Fort Bend Christian Academy

God and Modality: An Excursus on the Ontological Proof

A Thesis Submitted to

the Teacher and Students of the Advanced Apologetics Class

Department of Worldviews and Apologetics

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Introduction

"A curious thing about the ontological problem is its simplicity. It can be put in three Anglo-Saxon monosyllables: 'What is there?'"[1] Well, what is there? Every academic must come to terms with this question. Even if one maintains a commonsensical ontology, everyone has an ontology. There are certain objects to which people ascribe existence and certain objects to which people ascribe non-existence. Over the course of this paper, the definition of what it means to "exist" will be analyzed in terms of modes. Breaking up existence in this format is known as the study of modality. Modality is a broad ranging field and has taken on many forms since its inception. In fact, as of late, there are seven tentative divisions of this logic: conditional, epistemic, doxastic, tense/temporal, dynamic, deontic, and alethic. The work at hand will analyze modality purely under the form of alethic logic, that is to say, the logic of possibility and necessity.[2, 3] The argument that is being put forth is that by analyzing the concept of existence, through the lens of modality, an agglomeration of proofs for God's existence will emerge that are both valid and sound.[4,5]

Before jumping into the murky waters of modality, it is appropriate to lather ourselves in the significance of this concept through history. Briefly to state it, the historical review will encompass advancement in four periods of humanity: Greek, Medieval, Modern, and

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[1] Quine, W. V. *On What There Is*. Washington, D.C.: Catholic University of America, Philosophy Education Society, 1948.

[2] Henceforth, unless otherwise stated, reference to modality will entail reference to alethic logic.

[3] I don't mean to imply that alethic modality will be the only type of modality in the stadium. In using the Term "purely," I am following Kant and mean for this to be taken as synonymous with "non empirically."

[4] In academic literature this reasoning is referenced by the family of Modal Ontological Arguments for God's existence.

[5] It is important to note the distinction between an argument and a proof. An argument is less formal than a proof. This thesis is an informal argument for a formal proof. Obviously this definition is insufficient, but will serve the purposes of my point. For the rest of the prospectus I will impose no such distinction as the purpose is comprehension and not formality.

Contemporary Epochs. The Greek Era with respect to philosophy was the genesis of modality. Aristotle, the father of the syllogism, was also the father of the necessary and the possible. Following in his footsteps came the Megarian and Stoic Schools which carried on his noble tradition. From this family, the first inklings of what is now known as an ontological argument manifested themselves into the person of Diogenes of Babylon.[6] After the Greek Era, muse-like inspiration was combined with the progress from the Muslim world to instantiate in the work of Saint Anselm of Canterbury. Most historians of theology credit this man with the foundations of the ontological argument. However, because of his poor performance with Guanillo and the fact that his work was eclipsed by that of Saint Thomas, the Medieval period is hailed as a sad time for the ontological argument. My approach hopes to avoid this tunnel vision method and move past traditional Anselmian hymns to a more vivid and engaging lyric that is not wholeheartedly flat. The last period before contemporary advancement was the Modern Era. In this time, both modality and the ontological argument were progressed together. Leibniz's notions of calculus alongside his ideas of possibility were highly influential. With Spinoza reworking the ontological argument before him and Frege building a logical framework to access modality after him, the modern era set the stage for contemporary advancements. Lastly, out of the heart of process theology came the groundbreaking work of Charles Hartshorne. Although his visage of the divine was lacking in the area of omniscience, his modal interpretations of Anselmian thought led the way for truly powerful advancements. The most prominent theists to take on such reasoning were the realist mathematician, Kurt Gödel, and the nominalistic philosopher, Alvin Plantinga. With the likes of these men in mind, the reader is now equipped to participate in substantive discussions.

[6] Because of Diogenes' dwindling role of unimportance, he will not be given more than a gentle nod.

Current discussions on Modal Ontological Arguments are analogous to a set of proofs and rebuttals. The proofs are mostly theistic by nature, whereas rebuttals fall on either side.[7] The major attacks are based on the impossibility of divinity, the fallacy of question begging, the nature of necessity, and the validity of our modal intuitions. To combat these objections the works of four major players have sprung forth: Brian Leftow, Robert Maydole, Alexander Pruss, and Harvey Friedman. Past this, developments in the field involve more vague modal epistemic arguments such as those of Emmanuel Rutten. The main purpose of stating both sides of the argument is to show the reader that the best attacks on the ontological argument are fatally flawed and that the best rebuttals and attempts at support are at least valid and sound.

From this epiphany it is up to the reader to decide whether God exists. This thesis is not to act as a mandate for belief in God's existence, but as a question: If there is a proof for the existence of God that is logically valid and sound, why should we reject Him? Is it the case that the proofs are not emotionally persuasive? Then I will make myself a slave to the tradition of Experimentalism and arm myself with the sword of Romanticism. Is it the case that the proofs are too sophisticated? What more did you expect when trying to unpack the God of the universe? If one refuses to accept a proof or respond with any quip of intelligence, then the conversation is over. Apologetics is done and psychology has laid claim this thread of the discussion.

