affected by the nature of time. On top of this, the cause must also be spaceless (not occupying any mass), and immaterial (not consisting of any mass). The next attribute argued by Craig is that of which the cause must be

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<sup>7</sup> <https://libquotes.com/bertrand-russell/quote/lbp1y0o>  
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personal – this can be defined as the cause having the ability to possess personal qualities, not being a detached entity. Humans are able to form relationships with this cause, communicate with this cause, and feel a sense of communion with this cause. This implies that if this cause was able to create the universe in a timeless condition, then the cause must hold a non-deterministic agency. In simpler wording, the actions, and decisions the cause makes are not determined previously – they are brought about by free will. Finally, the fourth quality stated by Craig is that the cause is one. A simple principle we can associate this with is Occam's Razor, also known as the Law of Parsimony. It is often ascribed to the 14<sup>th</sup> century theologian William of Ockham. The principle states that between two or more competing theories, one should opt to believe the simplest one. As Albert Einstein stated:

*"It can scarcely be denied that the supreme goal of all theory is to make the irreducible basic elements as simple and as few as possible..."*<sup>8</sup>

We can clearly see the use of Occam's Razor in Craig's argument. There is no need to overcomplicate the argument by adding multiple deities; instead, believing in a singular cause is the most logical choice.

Consequently, by merging theological views with more reasoned and balanced outlooks, Craig's version of the Kalam argument portrays a simplified and rationalized premise for the belief in an ultimate and almighty creator, or cause. I believe that Craig does well to display his argument for a first cause, but I feel that it may leave many, especially those atheistic, remaining in confusion due to the uncertainty that arises with assuming the

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<sup>8</sup> Einstein, Albert, *On the Method of Theoretical Physics*, Oxford University Press, 1933  
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cause must be God. Additionally, they may also claim it is not adequate proof for God's existence as Craig is leaping to conclusions that the cause is God. Just because it is the simplest conclusion, it does not become correct. Who is to say that Occam's Razor is correct in assuming that the simplest route is the best? There may be multiple causes, the cause may not be benevolent, etc. There is no direct way to conclude the cause is God. This logical approach matches Hume's arguments as Hume argued we cannot assume the qualities of God through observations of the universe. Even if one were to recognise a first cause, Hume would argue that there is no justification for concluding that this first cause possesses the traditional traits assigned to God.

Although confusion may arise, I remain convinced in the Kalam Cosmological Argument, as proposed by Al-Ghazali and Craig, is a compelling and persuasive justification of the universe, as well as God's, existence. I believe this is due to Al-Ghazali, who took accounts of infinity and disproven Aristotelian beliefs, and Craig, who incorporated contemporary beliefs on the laws of nature, using simpler methods to prove God's existence.

Now, I will look further into David Hume and the counterarguments he proposed against the cosmological argument. In 1750, Hume began writing what would become one of his most renowned works – Dialogues Concerning Natural Religion. Within his work, Hume's primary question that he targets is the debate on God's nature and existence. The counterarguments proposed by Hume correlate to Al-Ghazali's original basis that the universe requires an origin. Hume's argument challenged Al-Ghazali's general line of reasoning, doubting that God must be the original creator of the universe. Instead, Hume argued from a perspective of disbelief in God's existence – it is illogical

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to trace the universe's existence back to God. Hume wrote in 'Dialogues Concerning Natural Religion,'

*"But surely, where reasonable men treat these subjects, the question can never be concerning the being, but only the nature of the Deity."*<sup>9</sup>

Hume argued from this point as he believed we should not conclude the qualities of God based on observations in the universe. This quote effectively expresses Hume's argument that even if an individual believes in a God-like deity, they cannot conclude the nature of the deity simply by perceiving the universe. Simply put, the universe may have a cause, however, that does not show anything about the identity of that cause. Hume argued that it is difficult to assume the cause is the omnibenevolent, omnipotent, omniscient God we are all accustomed to, as this becomes philosophically intricate. According to Hume, the association and connection between the universe and its potential cause is not substantial to deduce a God. Hume's philosophy turned out to be very influential as he was an empiricist, which resulted in Hume laying significant emphasis on observations and sensory experiences. Hume argued that all ideas one has can be traced back to one's senses – every ounce of knowledge is a posteriori. As Hume writes in 'An Enquiry Concerning Human Understanding':

*"A wise man. Therefore, proportions his beliefs to the evidence."*<sup>10</sup>

Due to Hume's beliefs being built upon this foundation of empiricism, he argued that humans have no (empirical) approach to understanding the universe's creation,

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<sup>9</sup> <https://www.gutenberg.org/files/4583/4583-h/4583-h.htm>

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<sup>10</sup> <https://www.gutenberg.org/files/9662/9662-h/9662-h.htm>

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suggesting that any philosophical or theological approach to understanding the origins of the universe lack a solid empirical foundation. The notion that the universe has a great genesis, as described by Al-Ghazali and William Lane Craig, is beyond human comprehension and ability to understand. An implication of this is that human reasoning itself may be unreliable if one is discussing such experiences that lie beyond experience. I think that Hume's empiricist beliefs are very rigid and closed minded when arguing against the Kalam cosmological argument. Hume may be correct in arguing for empiricist beliefs for a number of things, but I think when tackling the creation of the universe, he is incorrect. Al-Ghazali's Kalam argument provides a firm argument for a universe with a beginning. Because of the inflexibility in Hume's thinking, I believe the Kalam cosmological argument continues to stand strong.

