

STARS

University of Central Florida
STARS


Honors Undergraduate Theses

UCF Theses and Dissertations

2020

Rethinking Causality: Thomas Aquinas' Argument From Motion & the Kalām Cosmological Argument

Derwin Sánchez Jr.
University of Central Florida

 Part of the [Philosophy Commons](#)

Find similar works at: <https://stars.library.ucf.edu/honorsthesis>

University of Central Florida Libraries <http://library.ucf.edu>

This Open Access is brought to you for free and open access by the UCF Theses and Dissertations at STARS. It has been accepted for inclusion in Honors Undergraduate Theses by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

Recommended Citation

Sánchez, Derwin Jr., "Rethinking Causality: Thomas Aquinas' Argument From Motion & the Kalām Cosmological Argument" (2020). *Honors Undergraduate Theses*. 858.

<https://stars.library.ucf.edu/honorsthesis/858>



RETHINKING CAUSALITY:
THOMAS AQUINAS' ARGUMENT FROM MOTION & THE KALĀM
COSMOLOGICAL ARGUMENT

by

DERWIN SANCHEZ, JR.

A thesis submitted in partial fulfillment of the requirements
for the Honors in the Major Program in Philosophy
in the College of Arts and Humanities
and in the Burnett Honors College
at the University of Central Florida
Orlando, Florida

Fall Term 2020

Thesis Chair: Dr. Cyrus Zargar

ABSTRACT

Ever since they were formulated in the Middle Ages, St. Thomas Aquinas' famous Five Ways to demonstrate the existence of God have been frequently debated. During this process there have been several misconceptions of what Aquinas actually meant, especially when discussing his cosmological arguments. While previous researchers have managed to tease out why Aquinas accepts some infinite regresses and rejects others, I attempt to add on to this by demonstrating the centrality of his metaphysics in his argument from motion. Aquinas cannot be properly understood or debated with a contemporary view of causality, but rather must wrestle with the concepts he actually employs in the arguments. To demonstrate this, I will compare the Thomistic argument from motion to the contemporary Kalām cosmological argument of William Lane Craig. Although some may consider it beneficial to base theistic arguments on more modern principles, this analysis shows that the metaphysical framework used by Aquinas is much less vulnerable to the rebuttals that otherwise challenge the Kalām argument, and that their differences in strength rest on their differences in metaphysics.

DEDICATION

Dedicated to the Holy Trinity, the Unmoved Mover

ACKNOWLEDGEMENTS

First and foremost, I thank God for giving me the ability and opportunity to write a thesis on His existence, one of my favorite topics in philosophy. I would also like to thank my parents, brother, and sister for their continual support and encouragement throughout this process. Additionally, I am indebted to Dr. Cyrus Zargar and Dr. Derek Green, the members of my thesis committee, for giving me resources to read and pointing me in the right direction. Lastly, I would like to thank Dr. Nam Nguyen, not just for providing me with his invaluable knowledge and wisdom on this thesis, but for instilling within me a love and passion for philosophy.

TABLE OF CONTENTS

RETHINKING CAUSALITY	i
I. INTRODUCTION	1
II. PHILOSOPHICAL BACKGROUND OF AQUINAS	7
II.1 ARISTOTELIAN METAPHYSICS	7
II.2 MAIMONIDEAN INFLUENCES	12
II. 3 ISLAMIC INFLUENCES	13
II.4 METAPHYSICS AND SCIENCE	14
III. PHILOSOPHICAL BACKGROUND OF KALĀM	17
III.1 THE CAUSAL PRINCIPLE IN AL-GHAZALI	17
III.2 ACTUAL INFINITES	18
III.3 THE CAUSAL PRINCIPLE IN CRAIG	19
IV. THOMISTIC CAUSALITY.....	22
V. ON THE <i>PER SE</i> CAUSAL SERIES	28
V.1 ONTOLOGICAL DEPENDENCE	28
V.2 TWO TYPES OF CAUSAL SERIES	29
V. 3 APPLICATION TO AQUINAS	33
VI. CONTRASTING THE TWO ARGUMENTS	37
VI.1 DIFFERENCES OF PRINCIPLE	37
VI.2 DECONSTRUCTING THE KALĀM ARGUMENT	39
VI.3 THE MODERN RESPONSE	47
VII. CONCLUSION AND IMPLICATIONS	52
VIII. WORKS CITED	57

I. INTRODUCTION

One significant divide among contemporary theistic philosophers centers around the method of demonstrating the existence of God. Those indebted to some form of Aristotelianism hold that a solid argument for the existence of God ought to be built upon Aristotle's metaphysical view of concepts such as substance, accident, matter, and form. These philosophers are not necessarily pure Aristotelians; for instance, some follow the Thomistic school, while others belong to neo-Aristotelian or analytical Thomistic schools. On the other hand, some theistic philosophers fear that this strict adherence to Aristotelian metaphysics places too much of a burden on the argument, since it would have to first demonstrate that this particular metaphysic is true, and then show that God exists (Moreland and Craig 466). Such a strategy would apparently make the argument more vulnerable, since it can be adequately refuted simply by rejecting its metaphysical foundation.

St. Thomas Aquinas, one of the most influential philosophers of the medieval period, was heavily shaped by the Aristotelian corpus, albeit not exclusively. His five arguments for the existence of God in his *Summa Theologica*, also known as the Five Ways, are divided into four cosmological arguments and one teleological argument. An argument is cosmological when it argues for God's existence based on a posteriori observations of the empirical world, as opposed to ontological arguments, which proceed from an a priori concept or definition of God. Furthermore, while teleological arguments are technically cosmological, since they proceed from empirical observations, they are nevertheless distinct because they offer evidence that God exists based on natural substances innately acting toward a certain end.

Aquinas' four cosmological arguments include those from motion, efficient causality, contingency and necessity, and gradation. However, for the purposes of this analysis, I will only focus on the argument from motion, due to its relative ease to comprehend, in addition to its similarity to a contemporary cosmological argument, which I will expand upon later. When arranged in premise/conclusion form, Aquinas' argument from motion is actually very simple:

Premise 1: We see that things in the world move.

Premise 2: Everything in motion is moved by another.

Premise 3: If this mover is itself moved, it is also moved by another.

Premise 4: It is impossible to have an infinite regress of moved movers.

Premise 5: Therefore, there has to be a first, unmoved mover to terminate the series.

Conclusion: This everyone understands to be God. (ST I, q. 2, a. 3)

Aquinas begins with the uncontroversial fact that some things in the world move. He then recognizes that an object in motion can only move when moved by another object, and that by another again. However, this regress of moved movers cannot continue forever, which is why he argues for a first unmoved mover, which he calls God. As such, Aquinas' methodology is to move from the material to the immaterial. He begins from certain phenomena in the material universe, and then he proceeds to demonstrate that these phenomena are grounded in an immaterial first cause. In this specific argument, the phenomena on which Aquinas focuses is

motion. Before delving into the argument too deeply, it is important to note that Aquinas' word for motion, *motus*, did not strictly refer to change of place. Rather, it encompasses any kind of change, such as growth, diminution, coming into being, and going out of being. Ultimately, *motus* for Aquinas "means change of any sort...where by 'change' he means the reduction of potency to act (or potentiality to actuality)" ("Existential Inertia" 241). This will prove significant when analyzing what Aquinas means when he argues that God is the unmoved mover.

The Thomistic argument from motion can easily be conflated with another argument from the Middle Ages, the Kalām cosmological argument. Originally formulated by Islamic theologian al-Ghazali, this argument has undergone several contemporary revisions and is now defended most fervently by contemporary American philosopher William Lane Craig. In medieval Islamic thought, "Kalām" referred to "Islamic speculative theology," and is today commonly connected to the argument formulated by al-Ghazali (McGinnis para. 1). Craig's version of the argument runs as follows:

Premise 1: Whatever begins to exist has a cause.

Premise 2: The universe began to exist.

Premise 3: Therefore, the universe has a cause. ("In Defense" 236)

The argument by itself does not prove the existence of the God of Judaism, Christianity, and Islam, but it does demonstrate that the universe requires a cause due to its beginning in the

finite past. As I will discuss below, Craig relies on argumentation outside of the Kalām argument to specifically prove that the God of traditional monotheism exists.

Craig, and al-Ghazali before him, were focused on proving that God exists by first proving that the universe came into being at some point in the finite past. As a result of this emphasis on proving the universe to be finite, Craig rejects the possibility of infinite regress by making God the first cause in a temporal chain of causes. However, although he and Aquinas agree that infinite regresses are absurd, they are responding to different conceptions of infinite regress, and therefore, they each offer vastly different arguments.

Throughout this analysis, I will compare Craig’s Kalām argument to Aquinas’ argument from motion and show where Craig specifically lacks some critical principles that Aquinas incorporates in his own argument. Briefly, Craig fails to prove that God exists, because he argues solely on the basis of temporal causality, and he unintentionally conceives of God’s act of creation as no different than natural generation. In order to present why Aquinas does a better job of proving his conclusion, I will refer back to Aristotle’s original concepts regarding causality, motion, and the unmoved mover. This will provide context for understanding where Aquinas’ principles in his own argument come from. The most preeminent Aristotelian concepts in the argument from motion include substance, actuality, potentiality, and the distinction between substantial and accidental change.

Moreover, as I will argue later on in the paper, because of the aforementioned deficiencies in Craig’s argument, his conception of God is skewed in that he conceives of Him as a being with more power and strength than beings in nature, something more akin to the gods of ancient mythology than the God of classical theism. This difference in conception of God’s

nature will contribute to our understanding of why Aquinas considers God to be the unmoved mover, whereas Craig merely thinks of God as a first temporal cause.

As such, my goal in this thesis is to show how the metaphysical principles undergirding the Thomistic argument from motion more greatly succeed in proving the existence of God than does Craig's argument, in addition to successfully defending some key aspects of God's nature, as opposed to Craig. As Thomistic philosopher Edward Feser claims, the Aristotelian-Thomistic metaphysical framework is the key to formulating a robust understanding of God as the unmoved mover, or the unactualized actualizer ("Existential Inertia" 254). I will show where the Kalām argument differs from that of Aquinas and why those deviations are in fact deteriorations of, not improvements upon, the classical cosmological arguments. Central to the problem is an inadequate understanding of causality. When comparing Aquinas and Craig, it can be difficult to notice any immediate differences in terms of principle. This is because Craig uses terms and ideas familiar to Aristotelians like Aquinas, such as cause, effect, necessity, and contingency. As I will show, however, the trouble lies in that these ideas have been stripped from their traditional meanings and infused with foreign conceptions.