[7] The best theistic proofs stem from Plantinga and Maydole, whereas the best atheistic critiques stem from Gale and Rowe.

Historical Analysis

Greek Philosophy

All Western cultures herald Greek Philosophy as the cornerstone of conceptual ingenuity. Starting before the birth of Socrates and trickling down into Plato's Academy, the origins of academic endeavors are said to have begun in the cultures of Ancient Greece. In this respect, it is not surprising then that the root to almost every contemporary philosophical problem can be traced back to the height of Grecian prosperity. Such is the case with the origins of the ontological argument. While Greek philosophers themselves were not principled enough to engage in an argument that follows in the Anselmian fashion, they did lay down the systems of modality under which later generations would reap ontological significance. This quest to uncover the beginnings of modal notions can be traced through the progress of three schools in specific, The Peripatetics under the guidance of Aristotle, the Megarians under the influence of Diodorus Cronus, and the Stoics under the hand of Chrysippus the logician.

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

Apart from any ties to the ontological argument, Aristotle, also known as The Philosopher, is revered on his own as one of the greatest philosophical minds in human history. This association is unquestionably justified upon examination of his lofty critiques and weighty contributions to the process of thought. Perhaps the most candid demonstration of his wit can be seen within his collection of remarks on logic entitled *The Organon*. *The Organon* consists of roughly six different works and is commonly referenced as humanity's first recorded attempt at formal logic. It is through the pages of these works that modern logicians fashioned their frameworks, and it is through this lens that many theologians constructed their conceptions of God. In a more specified study of modal logic, however, the pieces most pertinent in *The Organon* are Chapters 8-24 of *Prior Analytics* and Chapter 9 of *On Interpretation*.

Before diving into the trenchant study of Aristotelian modal methods, it is proper to discuss some of the history that surrounds the interpretation of Aristotelian texts in order to establish context for their discussion. Prior to the first half of the 20th century most scholars who examined the logic of Aristotle were of one mind with regard to his formal outlook. However, in 1955 the peripatetic playing field was leveled by the Polish philosopher and logician, Jan Łukasiewicz, who, in his seminal work, *Aristotle's Syllogistic*, offered staunch criticisms of the so-called exegesis of earlier commentators. Łukasiewicz attacked Aristotle's interpreters on two grounds. The first was that the inferential schemas that had been offered of Aristotle's logic should be replaced with conditionals of propositions. This means that when assessing a formal proof, the conjunction of the premises should not be used to *verify* the truth of the conclusion, but that the subjunctive probability of the premises should, if true, *entail* the conclusion. Łukasiewicz even went so far as to declare that "no syllogism is formulated by Aristotle primarily as an inference, but they are all implications having the conjunction of the premises as the antecedent and the conclusion as the consequent."[8] Subsequently, he gave the common example that the "Aristotelian syllogism would be, therefore, the following implication: (S) If all men are mortal and all Greeks are men, then all Greeks are mortal."[9] Clearly, any student who takes the time to read the text knows that this is a gross misrepresentation of Aristotelian thought. In fact, in the years following his lectures, many commentators noted deep flaws with his interpretation of this part of the text.[10] However, while Łukasiewicz clearly erred

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[8] Łukasiewicz, Jan. *Aristotle's Syllogistic from the Standpoint of Modern Formal Logic*, second edition, (Oxford: Clarendon Press, 1957) 2.

[9] Ibid.

[10] For a more thorough explanation of these flaws see Corcoran, John, 1972. "Completeness of an Ancient Logic". (*Journal of Symbolic Logic*, 37): 696–705. and also Smiley, Timothy, 1994. "Aristotle's Completeness Proof", *Ancient Philosophy*, 14 (Special Issue): 25–38.

on conditional interpretation, the remainder of his book was highly enlightening. For one, he concisely formalized Aristotle's categorical remarks, and then added new ways in which to frame the formulas. Moreover, his second criticism of earlier commentators played nicely into his formulation of Aristotle's modality. In addition to having facts about how a sentence actually *is*, sentences also have modes under which they could or would be true, should different circumstances obtain. Łukasiewicz noted that most scholars have avoided the subject of modal logic in the writings of The Philosopher for lack of a "basic modal logic accepted by Aristotle and all logicians."[11] Łukasiewicz attempted to give such a system which he entitled L. This thesis will not delve into the entire system as it is not all relevant to the current discourse. However, a universal basis from which to work forward in modal talk is a point which has been harped on by many philosophers of logic.[12] As such, a basic schema, or a minimum requirement, will now be laid out for engaging in the metaphysics of modality.