However, while I believe that the cosmological argument remains strong against Hume's empiricism, modern science presents a more prominent challenge. The cosmological advancements made in the world of science provide natural reasonings for the universe's existence rather than jumping to a 'first cause.' For example, the Big Bang Theory explains how the universe had a beginning but not necessarily a creator. This theory demonstrates how nearly 14 billion years ago, the universe expanded from a singularity; implying that the genesis of the universe followed the laws of physics.<sup>11</sup> However, some theories propose that the universe did not need to originate according to the Big Bang. For instance, the cyclic model presents a theory in which the universe oscillates between expanding and contracting.<sup>12</sup> This theory implies that there is no

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<sup>11</sup> <https://newscenter.lbl.gov/2013/03/21/planck-results/>

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<sup>12</sup> <https://evolutionnews.org/2022/08/cyclic-universe-cant-avoid-a-cosmic-beginning/>

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need for a singular point of creation and the universe is an ever-changing state. If this theory happens to be correct, then the claim that the universe requires a definite origin becomes weakened.

Furthermore, there are a number of extensions of the Big Bang Theory such as the eternal inflation model. This model proposes the theory that the universe is an ever-expanding 'bubble' within a larger realm of other possible universes.<sup>13</sup> The key difference between this and the Big Bang Theory is that the latter has no direct implications of a multiverse as well as arguing that inflation ended in the universe after its expansion. The difference between inflation and expansion is that inflation is short and rapid. During the inflation period in the Big Bang Theory, time moved at a quicker rate than light and eventually this inflation came to a halt and expansion continued at a slower rate. However, in the eternal inflation model, inflation is seen to be continuing to this day.

In the face of these models and theories presenting other explanations for the universe, they do not answer the question of what caused the Big Bang to occur. Ongoing research at CERN is attempting to resolve this great mystery, however there is no definite answer yet.<sup>14</sup> This debate remains open-ended as these explanations only pose challenges to the universe requiring a creator rather than categorically falsifying the potential of one existing. Due to this uncertainty, I believe the cosmological argument can still be seen to be convincing.

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<sup>13</sup> <https://library.fiveable.me/key-terms/astrophysics-ii/eternal-inflation>

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<sup>14</sup> <https://arxiv.org/abs/2201.00202>

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The world of quantum mechanics also poses counterarguments to the classical cosmological arguments. For instance, the occurrence known as quantum fluctuations challenges the principle of causality which Aquinas discusses. In quantum mechanics, there is a possibility of particles appearing and disappearing without a necessary reason, leading to several physicists arguing that the universe was created in this spontaneous manner.<sup>15</sup> This contradicts the core principle of the cosmological argument – everything must have a cause. If time began with the universe, that tells us that there was no ‘before.’ This poses a challenge to the cosmological argument’s assumption that the universe was created by external forces. Additionally, this makes the cosmological argument less convincing as it implies that the universe could have had a spontaneous origin and does not require a ‘celestial’ creator.

Stephen Hawking himself worked with the theoretical physicist James Hartle to develop the Hartle-Hawking State. Simply put, the theory formed by the two talks about how the universe has no beginning. They suggest that as approaching the creation of the universe, time becomes meaningless and irrational if looked at through a quantum level.<sup>16</sup> The implications associated with this are profound as it indicates that the question ‘what caused the universe?’ is incoherent. If time did not exist, then there could not have been a moment where God caused the universe. Again, this challenges the cosmological assumption that there must be a cause. If causality itself becomes incoherent at quantum levels, then the concept of a first cause too becomes incoherent.

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<sup>15</sup> <https://bigthink.com/13-8/universe-quantum-fluctuation/>

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<sup>16</sup> <https://www.scientificlib.com/en/Physics/LX/HartleHawkingState.html>

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Consequently, the Hartle-Hawking State weakens the cosmological argument through implying that the question 'what caused the universe?' is meaningless.

In conclusion, I remain convinced by the entire cosmological argument. I think it has stronger reasoning as we can experience that everything has a cause in everyday life so the universe should not be an exception. I think that Al- Ghazali is more convincing than Aquinas as he tackles the problem of infinity which Aquinas just dismisses. Another reason I am less convinced by Aquinas is that he relies on Aristotle who was later disproven. Aquinas focuses far more on motion, causation and contingency rather than the universe having a beginning whereas Kalam focuses more on origins and creation of the universe which is the question that should really be answered. I also think that many of the counter arguments rely on assumptions and assertions. For example, Russell's quote on merely stating that the universe is just as it is, or Hume asserting we cannot determine the universe's creation as nobody was there to experience it. However, there are a number of things we cannot experience but know they begin to exist – for instance, black holes. Kalam is stronger because it focuses on our experience as humans and shows how irrational it is to argue that that the universe can occur without a cause. If you were to believe the opposite of Kalam that infinity is possible or that no cause is required, then that seems less rational.

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