Furthermore, by moving away from Aristotle's idea that substantial forms organize the matter to which they are united, Craig lacks the sense of actuality and potentiality, as well as essence and existence, that Aristotle and Aquinas utilize in their arguments. These are the very concepts that allow Aquinas to reason from imperfect instantiations of certain phenomena in reality to a completely perfect and fully actual first cause of all being. On the contrary, Craig's notion of causality stems from the Causal Principle. The basic formulation of the Causal Principle is summed up in the first premise of the Kalām argument: "Whatever begins to exist

has a cause” (“In Defense” 236). In essence, for Craig, causality is only limited to objects being sufficient causes to bring other objects into being. Once again, Aquinas’ view of causality is much broader than Craig’s, which will prove to be a significant distinction between these two thinkers.

Due to Aquinas’ use of Aristotelian principles, he is able to avoid entire problems against which Craig, on the other hand, is obligated to defend. In order to demonstrate this difference, I will present objections to God’s existence from philosophers like Bertrand Russell and Bede Rundle in order to elucidate why Craig is more vulnerable to these objections than Aquinas. Aquinas focuses on the fact that some beings depend on other beings for their existence, and then he reasons to an entity that does not derive His being from any other, but simply is pure actuality, since His very essence is to be. Several philosophers have tried to justify and defend Aquinas by infusing contemporary non-Aristotelian ideas into his original thought, which undercuts the metaphysical vigor of the original arguments.

After providing the philosophical background for both Aquinas’ and Craig’s arguments, I will then proceed to evaluate Craig’s Kalām argument, showing how its diversion from an Aristotelian view of causality jeopardizes his ability to reason about whether God exists and what His nature is like. Furthermore, I will explain how the Kalām argument itself is open to objections that could otherwise be avoided in a Thomistic defense. This thesis will contribute to the current conversation on Thomistic causality in relation to substantial and accidental change, as well as what Aquinas truly meant in his Five Ways (such as the prominent controversy among Thomists on whether Aquinas held that God continually sustains substances in being, or whether individual beings can subsist on their own) (“Existential Inertia” 237).

II. PHILOSOPHICAL BACKGROUND OF AQUINAS

The purpose of this philosophical background is to elucidate the bases that inform Aquinas' thought, as well as to show why Aquinas disagrees with Aristotle on the essence of God as transcendent creator. As it will be shown below, these points are the foundations to the argument from motion, which provides context for how Aquinas and Craig differ in their arguments for the existence of God.

Prior to evaluating Aquinas and Craig directly, we must first distinguish between the underlying concepts that inform both thinkers. Therefore, this section will be composed of a detailed background of the framework that Aquinas uses, beginning with his Aristotelian commitment and then moving into his other major influences. Next I will provide some philosophical background for the Kalām argument, including the Causal Principle and Craig's understanding of God as first cause.

II.1 ARISTOTELIAN METAPHYSICS

A key component of Aquinas' cosmological arguments is their reasoning from observable phenomena in the world to a singular entity in which the fullness of those respective phenomena is realized. For instance, the First Way starts from recognizing the existence of motion in the world and then reasoning to a first unmoved mover that grounds all motion. The Second Way reasons from the efficient causes in reality to a single efficient cause that sustains all things in existence. The Third Way begins from realizing that beings in the universe do not exist by necessity, but rather contingently. In other words, their existence depends on another for its existence, which means that all contingent beings must depend on a necessary being whose very

essence it is to be (ST I, q. 3, a. 4). As I shall explain below, these arguments depend on Aristotle's idea of actuality and potentiality, which informs his theory of change. Moreover, the Aristotelian idea of change is influenced by the concept ofhylomorphism, which allows Aristotle and Aquinas to argue for the existence of a purely actual entity, or one who contains no potential existence.

As stated in the introduction, when Aquinas refers to motion, he is actually referring to change in general. Hylomorphism is the bedrock of Aquinas' theory of change. Thus, to comprehend his view of change, it is necessary to expand upon what hylomorphism is. Hylomorphism derives from two Greek words: matter (hyle) and form (morphê). The definition of this term, therefore, is the union of matter and form. Aristotle holds that all material substances are composites of matter and form. It is important not to impose our contemporary notion of matter onto the Aristotelian view. When Aristotle and Aquinas describe matter, they are not referring to mere physical objects that occupy space. Rather, in the Aristotelian view, matter is the principle of potentiality in a substance. To understand this definition of matter, one needs to first comprehend his ideas on change.

Aristotle explains in the *Physics* that there are two types of change, "accidental" and "substantial." He writes that "there are different senses of 'coming-to-be.' In some cases we do not use the expression 'come to be,' but 'come to be so-and-so'" (*Phys.* I.7, 190a33-34). While accidents, or non-essential properties of substances, can come to be and pass away without any change to the substance itself, substantial changes entail a change of the substance, or the thing itself.

The example of accidental change that Aristotle uses in the *Physics* depicts a man becoming musical: When a man goes from being unmusical to being musical, “the man remains a man and is such even when he becomes musical, whereas what is not musical or is unmusical does not continue to exist” (*Phys.* I.7, 190a8-10). In every change there is an underlying substratum that persists through the change without itself being changed: the substance (*ousia*). However, substances do not persist through a substantial change, since it involves a coming to be or passing of away of the very substance itself. For example, if Socrates is born or dies, this is a substantial change. Aristotle holds that things do not come to be from nothing; he explains in *On Generation and Corruption* that substances come to be “out of not-substance...If... ‘unqualified not-being’ means ‘what is not in any sense at all’...what comes-to-be will have to come-to-be out of nothing” (*De Gen.* I.3, 317b9-12). However, “not-substance” for Aristotle does not refer to pure nothingness. To better grasp this, we need to distinguish between potential and actual existence. Coming into being “necessarily implies the pre-existence of something which potentially ‘is,’ but actually ‘is not’” (*De Gen.* I.3, 317b16-18). All substances must also pass away into potentiality. When a substance undergoes substantial change, it loses its initial form and assumes a new one. In other words, the substance loses its previous actualizing principle and passes into potentiality, until another form actualizes it. Therefore, because all substances both come into being from potentiality and pass away into potentiality, the underlying substratum in substantial change is pure potentiality.

All beings for Aristotle and Aquinas are composites of actuality and potentiality, which is a reiteration of hylomorphism, the union of matter and form. Matter is the principle of potentiality in a substance, and form is its actualizing principle. Pure potentiality without any

actuality is prime matter, which is what persists through substantial change. Although we can separate prime matter from form in our minds, matter cannot actually be separated from form in reality. Substances come from potentiality and pass away into potentiality as new forms are imposed onto formless matter.

Following Aristotle, Aquinas expands upon the doctrine of hylomorphism by emphasizing that form is what actualizes matter in both the accidental and substantial senses. For Aquinas, “that which is in potency to substantial existence is called prime matter, but that which is in potency to accidental existence is called the subject” (*De Prin. Nat.* para. 3). For example, sperm “is in potency to be man,” which is in potency to a substance, or prime matter, while man, itself a substance, “is in potency to be white,” which is accidental to the substance (*De Prin. Nat.* para. 2).

In both of these examples, there is matter and form. However, what gives actuality to accidental existence is an accidental form, and that which gives rise to substantial existence is a substantial form. Edward Feser presents the distinction between accidental and substantial form by stating that “[a]ccidental forms inform matter that is already informed by a substantial form” (*Aristotle’s Revenge* 313). The accidental form does not inform the very essence of a being with existence; rather, it superficially alters the object so that it achieves an accidental telos, or end. To further illustrate this difference, Feser provides the example of Tarzan using liana vines to build a hammock: “The parts of the liana vine have an inherent tendency to function together to allow the vine to exhibit growth patterns it does...and so forth. By contrast, the parts of the hammock--the liana vines themselves--have no inherent tendency to function together as a hammock” (23). The hammock, which is the accidental form in this scenario, is imposed upon

objects with substantial form already, namely the liana vines, for the end goal of functioning as a hammock. Substantial forms are natural to their respective substances, and accidental forms are external forms imposed from without.

The Aristotelian conception of substance is essential to the ancient argument for an unmoved mover. Substance is equated with ‘being’ in the *Metaphysics*: “[I]n one sense the ‘being’ meant is ‘what a thing is’ or a ‘this’...obviously that which ‘is’ primarily is the ‘what,’ which indicates the substance of the thing” (*Met.* VII.1, 1028a10-15, trans. Ross). We can think of substance as what a thing is, apart from any of its qualities or quantities. In the *Categories* Aristotle adds that substance “is that which is neither predicable of a subject nor present in a subject” (*Cat.* I.5, 2a12-13, trans. Edghill). For example, ‘man’ is a substance, whereas the fact that he is six feet tall and white in complexion are qualities of the man.

Aquinas connects substance to the idea of essence: “The Philosopher, too, says in the fifth book of the *Metaphysics* that every substance is a nature. But the word ‘nature’ taken in this way appears to signify the essence of a real thing” (*De Ente* para. 10). Thus, for Aquinas, every substance has an essence, or an essential nature that makes it what it is. However, it is important to note that Aquinas did not equate substance with essence, but instead that substance has essence. For the present moment, it is enough to keep in mind that Aquinas believed that beings that possess essence and existence exist in actuality, while beings that have essence without existence do not actually exist, although they may exist potentially.

II.2 MAIMONIDEAN INFLUENCES

While Aristotle is one of Aquinas' central sources for his philosophy and theology, he significantly diverged from Aristotle's conception of God. Unlike Aquinas, Aristotle did not understand God as transcendent, or as over and above the universe. Surely, God is the unmoved source of all motion, but He is not the source of the existence of all things. Aquinas strongly disagrees. As a Christian theologian, he is committed to demonstrating the transcendence of God, which entails His free creation of the universe. On the topic of divine transcendence, Aquinas finds an ally in Moses Maimonides, who admits that free creation "is not a teaching of the philosophers, even his beloved Aristotle" (Soskice 199).

For Maimonides, the biblical story of Moses and the burning bush in Exodus 3 is critical to understanding the essence of God. In the passage, Moses asks God for His name: "[I]f they [the Israelites] ask me, 'What is his name?' what am I to tell them?" To this God mysteriously replies "I AM WHO AM," which forms the basis of biblical exegesis and Christian philosophical theology for centuries. In an exegetical passage, Maimonides explains God's name in Exodus 3: "Scripture makes, as it were, a clear statement that the subject [I AM] is identical with the predicate [I AM]. This makes it clear that He is existent not through existence" (I.63). Instead, Maimonides holds that God exists through His essence, which is existence itself. Because the essence and the existence of God are identical, the subject and predicate in the statement "I AM WHO AM" is the same. This would make God's existence necessary, since His non-existence would contradict His essence.