First off, as with any form of logic, connectives are crucial. The following five connectives of classical logic shall be explicated first: negation, disjunction, conjunction, implication, and equivalence. In addition, the modal operators are standard: possibility and necessity. At this point it should be obvious that modal forms of logic are simply proposition logics with the additional two operators M and L. To make the operators of necessity and possibility primitive in the way that the five connectives are primitive, it must be shown that they can be mutually inter-defined. So, necessarily A, is logically equivalent to not possibly not A, and possibly A is logically equivalent to not necessarily not A. Also, the notion of inheritance plays well into the discourse of modality. If A_1, A_2,...A_n entail B, so does necessarily A_1,

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[11] Łukasiewicz, Aristotle's Syllogistic, 58.

[12] Most notably Tkaczyk, Marcin "5. A Debate on God: Anselm, Aquinas and Scotus," in *Ontological Proofs Today*: (doi:10.1515/9783110325881.) 113.

necessarily A_2,...necessarily A_n entail necessarily B. Lastly, the notion of interrelations via consequence and denied consequence are crucial to basic modal discourse. The three consequence relations are as follows: If necessarily A, then possibly A; If necessarily A, then A; and If A, then possibly A. The three relations of denied consequence are: Possibly A, does not entail necessarily A; A does not entail necessarily A; and possibly A does not entail A. From these principles a basic modal syllogistic can be continued. It is important to remember that these principles can be assumed in every text from here forward. Normally they are presented formally, but were placed in word format for conceptual accessibility. A formal presentation is given below:

Connectives: $\neg$, $\vee$, $\wedge$, $\rightarrow$, $\leftrightarrow$ Modal Operators: $\Diamond$, $\Box$ Consequence: $\vdash$ Denied Consequence: $\nvdash$ Logical Equivalence: $\sim$ Mutual Definability: [1] $\Box A \sim \neg\Diamond\neg A$ [2] $\Diamond A \sim \neg\Box\neg A$ Inheritance shown above.

Interrelations: Consequence- $\Box A \vdash \Diamond A$; $\Box A \vdash A$; $A \vdash \Diamond A$. Denied Consequence- $\Diamond A \nvdash \Box A$; $A \nvdash \Box A$; $\Diamond A \nvdash A$.[13]

Now that a formal syllogistic of Aristotle's modal logic is underway, it would be very possible to go through each argument and proof in his modal rhetoric, but this would only distract from more substantive metaphysical analyses. That said, having an archetype for the genres that Aristotle used to divide up his logic is still important for understanding his methods. Marcin Tkaczyk, Professor of Philosophy at Ludwig-Maximillians University in Munich, comments on the significance of the division of Aristotelian logic as follows,

> "Assertoric Syllogistic, known as Aristotle's second logic, as opposed to his early, mostly rhetoric or semantical works constituting the first one, turned out soon insufficient. So

[13] If confusion persists, see Appendix A.

> Aristotle's third logic came into being, that is modal logic that suits Aristotelian essentialism".[14]

Essentialism was Aristotle's belief that every "thing" in existence had an essence or set of properties which without it could not exist. In modern discourse, these properties have become known as essential properties. On the flip side, accidental properties, such as the color of one's hair, are properties which do not affect existence, but instantiation. For example, Sheamus can be instantiated with red hair, or he can be instantiated with blonde hair, but the essence of Sheamus cannot be exemplified without *humanity*. To talk about properties that one could or would exist without, Aristotle needed a logic that would address the notions of possibility and necessity. The problem was that propositional and categorical logic contained no such operators. The operators in these lower logics only addressed what *is* the case, not what might be, must be, or will be the case. In this spirit, Aristotle's Apodictic Logic was born.

The first notion that Aristotle spelled out in *Prior Analytics* was that of relations, and specifically, relations among changing entities. The idea here was to complete a subject-predicate analysis of relations. In this way a predicate, *a*, could belong to a subject, *b*, in three mutually distinct ways: 1) *a* (merely) belongs to *b*, 2) *a* necessarily belongs to *b*, and 3) *a* possibly belongs to *b*.[15] Here, it is important to understand the meaning behind the possibility and necessity used by Aristotle because it differs slightly from the possibility and necessity commonly thought of today. For Aristotle, some sentence, S, was necessary if and only if (iff) it was true at all times and possible iff it was true at some but not all times. In this way, he was employing a type of temporal modality that would come to further expression in *On*

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[14] Ibid, 117.

[15] Summarized from Aristotle's general work in Ibid.