The emphasis on Exodus 3 is important, because it is the verse that Aquinas uses to introduce the Five Ways. His section in which he refutes the objections to God's existence,

known as the *sed contra*, states, “On the contrary, It is said in the person of God: ‘I am Who am’” (1a.2.3). Unfortunately, the Five Ways are usually read separately from the *sed contra*, which divorces philosophy and Sacred Scripture in a thinker who synthesized them cohesively. As Janet Soskice states, “most modern philosophical writers pay little attention to the biblical citation lodged in the *sed contra*” (197). Contrary to being insignificant to the Five Ways, the citation of Exodus 3:14 is crucial to Aquinas’ unfolding of the arguments. His primary goal is to show that God is the transcendent creator of all things, and that He is *ipsum esse subsistens*, or the subsisting act of being. God is not one being among many for Aquinas; instead, He is being itself, the fullness of existence. This means that God must not have any potentiality to change, and that in God, there is nothing lacking. A mover can only be moved if it contains potentiality, which cannot be the case for God, making Him the unmoved mover. Aquinas definitely makes use of Aristotle’s argument to an unmoved mover, but he extracts divine transcendence from Maimonides’ biblical exegesis, allowing him to demonstrate that a purely actual mover can have no potentiality, and is thus unmoved. As a result, God is purely actual subsisting being itself, or as the medieval Islamic philosophers referred to Him, the necessary existent.

II.3 ISLAMIC INFLUENCES

Prior to Aquinas, philosophers like al-Farabi and Avicenna arrived at the conclusion that God is the “One whose very nature is to exist; everything else must have existence bestowed upon it by the One” (*The Oxford Handbook* 67). Avicenna distinguishes between essence and existence because of his Neoplatonic background. God (or the One) is utterly different from the world in every way. In fact, it does not exist in the same way that creatures do; the One

transcends all creatures because it is the source of all existence: “It...reveals the divine creative act: everything except the Principle [God] receives (or obtains) existence” (Lizzini para. 18). Every essence requires an existent to unite it to existence, whereas the One transcends this need. Rather, it self-subsists in being; its very essence is to be. Aquinas fleshes this out in the *De Ente et Essentia*, where he equates essence to potentiality and existence to actuality (*De Ente* para. 81).

One of the most preeminent concerns in medieval Islamic thought is the hierarchy of being. Philosophers such as al-Farabi, influenced by Neoplatonism, acknowledged that the cosmos is ordered hierarchically, with God at the pinnacle and non-living beings at the bottom. This framework led Islamic philosophers to conclude that God is the Necessary Being, on whom all contingent beings depend for their existence. Aquinas expands upon this notion of God as the Necessary Being in the *Summa Theologica*: God is not composed of matter and form, “because matter is in potentiality. But...God is pure act, without any potentiality” (ST I, q. 3, a. 2). If God is pure actuality, or *actus purus*, He cannot have any potential to change, since His existence is fully realized. In other words, there are no potentials in God. If God had potentiality, an infinite regress would result, since God Himself would require an external mover to actualize His being. Therefore, because God exists as *actus purus*, He could not have failed to exist, as His existence is unconditioned and maximally realized.

II.4 METAPHYSICS AND SCIENCE

One critical point in this analysis is the relation between metaphysics and science. Several modern philosophical schools, like the logical positivists and the Vienna Circle, viewed

scientific claims as incompatible with metaphysical ones, because of their idea that science is the only way to understand reality. These schools were committed to the epistemological notion that all that can be known is the physical universe, which belongs to the domain of natural science. Anything beyond the physical world belongs to metaphysics. This stance is also based upon the modern idea that language contains meaning only if it refers to empirically observable entities or phenomena. Thus, all metaphysical statements are completely meaningless, because they are concerned with what lies beyond the empirically observable world.

A brief section comparing the modern and Thomistic views of metaphysics is necessary in order to grasp where Aquinas' arguments are coming from. Metaphysics, for the purposes of this paper, is the study of reality as such, or that which is common to all existence. Additionally, science, for the purposes of this paper, is the study of observable, empirical phenomena. Aquinas views metaphysics as a logical extension of physics: while physics studies the reality of nature, metaphysics studies first principles, or the very bedrock of reality (Commentary on *Met.*, Lesson 2, q. 2, para. 347). This field of study, since it is concerned with matters beyond empirical observation, must rely on pure reason as its methodology. Aquinas, like Aristotle before him, utilize both empirical study and human reason as two means to attain truth, as we can see in the argument from motion (ST I, q. 2, a. 3). Nevertheless, they are distinct because they deal with different types of truth, namely truths about the material and immaterial worlds, respectively.

While Aquinas acknowledges this distinction, he does not view metaphysics and science as opposed. Instead, he believes that they can be integrated in order to reach conclusions that neither science nor metaphysics could have attained on their own. This relationship between metaphysics and science is much like the relationship between metaphysics and theology, at least

in Thomistic thought: metaphysical truths can only be reached through human reason, while matters of faith are attained through divine revelation. Once again, these branches of knowledge do not negate one another; instead, an accurate theology must be predicated upon an accurate metaphysic.

In the Five Ways, Aquinas actively unites empirical observations to his metaphysical conclusions. He reaches the conclusion that God exists by first appealing to common traits in the natural world. For example, motion is a common trait in the world, and beings that move are moved by something else. Yet this causal regress cannot continue forever. Therefore, there must be a first, unmoved mover who all people call God. His other cosmological arguments follow this same reasoning. They each begin with a trait all natural beings have, and then they move toward a metaphysical conclusion based on these observations. Thus, contrary to the modern divorce of science and metaphysics, the medieval Thomistic conception of these two branches of knowledge is that they can and should work together.

III. PHILOSOPHICAL BACKGROUND OF KALĀM

The argument as articulated by William Lane Craig attempts to prove that God exists by first demonstrating that everything that begins to exist has a cause. Then he postulates that the universe began to exist, which implies that the universe itself must have a cause. Craig explains that “[c]onceptual analysis of what it is to be cause of the universe will recover several of the principal attributes of God,” thereby narrowing the candidates for first cause down to the God of monotheism (“In Defense” 236). For Craig, both the characteristics of a finite universe and the nature that the first cause is logically required to possess, both point to a transcendent, personal creator of the cosmos.

Throughout the argument, Craig relies on the Causal Principle, which states that nothing can begin to exist without an adequate cause. Craig views infinite temporal regresses as logically absurd, which he takes to mean that the universe must have had a beginning (*The Existence of God* para. 8). In essence, Craig’s overarching concern is to demonstrate that God exists by showing that God is the first cause of a series of causes that extends backward to a finite beginning.

III.1 THE CAUSAL PRINCIPLE IN AL-GHAZALI

As I explained in the introduction, Craig’s Kalām argument has roots extending back to al-Ghazali in the medieval period. In his work *Incoherence of the Philosophers*, al-Ghazali argues against Avicenna, who held that the universe had existed for all eternity. This stance stemmed from a desire to reconcile the Aristotelian conception of an eternal cosmos and Muslim theology. Al-Ghazali specifically critiques this brand of Aristotelian philosophers for what he

interprets as a significant deviation from Islam. As Oliver Leaman explains in his interpretation of al-Ghazali, “[Al-Ghazali] argues both that the falāsifa [philosophers] are incapable of demonstrating that the world is eternal and that there is no way of reconciling belief in (the Muslim) God with adherence to the world’s eternity” (55). Thus, he seeks to prove that the universe had a beginning in time. Like Craig, al-Ghazali viewed the idea of a chronological infinite regress as logically impossible, since “nothing which originates in time originates by itself, and that, therefore, it needs a creator” (89). This is the medieval articulation of the Causal Principle, or the idea that what begins to exist has a cause.

To al-Ghazali, the finite nature of objects in the universe points to their previously-existing causes. No object simply pops into being from nothing, which means that objects come into existence from something else. Furthermore, the universe has to be finite, because an eternal universe leads to absurdities. If the universe itself was its own first cause, then it would sustain itself: “If...the world itself is supposed to be uncaused, we already will have found the First Principle” (90). However, because al-Ghazali believes that the Causal Principle applies to the cosmos as a whole, he looks to God as the first cause, since only God is the necessary, self-subsisting being.

III.2 ACTUAL INFINITES

Craig holds that all things that began to exist at some point in the past have a cause that brought them into existence, which is the first premise of the Kalām argument. The second premise is that the universe had a beginning. To prove this, Craig shows that an actually infinite regress of temporal events is impossible. An actual infinity is distinct from a potential infinity;

Craig explains that a potential infinity “is a collection which is increasing toward infinity as a limit, but never gets there. Such a collection is really indefinite, not infinite” (*The Existence of God* para. 8). However, an actual infinity is a set that already contains an infinite number of members. In the case of the universe, Craig views an infinite series of past events as an actual infinite (para. 11).

If the number of events in the universe extends infinitely into the past, Craig believes that the present day could have never occurred. Suppose we decide to count from negative infinity to zero. According to Craig, we could never begin counting. For example, if we have been counting from negative infinity to zero for all eternity, and we just now finished counting, there is no reason why we did not “finish counting yesterday or the day before or the year before” (para. 21). After all, an infinite amount of time had already transpired a year ago, so we could have finished then. We could have even finished a thousand years ago, since there would have also been an infinite past. As a result, at no point could we start counting, “for at any point we reach [we] will have already finished” (para. 21). Therefore, since an infinite temporal regress of past events is absurd, the universe began to exist in the finite past.

III.3 THE CAUSAL PRINCIPLE IN CRAIG

Al-Ghazali provides the framework for Craig’s version of the Kalām argument. From al-Ghazali’s argument that the objects in the world must have come into being from an external, previously-existing cause, Craig analyzes questions of causality from a framework that aligns with contemporary scientific advancements. For instance, atheist philosopher Graham Oppy, when objecting to the Kalām argument, argues that the existence of virtual particles in a quantum

mechanical vacuum adequately refutes the Causal Principle (“In Defense” 241). This is because virtual particles pop into and out of existence randomly. Craig replies that even virtual particles have a cause, since “the quantum mechanical vacuum on which they depend for their existence is emphatically not nothing... The quantum vacuum is a sea of fluctuating energy which gives rise to virtual particles. Thus, virtual particles can hardly be said to arise without a cause” (241).

Based on the Causal Principle, Craig claims that since the universe itself is another example of something that came into existence, it also had a cause. Of course, this does not imply that God was the cause of the universe, and Craig recognizes this. Therefore, he argues for God as the first cause on grounds different from the Kalām argument. He claims that a necessary being is one that is “eternal, uncaused, indestructible, and incorruptible” (*The Existence of God* para. 3). A necessary being, or a being that could not have failed to exist, is required to prevent an infinite regress, because it explains its own existence, rather than appealing to another being to explain it. Eternality and being uncaused are essential to a necessary being, since entities that begin to exist require an external cause. This explains why a necessary being must also be indestructible and incorruptible, since the destruction or corruption of a being must come from a cause.

Furthermore, Craig attempts to show that the first cause must also be personal. He claims that “[t]he only way to have an eternal cause but a temporal effect would seem to be if the cause is a personal agent who freely chooses to create an effect in time” (*The Existence of God* para. 48). The effects of an impersonal, eternal first cause would have to also be eternal, since the first cause could not choose to make its effects temporal. Because the universe is temporal, therefore,

the first cause must be personal. Thus, according to Craig, the first cause has to be God, since he has reasoned to the traditional attributes that are commonly ascribed to God.