Interpretation. As discussed by Alexander Pruss, this account of modality fails because, "We certainly mean more by saying that there can be no square circle than that just that there have never been, nor are, nor ever will be any square circles".[16] The idea is that actual temporal existence has little to no effect on the *possibility* of temporal existence. Philosophizing cats, for example, never have, nor will exist. Further it is unlikely that they exist currently, but that says nothing about whether the nature of a philosophizing cat can be possibly instantiated. Ultimately, Pruss blasts the modality of Aristotle as comparable to that of David Lewis', "but with time-slices replacing universes".[17] This provocative interpretation of The Philosopher, while accurate, must be approached with caution. Aristotle's modal logic is clearly his most demanding logic and misleads many who tread lightly and draw conclusions from a first glance. In fact, Richard Patterson, a leading scholar on Aristotelian modality at Emory College, has illuminated a duel interpretation of necessity used by Aristotle in which there is a natural necessity on one hand and a conceptual necessity on the other. In natural necessity, *a* belongs to the nature of *b*, and in conceptual necessity *a* belongs to the concept of *b*.[18] Whether this notion can also apply to possibility is a bit of a gray area. Nevertheless, this dual notion of necessity is not enough to save Aristotelian definitions of the modals because the notions of time are so finely engrained into Aristotle's metaphysics that the same criticisms can be re-leveled against dual necessity. The rather striking fact of the matter is that in Aristotle's definition of modalities, Aristotle does not give the definition of modalities. Variants, however, of an Aristotelian conception of modality have been written and defended extensively in contemporary circles.

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[16] Pruss, Alexander R. "The Leibnizian Cosmological Argument." in *Craig/The Blackwell Companion to Natural Theology*, 2009, 24-100. (doi:10.1002/9781444308334.) 31.

[17] Ibid.

[18] Patterson, Richard. *Aristotle's Modal Logic: Essence and Entailment in the Organon*. (Cambridge University Press, 1995.) 41.

Some accounts go for an essentialism that grounds modality in essences and takes necessity as primitive,[19] while others ground modality in the powers of causation and take possibility to be primitive.[20] Regardless of whether he defined modality correctly, Aristotle's combination of essentialism with possibilia still has a hold on contemporary philosophy.

The next section of *The Organon* which has significance in discussions of modality is Chapter 9 of *On Interpretation*. Other chapters, such as 12-13, discuss modal logic, but not in the metaphysical sense that captures the interest of this investigation. Throughout this work, Aristotle had been fixed with discussing the idea of contradiction. Two premises, A and B, are contradictory when A expresses the negation of B. Thus, for every pair of contradictory propositions, one of the propositions will be true and one of the propositions will be false. Amongst these fairly straightforward conditions, Aristotle tried to conceive of exceptions. Most notably, "When the subject ... is individual, and that which is predicated of it relates to the future, the case is altered".[21] The specific illustration used in *De Interpretatione* was of a future Sea Battle. Consider, for example, the Battle at Salamis that took place on September 20th, 480B.C.E. Before September 20th, one of the two propositions must be true and the other must be false:

1. The Battle of Salamis will occur on September 20th, 480B.C.E.
2. The Battle of Salamis will not occur on September 20th, 480B.C.E.

The problem is that if one of these propositions was true before the event and one of these propositions was true after the event, then by definition they must always have been true. In essence there must have always been a fact about the matter. In that case, a type of determinism

[19] O'Connor, Timothy. *Theism and Ultimate Explanation: The Necessary Shape of Contingency*. (Chichester: Wiley-Blackwell, 2012.)

[20] Pruss, Leibnizian Cosmological Argument, in Blackwell Companion, 31.

[21] Aristotle. *On Interpretation*. (Whitefish, MT: Kessenger, 2005.) part 9.

known as fatalism must be the case, *necessarily*. Consider the following logical formulation of this argument for fatalism:

[Def S] $S =_{df}$ There is a Sea Battle of Salamis on September 20th, 480B.C.E.

[Prem 1] $S \rightarrow \Box S$
[Prem 2] $\neg S \rightarrow \Box \neg S$
[Prem 3] $S \vee \neg S$

{Con 1- formal} $\Box S \vee \Box \neg S$
{Con 2- crude} Con 1 is logically valid and thus universally true. Therefore, Con 1 was true before September 20th, 480B.C.E.

It is important to remember that Aristotle uses this example as one of the exceptions to his ideas on contradiction. In this case, Aristotle does not think that one proposition has to be true while the other proposition is false. In fact, in his mind "the corresponding affirmation and denial have the same character."[22] Thus, many have seen Aristotle as accepting a many valued logic under which the variable representing a proposition can be assigned a value other than true or false. In this case Aristotle advocates that statements about the future are neither true nor false. To most scholars, this strategy is known as rejecting the principle of future excluded middle in hopes of solving the problem of future contingents. To be clear, the idea of a future contingent is simply a statement made about the future that is contingent. Contingency in this case is simply non-necessity, and necessity can be taken as expounded above.