Craig's conception of causation is narrowed down to only include temporal causation. Within the scope of the Kalām cosmological argument, the Causal Principle reduces the focus of causation to a single type of becoming, namely that of coming into being. These are the grounds on which Craig's notion of God is based. Unlike Aquinas, Craig's derivation of the divine attributes depends on the universe being finite, as well as on the Causal Principle being true in all instances. A skeptic of the Kalām argument can simply demonstrate that the Causal Principle fails to account for a type of phenomenon that does not appear to require an external cause to explain it. To defend the argument against these claims, Craig has the burden to show that the Causal Principle is applicable in every situation and that the universe is in fact a finite entity.

IV. THOMISTIC CAUSALITY

Aristotle lists six types of change in the *Categories*: “generation, destruction, increase, diminution, alteration, and change of place” (*Cat.* I.14, 15a13-14). Due to advancements in modern science, many today would think these ideas of change outdated. Many like the philosopher Bede Rundle point to the Law of the Conservation of Energy to show that matter can neither be created nor destroyed, which supposedly disproves the Aristotelian notion of generation and corruption (Leslie 198). However, this completely misunderstands the Aristotelian-Thomistic position on coming-to-be and passing-away. Regarding change, Aquinas says that it “is nothing else than the reduction of something from potentiality to actuality” (ST I, q. 2, a. 3). For Aquinas, prime matter, as well as form, are “neither generated nor corrupted,” because there would have to be “a matter of matter and a form of form, and so on ad infinitum,” which he takes to be impossible (*De Prin. Nat.* para. 15). If matter and form per se were generated, they would have to actualize from potentiality, and if they were corrupted, they would pass away into potentiality. This means that matter itself would have had to come from other matter, and form would have had to be potential before being actual, even though form is the actualizing principle in substances. Therefore, Aquinas concludes that matter and form are not generated or corrupted.

Aquinas’ thinking aligns well with Aristotle’s treatment of generation and corruption. He sees these forms of change as different from alteration, since the substance persists through an alteration, yet not through generation and corruption, since these involve the very coming to be or passing away of substances. However, this does not imply that substances come to be and pass away from nothing; rather, as mentioned earlier, substances are generated when prime matter

takes a particular form, and they are corrupted when the substantial form is lost and another form shapes prime matter. In the *Metaphysics*, Aristotle explains that matter and form cannot come into being, because “everything that changes is something and is changed by something and into something” (*Met.* XII.3, 1069b35). As Aquinas argues, generation and corruption do not require the erroneous view that matter can be created and destroyed; instead, matter exists so long as there are substances, which involve the existence of actuality and potentiality.

Aquinas’ argument from motion can be best understood against the background of hylomorphism. Because motion “is nothing else than the reduction of something from potentiality to actuality,” the argument from motion can reasonably be reformulated as the argument from actualized actualizers to an unactualized actualizer. Furthermore, that which moves from potency to act, whether in the substantial or accidental sense, undergoes the informing of matter by form. Matter, which is potential, becomes actualized when a form unites to it. Of course, substances cannot come to be, take on new accidents, or take on accidental forms without an outside mover causing these to occur. Even eternally-moving substances require a mover; Aristotle says that the heavenly bodies, although they eternally rotate, are still nevertheless composites of act and potency, since they are potentially in a new spatial position with every rotation. If there were no first mover, nothing would happen, since potentiality cannot actualize itself without a cause of actualization. Therefore, Aristotle and Aquinas conclude, there must exist a first, unmoved mover that is pure actuality itself, one that imparts being to substances but is not itself actualized by an external object. As Aquinas says at the end of the First Way, “this everyone understands to be God” (ST I, q. 2, a. 3).

While it is definitely helpful to look at actuality and potentiality in relation to Aquinas' First Way, these ideas not only inform his metaphysics, but his natural theology as well. All Thomistic natural theology begins with the premise that God is the unactualized actualizer of all being. God, therefore, cannot have matter in Him, since that would imply potentiality, which would entail that God requires a mover. Moreover, along this train of thought, Aquinas holds that God is *ipsum esse subsistens*, or the subsisting act of being itself, one whose essence it is to exist (*De Ente* para. 81).

When ice is taken out of the freezer and placed in a room-temperature area it will melt due to the increase in temperature. This occurs because the water molecules have changed from being so tightly packed together to becoming a bit more disordered and more separated from one another. Thus, water acquires different attributes, namely being a liquid. In order for an object to gain or lose certain attributes, they must have the capacity for doing so. It must first be possible for water molecules to separate from one another. Otherwise, the object would not undergo change at all. We can verify through experience that different types of objects change in different ways according to their respective abilities. Water molecules have a capacity to distance themselves and acquire a liquid state if placed under certain external conditions. An ice cube exists as liquid water only potentially. In other words, the liquid water does not exist in the fullest sense of the term, but only has the possibility to exist actually. Aristotle says that "if there is something which is capable of moving things or acting on them, but is not actually doing so, there will not necessarily be movement; for that which has a potency need not exercise it" (*Met.* XII.6, 1071b13). Therefore, an unactualized potential would simply remain unactualized and not undergo change. Thus, if an ice cube has the potential to melt into liquid water, but the increase

in temperature never takes place, the liquid exists potentially. Potentiality, then, cannot be ontologically prior to actuality, since change can occur only if something else causes it to change.

As mentioned earlier, motion for Aquinas “is nothing else than the reduction of something from potentiality to actuality” (ST I, q. 2, a. 3). Aquinas explains that nothing moves itself, which he elaborates on in *Summa Contra Gentiles* (SCG I, ch. 13, para. 22). After he rejects the possibility of an infinite series, he argues that there must be a “first mover, put in motion by no other” (ST I, q. 2, a. 3). His reasons for asserting the existence of this unmoved mover are not found in the *Summa* itself. Thus, could the first mover not be a self-moved mover, much like Plato’s first cause in the *Phaedrus*? Aquinas poses this very objection in the *Summa Contra Gentiles*. He reintroduces actuality and potentiality to respond to the objection. If something is self-moved, then it must move itself, meaning that it must be both mover and moved. A mover is already in actuality, while a thing moved is in a state of potentiality and is in the process of being actualized. Hence, the whole can only be moved by its parts in order to move itself. According to Aquinas, then, “consequently, one part of the self-moved mover is solely moving, and the other part solely moved” (SCG I, ch. 13, para. 22). Thus, the first mover must be totally unmoved.

The above argument underscores the centrality of potentiality and actuality to Aquinas’ defense of the unmoved mover. This in no way compromises the ontological independence of God, however. If God is utterly unmoved, He cannot be subject to any external motion and must be absolutely free from motion. Additionally, Aquinas goes so far as to accept Aristotle’s claim that when a mover moves something else, the mover and the thing moved act as if they were one

contiguous object, and so the motions of a chain of moving objects occur simultaneously.

However, without the centrality of actuality and potentiality in the Thomistic argument from motion, the argument is left vulnerable to the objections of replacing the unmoved mover with a self-mover and having an infinite series of causes, so long as there is a preceding mover for every object moved.

Actuality and potentiality unfold differently in different causal series. For instance, each domino in a series causes the next domino to fall, which causes the next one to fall, and so on. But we have already established that such a series is accidental according to Aquinas' distinction between accidental and *per se* series. What this means for actuality and potentiality is that the preceding domino actualizes the falling of the next domino. However, the dominoes that have fallen previously, all leading up to this one particular instant, do not contribute in any way to the instant of motion occurring in the precise moment when Domino A causes the motion of Domino B. As I will discuss in the following section, these two types of series are viewed as distinct by Aquinas.

Both of these series in the domino example involve the actualization of potentiality, which for Aquinas is the definition of change. When some series proceed, it does not matter what the preceding causes were in relation to the motion being analyzed, so long as the motion is completed. On the other hand, the effect of other types of series occurs because of the simultaneous actualization of each individual member in the series.

The discussion of ontological dependence below will prove helpful in gaining a holistic understanding of Aquinas' rejection of some infinite causal series. While he rejects a certain kind

of infinite regress in the argument from motion, he embraces the possibility for other kinds of infinite regress to exist.

The most fundamental and crucial distinction in Aquinas' argument from motion is the idea of actuality and potentiality. Not only does this provide the bedrock for this argument in particular, but it also lays the groundwork for his other cosmological arguments, as well as his natural theology. Philosopher Caleb Cohoe's explanation of Aquinas' rejection of some infinite regresses will provide us with a general outline of why certain infinite series are not permissible.

V. ON THE *PER SE* CAUSAL SERIES

By returning to Aquinas' original texts, we can gain a better understanding of what Aquinas is trying to prove. The crux of the First Way resides in Aquinas' claim that there cannot possibly be an infinite chain of ontologically dependent moved movers that are prior to any given effect. If previous interpreters of Aquinas are correct in saying that the argument relies on an implicit notion of ontological dependence, then we have to flesh out the nature of this dependence relationship.

V.1 ONTOLOGICAL DEPENDENCE

Some have asserted that in order for something to ontologically depend on something else, "[o]ne thing x will depend upon another y just in case it is necessary that y exists if x exists" (Fine 270). This formulation paints ontological dependence as a necessarily-existing relationship between two objects. Under this conception, we can read Aquinas as saying that if a particular object X is moved by another particular object Y, X can only be moved so long as Y is moving it. For example, if a stone is moved by a stick which is moved by someone's hand, the motion of the stone occurs because of the simultaneous motion of the stick and hand (ST I, q. 46, a. 2). Thus, it is necessary for the stone's motion that it be moved by the stick. As such, we can understand Aquinas' notion of change as actualization of potentiality by appealing to ontological dependence. If the stone's physical motion depends on the stick's motion, then the stone derives its power to move by its cause, the stick. The stone's motion ontologically depends on that of the stick and the hand.

Caleb Cohoe finds the “clearest statement of the connection between ontological dependence and causation” from Aquinas’ *De Potentia Dei* (Cohoe 841). In this work Aquinas states that “it is necessary that an effect depend on its cause,” because otherwise the very concept of cause and effect would be contradicted (841). If a cause produces an effect, like the stick moving the stone, the stone’s movement entirely rests on that of the stick. Aquinas’ point seems to be that an effect such as motion cannot arise from the moved substance: “For what is actually hot cannot simultaneously be potentially hot” (ST I, q. 2, a. 3). In other words, nothing can move itself without deriving its motion from an external cause. This idea actually supports the utter dependence of moved beings on their respective movers here and now. This type of infinite regress is one that is ordered *per se*, which is distinct from one ordered accidentally (ST). A *per se* causal series of ontologically dependent parts implies that there must be an ontologically independent source of all motion from which all dependent movers obtain their causal power. If the causal chain extended infinitely without an unmoved mover, then motion could not be derived from anywhere, leaving the subsequent movers in the chain without any power for motion at all.