Overall, the main reason that Aristotle's discussions on modality are so enlightening is that they bring to the table something for everybody. For the philosophers, Aristotle's discussion of essential properties would plague modal distinctions in the Islamic era between essence and existence. For the theologians in the medieval era, formulations of God's nature would consist only of essential properties so as to protect the perfection of the Father Almighty. Moreover,

[22] Aristotle, Harold P. Cooke, and Hugh Tredennick. *The Organon*. Cambridge, MA: (Harvard University Press, 1955), 39.

future contingents and the problem of fatalism would cause a deep stir throughout the course of human history, but more specifically they would shape the modal advances of the Stoic and Megarian Schools following the footsteps of the Peripatetics. Lastly, and most importantly, is Aristotle's impact on the ontological argument. In discussions of Pre-Anselmian history of the ontological argument one might be tempted to turn to Plato as a more direct source of influence. However, while Plato established the idea of the forms which literally handed Anselm the notion of *existence in the mind,* Aristotle established a logical framework in which to formalize these arguments. Thus, the reader would do well to remember the wisdom of old, *Amicus Plato sed magis amica veritas*. There are also a broad range of formal Anselmian modalities that rely almost entirely on the shoulders of Aristotle. Not to mention that on a wider scale, a lack of this framework would have snared the colossal revival that took place beginning with the advances of Hartshorne and Findlay. Many of their first inclinations on modal discourse based themselves off of Aristotle's system because many of their proceedings were formal proceedings. Finally and most importantly, it is impossible to overemphasize the fact that Aristotle began discussions on the necessary and the possible in philosophical discourse. All in all, Aristotle's wide contributions are more than enough to guarantee him a spot in the history of modal logic, and when taken in context, his remarks are also pertinent to the history of the ontological argument as well.

Diodorus Cronus (???-c.284 B.C.E.)

Little is known about this ancient thinker commonly tied to the Megarian School of philosophy, but much in the same way that Aristotle is characterized as The Philosopher of the Peripatetics, so too is Diodorus named The Dialectician of the Megarians. Interestingly enough, Diodorus actually interacted with many of the same modal notions as Aristotle. In so doing, he

left his own mark on the history of modality and simultaneously gave rise to the formulation of other modal notions both inside and outside the Megarian School of thought. Inside, Diodorus had profound influence on Philo's construction of the modals, while outside, his other pupil, Zeno of Citum, continued these methods in Stoic circles of discourse. Centuries later, the spearheading logician of time and tense, Arthur Prior, would also draw heavily upon Diodoran insights. Currently, however, the scope of this section shall be concerned primarily with the happenings inside the Megarian school, and only brief asides shall be given to impacts outside the school.

The slightly burdensome problem that none of Diodorus works are left in existence, combined with the rather intriguing fact that he was the most frequently referenced Megarian, leaves contemporary scholarship in a rather inquisitive mood with regard to many of the facts around his life. Even details as simple as his surname, Cronus, bear with it feelings of ambiguity.[23] Moreover, the number of students that Diodorus motivated was so wide-ranging in variety that some scholars have even tried to assign Aristotle to the domain of that region. The instinct for this move lies largely in Theta 3 of Book 9 in the *Metaphysics* where Aristotle says, "There are some who say, as the Megaric school does, that a thing ‘can’ act only when it is acting, and when it is not acting it ‘cannot’ act."[24] The thought here is that this text is referring to Diodorus' famous Master Argument. A better explanation, however, would place him closer to the influence of the Stoics and their thoughts on modalities. The fact that Aristotle referenced the Megarics would then be attributed to an ancestor argument in the Megarian tradition

[23] Originally said to be Diogenes Laertius. There are multiple tales as to why he changed it, but none are philosophically significant.

[24] Aristotle, and Hippocrates George Apostle. *Metaphysics*. (Bloomington: Indiana University Press, 1966.) 129.

preceeding that of Diodorus'.[25] Despite the excitement that fuels debates around the facts outside Diodoran thought, the drama that lies within the context of his work is equally entertaining.

The first body of work that is of interest to the modern academic is the Diodoran advances of modal and conditional logic completed in turn with Philo the logician. While Philo studied under Diodorus, he did not always see eye to eye with the whims of his master. In fact on the nature of conditionals, they were deeply divided. For the purposes of this investigation, only modal matters will be of relevance. Thus, even though their structure was not exactly the same, they still came to terms with many of the same modal dogmas. Henceforth, a brief comparison shall be given of Diodoran and Philonian Modalities. Common to their notions of modality was the typology they laid out for discussing modal methods. Both "distinguish the four modalities possibility, impossibility, necessity, and non-necessity."[26] It is important to note that the notion of contingency in this framework is a separate matter which embodies possibility and non-necessity. Thus, *x* is contingent if *x* is first possible and second not necessarily true. The difference between the two lies in the way they defined their terms. For Philo, modality was a matter of "internal consistency" in the way that "every proposition is either incapable of falsehood (necessity), or incapable of truth (impossible), or capable of both (possible)."[27] For Diodorus, however, modality was a matter of time. As Suzan Bobzien, senior research fellow at the University of Oxford, points out, "which Diodorean modality a proposition has depends wholly on the range of truth-values it has at present and in the future."[28] The best way to see the

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[25] Some likely candidates would be the Lazy argument and the Mower Argument.