V.2 TWO TYPES OF CAUSAL SERIES

In his Reply to Objection 7 to the question ‘Whether It Is An Article of Faith That the World Began,’ Aquinas distinguishes between *per se* and accidental causal series: “In efficient causes it is impossible to proceed to infinity *per se*--thus, there cannot be an infinite number of causes that are *per se* required for a certain effect” (ST I, q. 46, a. 2). He then refers to an example, borrowed from Aristotle, of the stone which is moved by the stick which is moved by

the hand. From this example, we can reasonably infer that such a series can only produce an effect, in this case the motion of the stone, only if every single member of the series is simultaneously in motion. Such a series is not ordered temporally; the movement of the stick does not precede the movement of the stone, for instance. Rather, both movements occur at the same time. Every moved object in a series ordered *per se* depends here and now on all of the preceding members. If the hand were to stop moving the stick, it would simultaneously stop moving the stone. If this kind of series were infinite and had no first cause, Aquinas argues, it would be impossible (ST I, q. 46, a. 2).

An accidental series, on the other hand, is one in which “all the causes thus infinitely multiplied should have the order of only one cause” (ST I, q. 46, a. 2). To better understand accidental causal series, let’s assume that an artist is sculpting a statue. The artist uses one hammer for his statue, but he then replaces it after the hammer breaks (ST I, q. 46, a. 2). After a while, the second hammer breaks, as well as the third hammer, all the way to infinity. Timothy Joseph Day, author of “Aquinas on Infinite Regresses,” explains that an infinite number of hammers to create a statue is accidental because “the completed statue... does not depend on that multitude in order to exist” (154). Theoretically, a statue can be completed just as easily with one hammer than with infinitely many, assuming that the artist has an infinite amount of time available. The infinite number of hammers performs an equivalent amount of work as one hammer, since the artist ends up with the same result either way. Unlike the *per se* causal series, the artist’s use of each hammer in this series is temporally ordered. He uses one hammer first, the second hammer later, and so on ad infinitum. This is possible for Aquinas, because an infinitely

long temporal series accomplishes the same work as a series arranged in the “order of only one cause” (153).

Day also seems to suggest that part of the distinction between series ordered *per se* or accidentally rests on whether the order could have been different. When discussing Aquinas’ example of infinite generation, Day says that what makes it accidental is that a man’s being born to a particular father is not something necessary: “If Socrates’ father might have been Adam then Socrates certainly does not depend on all those other fathers and similarly for every other offspring” (160). We should stress the underlying reason of why the order of the series not being essential matters to the distinction. Some readers of Aquinas may commit the same mistake that I believe Patterson Brown makes, in which he relies on Duns Scotus’ view of an accidentally-ordered causal series: “[A] son depends upon his father for existence but is not dependent upon him in exercising his own causality [that is, in himself begetting a son], since he can act just as well whether his father be living or dead” (513). Furthermore, Brown argues that “the two functions of each individual variable must be identical in the essential case, but must differ in the accidental case” (517). He then states that Aquinas’ use of the stone being moved by the stick is essential because the motion of the stick is caused by the motion of the hand and at the same time causes that of the stone (517). However, I argue that this can justify a series like the consecutive falling of a row of dominoes, which Aquinas would likely categorize as accidental.

Applying Day’s strategy to the domino example, we should first see whether the falling of one domino is dependent upon the collision of the previous one. We can immediately see that this is not the case, because Domino A does not depend on the exact domino falling before it, Domino B. You could switch Domino B for any other, and the effect would be exactly the same.

In fact, it would be the same regardless if there is only one preceding domino or an infinite number, as we previously discussed with the example of the infinite hammers. Nevertheless, Brown should categorize this as an essential series, because Domino B's falling is caused by Domino C and simultaneously causes the falling of A. This domino example mirrors Aquinas' generation example, in which he employs a similar means of distinguishing an accidental series from one that is ordered *per se*. The point of showing that the order of an accidental series is non-essential is merely to illustrate the lack of a simultaneous dependence relationship, at least in the Thomistic argument from motion.

Day clarifies that an accidental and *per se* series can both occur together. In the example of the artist using infinitely many hammers to construct a statue, Day argues that there is a *per se* and an accidental series occurring here. The *per se* series must be finite, proceeding from A to B to C to D to the effect, where "D" refers to the hammer. For instance, the movement of the hammer occurs because of the motion of the artist's hand, which is moved in a certain fashion due to the "art in the soul" of the artist, or his capacity for art (ST. I, q. 7, a. 4). If any one of these causes were to be removed, the whole project would cease. Furthermore, Aquinas argues that if these causes "were infinitely multiplied, the...work would never be finished, forasmuch as it would depend on an infinite number of causes" (ST I, q. 7, a. 4). In other words, if this *per se* series were infinite, there would be no ultimate source of motion, and so the work could not ever take place. However, "it can proceed to infinity accidentally by having D1, D2, D3,...that all do the work that D [the hammer] does in the original series, but accidentally, not all at once or in any particular order" (Day 159). If the work done by one hammer in this series were done by infinitely many, this would not be a problem for Aquinas, since the statue's completion does not

depend on the number of hammers used, so long as they perform the same causal role as one hammer. The statue does not depend on any particular number of hammers, which is why they can technically be infinite in number.

V.3 APPLICATION TO AQUINAS

Let's return to the First Way and analyze it through the lens of the accidental/*per se* distinction: "But this cannot go on to infinity, because then there would be no first mover, and consequently, no other mover, seeing that subsequent movers move only inasmuch as they are moved by the first mover" (ST I, q. 2, a. 3). Such an argument would not make sense if Aquinas is referring to an accidental series. It would directly contradict his claim that an accidental infinite into the past is possible, as Craig would contend. However, the clue that he is combatting an infinite *per se* regress is his emphasis on the need for a single unmoved mover, without which nothing in existence could possibly move. If beings in the universe can exist and change without God's sustenance, Aquinas' argument would fall apart. The fullness of actuality, in which all other beings participate for their actuality, resembles a relationship of hierarchical ontological dependence, in which God is the independent source of actualization. Thus, Aquinas has to be referring to what Feser calls "divine conservation" ("Existential Inertia" 237). This is the idea that God is constantly conserving all of creation in existence at every moment. Without God as the source of all being, the universe would collapse into non-existence, which is precisely what a *per se* causal series is.

Aquinas is willing to grant that the universe may be eternal for the purposes of this argument. He has no problem with an eternal universe, since an infinite amount of time is a

series ordered accidentally. The universe's very existence does not depend on how long it has been in existence, but instead on whether it is being sustained by an ontologically independent source of all existence here and now. God could have been sustaining the universe for all eternity. However, an infinite regress of *per se* cannot explain the existence of the universe for Aquinas, since existence is derivative. The universe depends here and now on the unmoved mover, without which it would immediately pass into non-being. This is why Aquinas is able to argue against some infinite regresses while arguing in favor of others.

Aquinas' metaphysical notion of a *per se* series is illustrated by the physical principles in Aristotle's own argument from motion to an unmoved mover. Contrary to Aquinas' argument from motion, Aristotle's version actually depends on the eternity of motion in the cosmos. By showing that the heavenly bodies move in a circular motion, which Aristotle views as eternal motion, he states that these eternal bodies can only be moved by a mover that is itself unmoved (*Phys.* VII.1, 242a20-21, trans. Hardie and Gaye). Thus, contrary to William Lane Craig, who traces the universe back to a beginning in time, the Aristotelian-Thomistic argument from motion does not depend on a temporal series of past events.

We can also see in Aristotle an implicit distinction between *per se* and accidental series. An eternal universe implies eternal time, which in turn implies that an infinite temporal chain of events, or an accidental series. Aristotle also believes that a first mover is necessary to keep this eternal universe in motion. However, he clearly cannot mean "first" in a temporal sense, because he just argued for the eternity of the universe. Aristotle's reason for the necessity of a first unmoved mover instead emanates from the inability for the heavenly bodies, those that move eternally, to move themselves. In the *Physics*, he says that "[e]verything that is in motion must be

moved by something” (*Phys.* VII.1, 241b24). Since this also applies to the motion of the eternal bodies, Aristotle’s unmoved mover is required to sustain the eternal motions of the heavenly realms. Here we see a glimpse of the *per se* causal series that later thinkers have used to demonstrate the existence of an unmoved mover. The necessity of a first mover is essential because the parts of this type of chain depend directly on each prior member.

Day’s distinction between the two types of causal series is expanded by Edward Feser in “Existential Inertia and the Five Ways” (2011). In defending the position that God continually sustains natural objects in being, he explains that “Aquinas explicitly acknowledges...that there can be non-divine beings which are necessary...while maintaining that such beings nevertheless require a divine sustaining cause insofar as they do not have their necessity of themselves” (“Existential Inertia” 256). To put it more squarely in the context of the First Way, beings can be in constant states of actuality without passing into non-being, so long as an external mover is continuously actualizing it. Moreover, Aquinas holds that “particular individual material substances that are generated and corrupted, while matter and form themselves are not” (256). Feser alleges that this component of Aquinas’ thinking on causality supports divine conservation, which argues that beings in a causal chain depend simultaneously on one another for their continued existence (240). Since existence for Aquinas is a state of actuality, we can say that the actualization of a potential only occurs when every ontologically preceding cause in the chain simultaneously actualizes, which is a derivative ability, or an ability that derives its power from an ultimate source.

Caleb Cohoe’s distinction on the types of infinite regresses rejected or accepted by Aquinas also rests on this notion of a series ordered *per se*, which is “asymmetric, irreflexive,

and wholly derivative” (839). He distinguishes that from accidentally-ordered causal series, “requir[ing] an infinite number of causes *per accidens*” (840). He argues that implicit in the First Way is the notion of ontological dependence, which provides an ontological explanation for the dependence of effects here and now on their preceding causes.

A cause in a chain only acts as a cause because it is “caused by and [is an] effect[] of all the preceding members” (838). This expands upon Aquinas’ own words that describe the impossibility for things to actualize themselves: “Now it is not possible that the same thing should be at once in actuality and potentiality in the same respect, but only in different respects” (ST I, q. 2, a. 3). Furthermore, Cohoe’s analysis shows that if Aquinas chooses to accept some regresses while rejecting others, it can only make sense if ontological dependence is implicit in his argument. When Aquinas is referring to causation in the First Way, he is not tracing the causal chain back temporally but ontologically. In other words, the very fact that beings in a *per se* causal series have the ability to actualize potentials in other beings is because this ability is derived from every other member ontologically prior to them. Moreover, a *per se* infinite regress would mean that a series in which each dependent member requires a source of actuality does not have such a source, which is impossible if motion is to exist.