[26] Bobzien, S., 1993, "Chrysippus' modal logic and its relation to Philo and Diodorus", in *Dialektiker und Stoiker*, K. Döring and Th. Ebert (eds.), Stuttgart: Franz Steiner, pp. 63–84.

[27] Bobzien, Susanne, "Dialectical School", *The Stanford Encyclopedia of Philosophy* (Fall 2011 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/fall2011/entries/dialectical-school/>.

[28] Ibid.

difference between the two systems is that in the former, modality is a *state* of the proposition, while in the latter, modality is a *property* of the proposition, at a time, *t*. To speak strictly about the necessity or possibility of a proposition is known as a purely alethic account of modality, while talking about the necessity and possibility of a proposition in relation to the time in which it holds true is known as a temporal account of modality. While both approaches have their positives and negatives, context is usually the determinant of which combination is employed today.

Notably, the most interesting facet of Diodoran Modality is that its temporality allows some of its propositions to change their alethic value over the course of time. Propositions such as the length of someone's hair with respect to his age, will move from impossible to possible as time progresses. For example, for Socrates at age 30 the proposition, "the beard of Socrates is 12 inches," is possibly true because Socrates is old enough to have grown a beard 12 inches long. However, for Socrates at the time of his birth, the proposition, "the beard of Socrates is 12 inches," is impossible a posteriori because humans have learned that the growth of facial hair does not begin in male hominids until after the beginning of puberty. On the notions of time and alethicity, therefore, it can be concluded that Diodorus is appropriately down to earth. On the contrary, the Diodoran account of tense in the scheme of time proves more challenging in his modal theory. According to the New World Encyclopedia,

> "Diodorus also distinguished between propositions in the present tense...and propositions in a tense of completion...and observed that it is possible for propositions like the latter two (in a tense of completion) to be true, without there ever having been a time at which a corresponding one of the former type was true."[29]

[29] "Diodorus Cronus." Diodorus Cronus - New World Encyclopedia. Accessed November 26, 2016. http://www.newworldencyclopedia.org/entry/Diodorus_Cronus.

To be clear, Diodorus is not talking about different propositions with different tense assignments, such as "Jane marries John" and "Jane bore the child whose father is John," but the same proposition, such as "Jane marries John" and "Jane married John." What he is saying is that it is possible for the statement, "Jane married John" to be true "without there ever having been a time at which" the statement "Jane marries John" is true in the present. To the mind of most, this doctrine is particularly perplexing, and does not seem to flow well with the rest of his statements about time and modality. Thus, seeing as Diodorus was such a commonsensical chap, a David Lewis reference, we can only hope that his real words were lost in transmission.

Perhaps the most crucial reason to take interest in the modality of The Dialectician is that he included a gem most logicians tend to leave out, a clever but carefully crafted argument in which to apply his modal methodology. The argument being referenced is, of course, the famous Master Argument that captivated crowds at dinner parties and of which the famous historian, Callimachus, wrote the epigram, "Even the cows on the roofs caw about the nature of conditionals."[30] The appeal that drew members from the academic and noble communities was the argument's blinding simplicity coupled with its daring conclusions. If true, the Master Argument of Diodorus Cronus would confirm the fatalistic suspicions of The Philosopher in Chapter 9 of *De Interpretatione.* Using temporal accounts of the modals, he could formulate statements that had deterministic leanings. For example, his two most famous statements regarding the matter were the following inverses:

1. Everything that either is or will be true is possible.

2. Everything that is possible either is or will be true.

[30] See the following sources Dôring, frs. 96, 128; D.L., ii111; S.E. M i309, 672 Bekk.; Pfeiffer: fr. 393, 14, Epigrammatum fragmentu, i.

The first statement is obviously true and more or less amounts to the idea that everything that is actual is possible. The Hellenistic philosophers were in no need for proof of its validity, and there is virtually no one in all of antiquity who has opposed its truth value, with the exception of Spinoza. The second statement, however, goes directly against our modal intuitions and is therefore in need of more backing. To lend credence to the veracity of the second statement, Cronus proposed his linguistically perspicacious Master Argument. Unfortunately, and rather ironically, due to the passage of *time*, not all of the premises are available to modern logicians. The longest passage in existence is from Epictetus in which he states the argument as follows,

> "'The Master Argument seems to have been developed from the following starting points: There is a general conflict between the following three <statements>: (I) every past true <proposition> is necessary; and (II) the impossible does not follow from the possible; and (III) something is possible which neither is true nor will be true. Being aware of this conflict, Diodorus used the plausibility of the first two <statements> in order to show that (IV) nothing is possible that neither is nor will be true.'"[31]