VI. CONTRASTING THE TWO ARGUMENTS

As stated in the introduction, there have been several attempts to modernize and reformulate the cosmological argument since the medieval period. Among the most prominent of these is the Kalām cosmological argument as defended by William Lane Craig. This argument is completely divorced from the ancient notion of actuality and potentiality; instead, it is replaced by the Causal Principle. It is my contention that the modern Kalām argument lacks the strength and effectiveness of the Thomistic formulation for three main reasons. First, the Kalām cosmological argument is based upon the Causal Principle, which can only demonstrate the coming into existence of objects from previously-existing matter. Second, it conceives of God's act of creation as equivalent to generation, since the Kalām argument reduces creation to temporal generation. Lastly, due to the flaw in the second problem, the Kalām cosmological argument does not prove that the monotheistic God exists. It is bereft of a strong conception of potentiality and actuality, which reduces God to a mere creature and offers a flimsy understanding of God when compared to the Aristotelian-Thomistic conception.

VI.1 DIFFERENCES OF PRINCIPLE

At first glance, this seems to adhere to Aquinas' notions of act and potency, especially in the first premise. After all, nothing can cause itself to be, and that which moves from non-being to being moves from potentiality to actuality. This seems to coincide with the Thomistic principle that no potential existent brings itself into being by itself, or that a being that actualizes itself from potency is impossible since it would have to be prior to itself. Nevertheless, Craig's Causal

Principle is fundamentally different from Aquinas' understanding of change. This principle claims that if something begins to exist, there must be an external cause for its coming to be.

The PSR is the foundation of Craig's Kalām argument (Reichenbach para. 63). However, he narrows down the full-fledged PSR, so that it only includes temporal causation. As such, while the PSR is controversial among philosophers, the narrower Causal Principle reduces the focus to a single type of becoming, namely that of coming into being. In essence, then, the Causal Principle demands an adequate explanation for a common phenomenon: in order for something to come into existence, there must be an adequate cause to explain it. Despite this modification, the Causal Principle still relies on sufficient explanations for events, as opposed to real natural causes for the existence of real natural substances.

Craig, by depending on the Causal Principle, also argues that beings require preceding causes in order to come into being. After he establishes that individual beings cannot come into existence without a cause, he then argues that the entire universe came into being at some point in the finite past, which implies that it also requires a cause. This move assumes that the universe as a whole can be categorized as a being on par with beings like dogs, trees, or people. Some would say that treating the universe as having the same properties as individual beings commits the part-to-whole fallacy: just because parts of the universe have a certain property or quality does not mean that the universe as a whole possesses that property or quality.

Others may argue that the universe is merely the conglomeration of all beings that exist, but it is not itself a being. These criticisms may or may not be accurate; nevertheless, this entire controversy can be completely avoided by appealing to actuality and potentiality instead of the Causal Principle. While I am not contending that the merits of either position rest on simplicity

or the avoidance of debate, the Causal Principle's failure to demonstrate certain qualities of the universe is telling. It presents premises that do not have to be proven to demonstrate the existence of God, and by searching for a temporal first cause, the Kalām argument circumvents a more fundamental issue that Aristotle and Aquinas gladly take up.

VI.2 DECONSTRUCTING THE KALĀM ARGUMENT

The crux of Craig's cosmological argument is that nothing can come into being without a cause. Thus, because the universe came to be, it also requires a cause. What Craig essentially states through the Causal Principle is that an external being must exist in order to explain the cause of the existence of another being. For instance, a human being cannot just pop into existence; he requires parents. In one sense, then, Craig is correct that beings come to be from other beings.

However, in another sense, beings come to be from non-being. Aquinas identifies three different principles through which generation occurs: "being in potency which is matter, non-existence in act which is privation, and that through which something comes to be in act which is form" (*De. Prin. Nat.* para. 8). In the sense that matter per se and privation denote a lack of actual being, substances do indeed come to be from non-being. However, this is not non-being in the absolute sense, since substances are also generated from other beings.

However, the problem with the Kalām argument in this regard is that it tries to establish the existence of a first cause of the universe not by reasoning to an ultimate reality or ultimate explanation, but by first defending the idea that the universe began to exist at some point in the finite past. Thus, the Kalām argument depends entirely on the soundness of the second premise,

which is more controversial than the first. As a result, a defender of God's existence via the Kalām cosmological argument must first establish that everything that begins to exist needs a cause, and then proceed to defend that the universe began to exist. The conclusion, nevertheless, is not that God exists or even that He is the first cause, but that the universe has an external cause. In order to demonstrate that God exists, the arguer must show why this cause has to possess the divine attributes that align with the God of theism, such as omnipotence, omniscience, eternity, infinity, and omnibenevolence.

Craig fails to distinguish between non-being in the sense of matter or privation and absolute non-being. As a result, the conception of non-being in the Kalām argument is limited to absolute non-being. This is a critical error, because it restricts the scope of causal chains to those that are linear, while failing to account for the *per se* causal series found in Aquinas. By limiting his view of causality to one certain type, Craig imposes upon himself an unnecessary burden, which is to prove that the universe began to exist at some point in the finite past.

Not only is this an unnecessary point to prove, but it also steers the conversation away from the core issue in the debate between theism and atheism: the question of what sustains all of existence in being. This is what Aquinas' argument from motion seeks to answer. He is focused on one phenomenon, motion, and finding the source of all motion. In this way, Aquinas casts the question of infinite regresses in a light of derivative powers. The first three of the Five Ways deal with common features of the universe, such as motion, efficient causality, and contingency, and Aquinas recognizes that they derive their potency from something else. Hence, he concludes that these features must derive from, or participate in, the fullness of being itself, which is the source of all motion, causality, and contingency. However, since Craig emphasizes chronological causal

chains, he avoids this deeper question and instead remains on whether the universe began to exist. If Craig were to focus on the derivative nature of phenomena like motion, he could completely avoid the modern philosophical objections, like those from Russell and Rundle.

Furthermore, Craig's argument only demonstrates that coming to be from other beings occurs in the universe, which Aristotle and Aquinas term "becoming" or "generation." Nevertheless, Craig does not show that God's act of creation caused the universe to exist. Instead, he attributes the same generation among beings in the cosmos to creation by God. The Kalām argument treats the creation of the universe as equivalent to the generation of natural objects. This is particularly problematic because generation is a form of change, moving from one contrary to the other. As Aquinas states, such a change requires an underlying subject that persists through the change (*De Prin. Nat.* para. 3). In the case of the universe, this would be the change from its non-being to its being. Assuming that God's act of creation is equivalent to the coming-to-be of natural objects, the creation of the universe would be a substantial change, since the persisting subject would be prime matter, onto which an outside being, God, infuses a substantial form.

If God creates in the same way that finite beings generate, as the Kalām argument implicitly suggests, there would have to be time "in the first part of which we find the one contrary, and in the second part the other" (*De Pot.* q. III, a. 2). However, Craig contends that an infinite temporal regress of events could not possibly exist, and so time must have a beginning ("The Ultimate Question of Origins" 738). This is undermined, though, by his own argument, because if God is merely the one that initiates the chain of temporal events, He is merely the

generator, not the creator, of the universe. In fact, if creation is equivalent to generation, these terms would basically be nothing short of interchangeable.

Craig recognizes, though, the objection that under his framework, the creation of the universe must have been an event in time. He argues, however, that the act of creation was not an event occurring in time, but was instead a timeless event, in which the cause and effect both occurred simultaneously. Against the view that God created the universe in time, Craig offers the position that “The Creator may be conceived to be causally, but not temporally, prior to the origin of the universe” (“Prof. Grünbaum on Creation” 327). If God created the universe *ex nihilo*, or out of nothing, which Craig does indeed believe, God could not possibly have created in time, since there was no time in existence prior to His act of creation. Instead, the causality described in the Kalām argument is misunderstood as referring exclusively to chronological causation. The argument, according to Craig, claims “not that there was a state of nothingness temporally prior to the origin of the universe, but simply that the universe lacks a prior material cause” (327). Therefore, God serves as the cause of the universe not in a temporal sense, but in a purely causal sense. In other words, the cause does not precede the effect chronologically, but as the cause *per se*.

For Aquinas’ argument, either a finite or an eternal universe can work, since the concern here is God as the cause of the universe’s being, not its becoming. Becoming involves change, which is inextricably linked to time, since time only makes sense in terms of change. However, Craig’s argument relies on causation in relation to coming into existence, or becoming. Moreover, the Kalām argument equates the coming-to-be of natural objects and that of the entire universe.

Of course, Craig can argue that his argument merely establishes that a cause exists (regardless of what type of cause it is). In that case, however, there is no apparent reason to favor Craig's view of God's creative act as non-chronological. Prior to creation, God is only timeless because there are no events. If the universe's creation initiates the first event, and by extension time, as Craig himself suggests, "time begins with the first event, not only for the universe, but also for God, in virtue of His real relation to the universe" (327). This, though, demonstrates a weak conception of God as a timeless cause, for if God were to hypothetically create another universe from nothing alongside our universe, that would be an act of creation in time, due to His relation to the passage of time in our current universe.

Craig is not mistaken when he acknowledges that God created the universe outside of time. However, the framework he creates based on the Kalām argument makes this view incompatible with the rest of his claims on the nature of causation. His claim that God's act of creation is more akin to a *per se* causal relation is grounded on a different foundation than what Aquinas would argue (327). For instance, Craig claims that God existed timelessly before the universe was created, since there were no events unfolding. Thus, based on Craig's argumentation, God's timelessness was only an accidental side effect of His existence before the existence of material reality, which also suggests that God was bound by some sort of temporal series from all eternity. If His timelessness was contingent on there being no events, then the first event, the act of creation, would have changed that, making God's timeless existence more like a state of being than part of His eternal nature. This would make His timelessness nothing more than an eternally long first event, with creation being the second event. Therefore, despite Craig's

attempt to make God a non-chronological first cause, he is still left with the notion that God is a temporal cause.

Additionally, by reducing God to the first temporal cause of a chain of causes, Craig's argument inadvertently makes God nothing more than something that forms matter, which is essentially the process of generation. The flaw with this line of thinking is that it entails that formless matter had to exist prior to the generation of the universe. After all, there would have had to be something for Him to shape into the cosmos. If prime matter existed before the universe, it would imply that time existed before creation, since the act of forming matter is a substantial change from potentiality to actuality. Thus, time would exist before time began, and that time existed alongside God before creation.

Moreover, even if a defender of the Kalām cosmological argument contends that prime matter did not exist before creation, there would be nothing for God to use to make the universe. This is a serious dilemma for the Kalām defender, because it only recognizes efficient causality, or that which unites matter to a form. While Aquinas definitely acknowledges God as the efficient cause of all in existence, he distinguishes in the *De Potentia Dei* between efficient causality in terms of becoming, under which generation and corruption fall, and efficient causality in terms of being (*De Pot.* q. V, a. 1). The argument does not rely on the metaphysics of act and potency, so it does not recognize God as pure act.

To defend this premise against objections pointing to an infinite regress of the universe, Craig argues that an actually infinite temporal regress into the past is logically impossible. He appeals to the absurdities that arise in thought experiments like Hilbert's Hotel or in claiming to arrive at negative 1 after counting all the way from negative infinity. If applied to our universe,

Craig contends, these same absurdities would still arise. For instance, we are at the present day, but if there were an infinite number of days preceding this day, we could never arrive at the present. But it is patently obvious that today occurred. Thus, the past had to be finite, thereby supporting the premise that the universe requires a cause, and in order to terminate the regress, it must be the first cause.

For Craig, such a cause would have to be powerful enough to create the universe, outside of all space and time as the creator of space and time, and supernatural, since it cannot be natural as the creator of nature itself. Such a being possesses the qualities traditionally attributed to God. Therefore, Craig concludes that the first cause of the universe must be God, a necessary, infinite, eternal, all-powerful, all-knowing being (*The Existence of God* para. 3).

The Kalām cosmological argument is a modern attempt to reconcile contemporary science with theistic philosophy. Without a doubt, Craig's syllogism is valid; his premises, if true, logically entail his conclusion. If it is true that the universe began and that everything that begins to exist requires a cause for its existence, then the universe must have a cause. Nevertheless, we ought to question the soundness of the syllogism starting with the first premise. If everything that begins to exist needs an external cause to bring it into being, this means that nothing that begins to exist can bring itself into being. This implies that no being that begins to exist possesses the power, or the actualizing principle, necessary to move from potentiality to actuality, and as such depends on an outside cause for actualization. If this were false, we would have to admit that beings can actualize themselves entirely on their own, and we thus would be required to argue for the possibility of non-being to contain the ability to become being, which is

absurd. After all, non-being cannot possess anything, since that would make it some type of being. Thus, the first premise is granted.

The second premise, however, is more questionable. There are two aspects of Craig's version of this premise, the scientific defense and the philosophical defense. One of the problems with the Kalām argument is the appeal to science, not because the science is faulty, but because the debate over the scientific proof of the origin of the universe is only a tangent from the deeper, philosophical issue of God's existence. Hence, for the sake of brevity, I will narrow my focus to the philosophical dimension of the second premise.

The difference between Craig's Kalām argument and Aquinas' is what they set out to prove. Both Aquinas and Craig demonstrate the existence of God from what we can empirically observe, namely the natural world. In this sense both arguments are cosmological. However, the difference lies in that Aquinas reasons from observing motion, or the actualization of potentiality, to the conclusion that the basis for all motion resides in an unmoved mover who is pure actuality, or being itself. Craig's approach starts with the premise that things that begin to exist require a cause, and then concludes that there must be a first cause in the temporal chain of causes responsible for the existence of the universe in the finite past.

These two approaches lead to very different conceptions of God. Aquinas' God is the fullness of being, or existence itself, because he is fully actual without any potentiality. Since actuality is the fullness of being, God is the actualizer that does not need to be actualized. Other beings participate in existence, but existence is not essential to them. Therefore, they derive their existence from the source of all being, without whom there could be no existence. In sum, Aquinas' argument from motion is concerned with change as a derivative quality, allowing him

to conclude that God is the ground of all change. On the contrary, Craig's God is simply the first cause of a finite chain. God is not *actus purus* according to the Kalām argument; He is simply the first cause in a chronological sequence of events.

VI.3 THE MODERN RESPONSE

One final difference between the arguments of Aquinas and Craig is their vulnerability to certain objections. Many objections to which Craig must respond are irrelevant to Aquinas. For example, the 20th-century philosophers Bertrand Russell and Bede Rundle have similar rebuttals to the argument that the material world requires an external first cause for its existence. While they do not believe that the infinite regress of motion that Aquinas emphasizes does not need to terminate in an unmoved mover, they attribute this role to something in nature.

Rundle conceives of causation in purely physical terms: “[H]ow could this [fine-tuning of the universe] be evidence of divine action when ‘our basic conception of cause... involves physical contact?’ A gardener pushing a wheelbarrow ‘is doing something to the wheelbarrow,’ as any fool can see; there are no hidden forces here” (Leslie 197). Even though this paper is not focusing on the argument from fine-tuning, Rundle's view on causation, which only encompasses the physical moving of two or more objects, is exemplified here. Closely linked to his stance on the limit of causation, Rundle states that many theologians do not conceive of God as physical (200). Thus, in no sense could God cause anything.

This final point Rundle raises makes sense under his causal framework, but his physicalist view of causation does not account for every instance of change in the world. In the *Summa Theologica*, Aquinas asks whether God's existence differs from His essence: “First,

whatever a thing has besides its essence must be caused either by the constituent principles of that essence...or by some exterior agent” (ST I, q. 3, a. 4). Aquinas holds that “it is impossible for a thing’s existence to be caused by its essential constituent principles,” because, if a thing’s essence does not contain existence and is thus distinct from it, the essence of a non-existing thing cannot give itself existence (ST I, q. 3, a. 4). Therefore, an existing thing derives its existence from another existing thing.

If God is the unactualized actualizer, His essence and existence cannot differ from each other. If God’s essence did not include existence, He would need an external existing thing to bestow being onto Him, and then that being would require another being, ad infinitum. To avoid the logical impossibility of an infinite regress, God’s essence must be existence itself. God is existence itself, from whom all other beings participate in existence. Thus, when Rundle criticizes the appeals to God as an ultimate explanation for change in the world, he is severely misunderstanding Aquinas’ metaphysical framework.

Let’s assume for the sake of argument that the only entity that exists is the physical universe, and that there are no angels, God, or immortal human souls. Can a universe filled only with matter exist on its own? Is the first cause of all things simply reducible to matter? Rundle himself states that the Law of the Conservation of Energy “according to which matter and energy are never lost but rather transmute into each other,” accounts for the existence of everything in the cosmos, and that, “[a]s indestructible, matter/energy is the necessary being” (Reichenbach para. 38). However, matter and energy cannot take the place of the unactualized actualizer, since they are constantly taking different forms, being actualized in all sorts of ways. Matter can take on any shape, color, or position in space. Aristotle even calls prime matter, that is, matter without

form, pure potentiality, since “it is capable of taking on any form whatsoever” (Ainsworth para. 12). Ultimately, Rundle attempts to reduce all causation to material entities, which fails to explain the causes of the changes of matter. No matter how far one wants to push it back, only a source of all being that is pure actuality, in which all other beings participate, can account for the existence and change that occur in reality.

Additionally, Rundle’s rebuttal to Aquinas anachronistically imposes a modern conception of matter onto the medieval cosmological argument, which completely discards the metaphysical background at work. A refutation of Aquinas’ metaphysics is definitely acceptable, but it must operate on his grounds rather than acting as if the argument is operating under modern definitions.

Ultimately, Rundle refuses to give a charitable rendering of Aquinas, since he refuses to engage with Aquinas’ metaphysics, viewing Aristotle’s metaphysics of matter as worthless. If pure matter truly is potentiality that requires an actualizing principle (i.e. form) in order to actualize, then the conclusion that all of reality is grounded on pure actuality becomes more plausible. Granted, this is not itself an argument for the soundness of Aquinas’ cosmological arguments, but it merely demonstrates that an accurate understanding of the metaphysical framework is a crucial step in dealing with the argument effectively.

On the contrary, while Aquinas’ arguments are defensible against this attack from the nature of matter, the Kalām argument leaves the door open to them. Craig responds to the question of matter by appealing to Big Bang cosmology. He accepts the Standard Big Bang Model, which does not refer to “the expansion of the material content of the universe into a pre-existing, empty, Newtonian space, but rather the expansion of space itself” (“The Ultimate

Question of Origins” 725). In other words, the Big Bang led to the generation of matter and energy. If the Standard Model is correct, then matter was created at a certain point in the finite past, prior to which absolutely nothing existed. After this explanation of the Standard Model, Craig argues that God is the first cause of the universe, since, as explained above, the first cause must be “timeless, spaceless, beginningless, changeless, necessary, uncaused, and enormously powerful” (737). Evidently, Craig takes a temporal approach to defending the dependence of matter on God than does Aquinas.

The Big Bang is a relatively uncontroversial scientific theory. However, the more pressing issue is not Craig’s utilization of Big Bang cosmology itself, but rather his method of proving that matter is not the ultimate cause of the universe. As stated previously, Craig places an undue burden on himself by relying on the causal principles of the Kalām argument. It forces him to engage with these objections on their playing field, which places Craig at a disadvantage, especially because of his conception of God as temporal first cause. This idea leaves Craig open to objections; for instance, he has no sufficient reasons to favor non-chronological creation, and his view can possibly depict God as existing in time. Aquinas is much more robust when countering objections, because his argument allows for a wider view of causation, thereby including the possibility that God’s creation is atemporal.

Another objection comes from Bertrand Russell, who questions why we need a first mover at all to explain the existence of the universe. To him, the existence of the universe is simply a brute fact of reality. No explanation is necessary, since “the universe is just there, and that's all” (Reichenbach para. 40).

If the universe and its laws were nothing more than a brute fact, then the universe should sufficiently explain its own existence. Aquinas and Craig are both in agreement on that point. However, they diverge in their methods of objecting to Russell's claim. Craig would argue that the universe had a beginning in time, which would require us to look for a cause. On the other hand, Aquinas would say that the universe cannot be the source of change, or the actualization of potentiality, that we observe in reality, since the universe is not pure actuality or pure existence itself.

Aquinas' approach directly addresses the fundamental issue at hand, the origin of all being. The actualization of potentiality can only be grounded in an entity that is pure actuality, because the changes in the world are only able to occur due to their participation in the actualization of previous potentials, which in turn must be grounded in a purely actual source. With Craig's approach, though, one would have to first establish that the universe began to exist, which leads to the digression into Big Bang cosmology, the different theories of time, and whether the universe was eternal, all of which characterize Craig's scholarly conversation with opposing interlocutors. Unfortunately, this debate misses the forest for the trees. The question of God's existence becomes lost in the weeds of scientific theory, which is always subject to modification.

The argument from motion is part of a philosophical conversation that is completely alien to the objections of Russell and Rundle. However, the contemporary Kalām argument is more widely open to these objections, because it deals directly with the beginning of the universe, which are precisely what Russell and Rundle refute. While Russell objects to the notion that the universe needs a temporal first cause by appealing to brute facts, Rundle refutes the same idea by

pointing to the Law of the Conservation of Energy. Nevertheless, they both contribute to the philosophical-scientific debate on the finite past of the universe, which has created the impasse between thinkers like Craig and his opponents.

VII. CONCLUSION AND IMPLICATIONS

As the ongoing discussion about the existence of God continues in academia and in popular culture, the disagreement between classical and contemporary theists also remains. The fundamental concepts in this debate are not only the nature of God Himself, but also the methods of demonstrating that He exists. Thus, it is important to stress the distinction between these two philosophical approaches, as exemplified in Thomas Aquinas and William Lane Craig.

The philosophy of classical theism rests on Aristotelian principles, like actuality and potentiality, matter and form, and the idea of change as the actualization of potentiality. Such principles provide the basis for Aquinas' Five Ways, which cannot be understood apart from his Aristotelian background. When a contemporary understanding of cause and effect is imposed upon Aquinas' arguments, the full force of those arguments is severely weakened. False interpretations asserting that Aquinas primarily had a linear, temporal causal series in mind, or that he relied on the Principle of Sufficient Reason, all make the mistake of neglecting the essential philosophical concepts that are truly at work in the arguments.