What stands out about this passage more than anything is the noticeably ill-formed trilemma that leads to the conclusion that "nothing is possible that neither is nor will be true." In a spirit of grace to Diodorus, and judging from what is known about the argument, it is highly likely that some of the premises have been left out by the author due to their *obvious* nature. The problem is that trying to add premises back into the argument only makes it more complex. While complexity is not bad in itself, it does gash the argument upon Ockham's razor, as well as lean away from what scholars have said about the argument's simplicity. Therefore the best formalization needs to hit a sweet-spot between perfect comprehensibility and perfect

[31] Algra, Keimpe. *The Cambridge History of Hellenistic Philosophy*. Cambridge, U.K.: (Cambridge University Press, 1999.) 89.

extensional accuracy. Such a theory is hard to come by, and seeing as formalizations become incredibly complex within the space of only a few lines, a long conversation about their progress will be foregone in this section. Instead an extremely brief treatment will be dealt to each of the interpretations presently held, and an outline will conclude the victorious model.

Broadly speaking, there are five different interpretations of the Master Argument in contemporary historiography.[32] The most hotly contested of the five are those of Denyer and Gaskin, and the most similar of the five are those of Vuillemin and Rescher. The main difference between Vuillemin and Rescher is the presence of indexicals between their arguments. The interpretation, however, that has gained the most applause is that of the pioneering logician of time and tense, Arthur Prior. Prior's interpretation of Cronus began with his 1955 work entitled "Diodoran Modalities" and culminated in his 1967 book, *Past Present and Future.* For Prior, Diodorus acted like a goddess muse who inspired his work on tense logic formalizations, and thus interpreting his idol with delicacy and respect became his highest concern. In the years following 1955, Prior produced what has become a simple yet elegant interpretation of the Master Argument. [33] It is important to note that in Prior's work, all of the premises are formal, but for the purposes of clarity a brief translation from the formal to the crude form will follow:

Prior first points out what is known in the Master Argument, the first two premises, and the conclusion. What modern historians are searching for are the hidden premises beneath the surface.

1.) Every past true proposition is necessary

2.) The impossible does not follow from the possible

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[32] See Denyer (2009), Gaskin (1995), Vuillemin (1996), Rescher (1966) and Prior (1955).

[33] Prior, A. N. "Diodoran Modalities." *The Philosophical Quarterly* 5, no. 20 (1955): 205. (doi:10.2307/2957434.)

C.) Nothing is possible that neither is nor will be true.

Because the same basic conclusion that is found in the texts of Aristotle is also found in the text regarding Cronus, Prior suggest that the possible hidden premises go as follows,

3.) If something is the case now, then it always has been the case that it will be the case.

4.) If something neither is nor will be true, then it has been the case (at some time) that it will never be the case.

Premise 3 is essentially the same conclusion stated in Ch 9 of *De Interpretatione*, therefore there is ample historical motivation to accept its probability. Premise 4 is just the logical entailment of Premise 3 and is only present for conceptual clarity. Prior's next move is to have the interlocutors apply this reasoning to a specific proposition that *neither is nor will be true*, and watch the conclusion follow. It is important to remember that the process of applying these premises is more similar to applying axioms insofar as it is more of a concept for concept rather than step by step procedure. Consider the following proposition, "Jane is in Cairo"

The Master Argument:

A. The proposition "Jane is in Cairo" neither is nor will be true.
B. It has been the case at some time that Jane will never be in Cairo. (From 4)
C. The proposition that "It has been the case at some time that Jane will never be in Cairo." is necessary. (From 1)
D. The necessity of a proposition is equivalent to the impossibility of its contradictory. (Basic logic)
E. The proposition that "it has always been the case that Jane will be in Cairo (at some time)" is impossible. (From D)

F. The proposition that "it has always been the case that Jane will be in Cairo (at some time)" follows from the proposition that "Jane is in Cairo". (From 3)

G. The impossible does not follow from the possible

H. Thus since the proposition "it has always been the case that Jane will be in Cairo (at some time)" is impossible, so too is the proposition that "Jane is in Cairo"

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C. Therefore the proposition "Jane is in Cairo" is impossible

Because there is nothing special about the proposition "Jane is in Cairo," this argument can be generalized to any proposition that *neither is nor will be true*. Therefore since every proposition that *neither is nor will be true* is impossible, it follows that there is nothing that is possible that *neither is nor will be true*, and thus the original conclusion of the Master Argument is established. Fatalism is the necessary consequence.