The modern Kalām cosmological argument, on the other hand, depends on a different set of principles, particularly the Causal Principle. Such an argument, as has been shown above, is radically distinct from what Aristotle and Aquinas had in mind. Defenses of God's existence like the Kalām cosmological argument demonstrate their conclusion in a manner that completely misses a deeper and much more fundamental point of which Aristotle and Aquinas were aware. Specifically, the ancient and medieval arguments were much more concerned with ultimate reality: Is the world of the sense experiences all there is, or is there something undergirding this world and sustaining it in being? In other words, is the universe that contains motion, efficient

causes, and contingent beings self-subsisting? However, philosophers like Craig and al-Ghazali are preoccupied with discovering the first mover of the universe in a temporal sense; they want to know who pushed the first domino in a series of falling dominos. As a result, they are concerned with demonstrating the finitude of the past, as well as showing that the universe cannot be eternal.

With Aquinas and Aristotle, one can be agnostic about the eternity of the universe while still accepting the arguments, because the arguments themselves go beyond the superficial question of a temporal beginning to reality. The causal series with which Aquinas was concerned is a *per se* causal series, one in which each dependent member of the series derives their causal power from an ultimate, independent cause.

One main implication of this analysis is that the medieval Thomistic arguments are much stronger and more compelling than the Kalām argument. Not only do they withstand scientific developments (unlike the Kalām argument), but they also exhibit a robust foundation in metaphysical principles that point to conclusions that cannot be defeated easily. They do not rely on the causal principle, which portrays a very different God than that of classical theism. Furthermore, the Kalām argument commits the fallacy of equivocation by applying the term “cause” both to natural causes and to the divine cause. In order to establish the logical connection between God’s causality and the causality of natural objects, the natural causes must be similar to the causal power of God. Unfortunately, however, this diminishes the nature of God in a way that the Thomistic argument from motion does not. While Aquinas views God as the unactualized actualizer that moves all other beings from potentiality to actuality, the Kalām

argument views Him as a temporal first cause, which places Him on the same linear level as the natural causes.

The comparison of these two prominent philosophers will hopefully serve as a call to those in the fields of philosophy of religion and natural theology to refer back to the arguments of Aquinas, as well as Aristotelian-Thomistic metaphysics, in the scholarly conversation of the existence of God. Currently, the conversation revolves around the beginning of the universe, the finitude of time, and temporal causal chains. Unfortunately, such a discussion fails to address the question of ultimate reality, which can move the debate towards a more fruitful direction. The current debate should be primarily metaphysical, not scientific, because the question of God is metaphysical. However, as it stands today, the conversation on all sides relies too heavily on scientific data, which creates a flawed notion that the question is scientific. This puts theists and atheists alike at a disadvantage, since they are debating about a metaphysical topic with the inappropriate tools. Only recently has the debate taken such a scientific turn, even though the Kalām argument has existed for centuries in various forms. Nevertheless, if philosophers at least turn back to the traditional arguments of Aquinas and seek to understand them in their appropriate philosophical context, they can be able to approach the question of God in a proper metaphysical way without the scientific baggage.

These five arguments of St. Thomas Aquinas ought to be reconsidered by many modern theistic philosophers, because its case for God's existence is grounded on metaphysical principles, as opposed to scientific ones. Hence, the arguments are not susceptible to changes based on the ever-changing discoveries in the natural sciences. If the universe was scientifically proven to be eternal, the Thomistic arguments would not be threatened, and the same would be

true if the universe was scientifically demonstrated to be finite. On the other hand, the Kalām cosmological argument is liable to persnickety debates about scientific matters, and as a result, it misses the larger issue. Hopefully, this analysis shows that far from being a set of ancient, credulous, obsolete assertions, the Thomistic arguments for the existence of God are still a force to be reckoned with. Theistic philosophers can benefit by taking another look at the Five Ways, as well as the Aristotelian metaphysical framework upon which they are built.

VIII. WORKS CITED

- Al-Ghazali. *Incoherence of the Philosophers*. Translated by Sabih Ahmad Kamali, Pakistan Philosophical Congress, 1963.
- Aristotle. "Categories." *The Basic Works of Aristotle*, edited by Richard McKeon, The Modern Library Classics, 1941, pp. 7-37.
- Aristotle. "Metaphysics." *The Basic Works of Aristotle*, edited by Richard McKeon, The Modern Library Classics, 1941, pp. 681-926.
- Aristotle. "On Generation and Corruption." *The Basic Works of Aristotle*, edited by Richard McKeon, The Modern Library Classics, 1941, pp. 467-531.
- Aristotle. "Physics." *The Basic Works of Aristotle*, edited by Richard McKeon, The Modern Library Classics, 1941, pp. 213-394.
- Ainsworth, Thomas. "Form vs. Matter." *Stanford Encyclopedia of Philosophy*, 8 Feb. 2016. <https://plato.stanford.edu/entries/form-matter/>. Accessed February 15, 2020.
- Aquinas, Thomas. *Commentary on Aristotle's Metaphysics*. Translated by John P. Rowan, E-Book, Regnery, 1961.
- Aquinas, Thomas. *De Ente et Essentia*. Translated by Joseph Kenny, O.P., E-Book, 1965.
- Aquinas, Thomas. *De Potentia Dei*. Translated by the English Dominican Fathers. E-Book, The Newman Press, 1952.
- Aquinas, Thomas. *De Principiis Naturae*. Translated by R.A. Kocoruek. E-Book, North Central University, 1948.
- Aquinas, Thomas. *Summa Contra Gentiles, Book 1: God*. Translated by Anton C. Pegis, University of Notre Dame Press, 1975.

Aquinas, Thomas. *Summa Theologica*. Translated by the Fathers of the Dominican Province,

<http://www.documentacatholicaomnia.eu/03d/>

[1225-1274, Thomas Aquinas, Summa Theologiae %5B1%5D, EN.pdf](#).

Brown, Patterson. "Infinite Causal Regression." *The Philosophical Review*, vol. 75, no. 4, 1966,

pp. 510-525. *JSTOR*, <https://www.jstor.org/stable/2183226>. Accessed December 2, 2019.

Cohoe, Caleb. "There Must Be a First: Why Thomas Aquinas Rejects Infinite, Essentially

Ordered, Causal Series." *British Journal for the History of Philosophy*, vol. 21, no. 5,

2013, pp. 838-856. *Taylor & Francis Online*, <http://dx.doi.org/>

[10.1080/09608788.2013.816934](http://dx.doi.org/10.1080/09608788.2013.816934). Accessed December 2, 2019.

Craig, William L. "In Defense of the Kalam Cosmological Argument." *Faith and Philosophy*,

vol. 14, no. 2, 1997, pp. 236-247.

Craig, William L. "Prof. Grünbaum on Creation." *Erkenntnis*, vol. 40, no. 3, 1994, pp. 325-341.

JSTOR, <https://www.jstor.org/stable/20012549>. Accessed January 2, 2020.

Craig, William L. *The Existence of God and the Beginning of the Universe*. Here's Life, 1979.

Craig, William L. "The Ultimate Question of Origins: God and the Beginning of the Universe."

Astrophysics and Space Science, vol. 269-270, 1999, pp. 723-740. *Springer*, [https://](https://link.springer.com/article/10.1023/A:1017083700096)

link.springer.com/article/10.1023/A:1017083700096. Accessed January 2, 2020.

The Oxford Handbook of Aquinas, edited by Brian Davies and Eleonor Stump, Oxford

University Press, 2012.

Day, Timothy J. "Aquinas on Infinite Regresses." *International Journal for Philosophy of*

Religion, vol. 22, no. 3, 1987, pp. 151-164. *JSTOR*,

<https://www.jstor.org/stable/pdf/40018833.pdf?>

[ab_segments=0%2Fbasic_expensive%2Fcontrol&refreqid=search%3Ac43da4a06190c62](https://www.jstor.org/stable/pdf/40018833.pdf?ab_segments=0%2Fbasic_expensive%2Fcontrol&refreqid=search%3Ac43da4a06190c62)

[b8c01eccbc23aba6a](https://www.jstor.org/stable/pdf/40018833.pdf?b8c01eccbc23aba6a). Accessed December 1, 2019.

Feser, Edward. *Aristotle's Revenge: The Metaphysical Foundations of Physical and Biological Science*. Editiones Scholasticae, 2019.

Feser, Edward. "Existential Inertia and the Five Ways." *American Catholic Philosophical Quarterly*, vol. 85, no. 2, 2011, pp. 237-267. Philosophy Documentation Center,

<https://isidore.co/misc/Res%20pro%20Deo/>

[American%20Catholic%20Philosophical%20Quarterly/Existential%20Inertia%20\(Feser;%20ACPQ\).pdf](https://isidore.co/misc/Res%20pro%20Deo/American%20Catholic%20Philosophical%20Quarterly/Existential%20Inertia%20(Feser;%20ACPQ).pdf). Accessed March 9, 2020.

Fine, Kit. "Ontological Dependence." *Proceedings of the Aristotelian Society*, 95, 1995, pp. 269-290. *JSTOR*, <https://www.jstor.org/stable/4545221>. Accessed February 15, 2020.

Leaman, Oliver. *An Introduction to Classical Islamic Philosophy*. 2nd edition, Cambridge University Press, 2002.

Leslie, John. "Why There Is Something Rather Than Nothing by Bede Rundle." *Mind*, vol. 114, no. 453, 2005, pp. 197-200. *JSTOR*, <https://www.jstor.org/stable/3488998>.

Accessed March 9, 2020.

Lizzini, Olga. "Ibn Sina's Metaphysics." *Stanford Encyclopedia of Philosophy*, 26 Mar. 2020.

<https://plato.stanford.edu/archives/sum2020/entries/ibn-sina-metaphysics/>. Accessed

October 10, 2020.

- McGinnis, Jon. "Arabic and Islamic Natural Philosophy and Natural Science." *Stanford Encyclopedia of Philosophy*, 2 Nov. 2018. <https://plato.stanford.edu/archives/win2018/entries/arabic-islamic-natural/>. Accessed September 23, 2020.
- Moreland, James P. and William Lane Craig. *Philosophical Foundations for a Christian Worldview*. IVP Academic, 2009.
- Reichenbach, Bruce. "Cosmological Argument." *Stanford Encyclopedia of Philosophy*, 11 Oct. 2017. <https://plato.stanford.edu/archives/fall2019/entries/cosmological-argument>. Accessed February 15, 2020.
- Soskice, Janet. "Aquinas and Augustine on Creation and God as 'Eternal Being.'" *New Blackfriars*, vol. 95, no. 1056, 2014, pp. 190-207. *JSTOR*, <https://www.jstor.org/stable/43251809>. Accessed September 23, 2020.