Upon reflection, it may seem strange to try to relate the remarks of Diodorus Cronus back to the Ontological Argument, however it is these thoughts that caused the ruckus in Greek Philosophy, and it is these thoughts that led later generations to pursue conversations about modality. While Aristotle began modal discourse, it was Diodorus who popularized it under the flag of fatalism. Whether this result was an intentional effect or the bi-product of a happy coincidence is up for debate. However, it remains to be emphasized how influential Cronus was on conversations outside his school. Modality for the Stoics was almost completely a result of discussion of the Master Argument, and modality for Prior can be said to be solely founded in the interests of The Dialectician. Also, the determinism which Diodorus discussed will show its significance in discussing the omniscience of a maximally great being. Lastly, beyond Aristotle and determinism, Diodorus' own contributions to modal logic are impossible to over-iterate. The

definitions of possibility and necessity in terms of time gave way to the rise of tense logic, not just in Prior, but throughout the twentieth century. All in all, the wide ranging impact of Diodorus Cronus plays an essential part in any reconstruction of Greek modalities.

Chrysippus (c.280-c.207 B.C.E.)

Perhaps the strongest pillar in the Parthenon of Greek Modality is the contribution from the Stoics on claims that are alethically dogmatized. Beginning with Zeno of Citium, the founder of Stoicism in the Hellenistic period, members of this school scavenged through the texts of their ancestors to construct the most accurate accounts of modality *possible*. Without question, the most interesting Stoic to philosophize on modality was Chrysippus of Soli. Worshiped as the second greatest logician of all time and endearingly noted by Carneades as the pinnacle of his existence,[34] Chrysippus stood to challenge the modal fortitude of both Philo and Diodorus. Not, however, was he so rash as to reject both systems completely. Instead compliments and criticisms were awarded to both lines of thought. Lastly, Chrysippus was the master of Diogenese of Babylon, a man whom some have attributed the first inklings of an ontological argument.[35]

While other Stoic academics centered in on the nature of conditionals and the freedom of the will, Chrysippus also made substantive contributions to the nature of modal logic. Interestingly enough, Chrysippus posed no objections to the formal writings of Aristotle or Diodorus, but he took more concern with the metaphysical implications of their schools' doctrines. At a basic level he conceded the four modal categories of necessity, possibility,

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[34] "'If Chrysippus had not existed, neither would I' (DL 4, 62)." Inwood, Brad. *The Cambridge Companion to the Stoics*. Cambridge, U.K.: (Cambridge University Press, 2003.) 69.

[35] See Papazian, Michael. "The Ontological Argument of Diogenes," Phronesis 52, no. 2 (2007): 197-200, accessed October 2, 2013. http://www.jstor.org/stable/40387928 and Jamison, Trevor. "Great God in Boots: Malcolm's Argument is Valid." (Thesis, Fort Bend Christian Academy, 2013), 9-11.

impossibility, and non-necessity. In terms of definition, however, he pursued what appears to be a combination of Philonian and Diodoran insights. First, it is important to note that Chrysippus did not see the modals as operators like the Peripatetics and Megarians did, but as values of an assertable. An assertable, or sayable in this case, is the Stoic equivalent of a proposition, and will henceforth be synonymous with the term. The modal values that Chrysippus assigned to assertables went as follows, "A proposition is possible which admits of being true, there being no external factor to prevent its being true . . . Necessary is that which, being true, does not admit of being false, or if it does so admit is prevented from being false by external factors".[36] The definitions put forth by Chrysippus suggest, in the spirit of Philo, that the internal consistency of a proposition decides whether it "admits of being true."[37] That said, Chrysippus deeply disagreed with following this conclusion to its logical consequence. If internal consistency is all that is important, then wood is capable of burning, even when submerged in water, because it has the internal consistency to catch on fire. Clearly this conclusion is not viable. In response, Chrysippus distinguished between two types of modal notions, *species* possibility and *actual* possibility. In species possibility, "some predicate P is possibly applicable to an individual of natural kind K just in case K's can, other things being equal, be P's".[38] In other words, wood can always burn theoretically, or K can always be P theoretically. However, in actual possibility, there are some circumstances that can obtain such that the internal consistency of an object is not always actualized. Nowadays, this distinction is considered obvious and goes without saying, but in the time of Philo this news was held as ground-breaking. Next, Chrysippus turned his attention toward the temporal method of modality posed by Aristotle and developed further by

[36] Algra, *Cambridge Hellenistic Philosophy* 527.

[37] Ibid, 528.

[38] Ibid.

Diodorus Cronus. The main problem that Chrysippus posed for the temporal method was that of possible non-actual objects. This objection plays upon the above objection raised by Pruss insofar as it states that simply because an object does not obtain does not ensure it is not possible. For example, philosophizing cats never have or will obtain, but that does not mean their nature is internally inconsistent. It means the evolutionary history of felines is such that language and connection of higher order thoughts did not come to bear in what we would call common house cats. Therefore, nothing suggests that this state of affairs is impossible. To be clear, the difference between the attack of Chrysippus and the attack of Pruss, is that Pruss focuses more on relevance, and Chrysippus focuses more on instantiation. For Pruss, talking about whether an object obtains is not relevant to modal discourse because it states nothing about the possibility of that object. For Chrysippus, however, human free choices can affect the instantiation of otherwise possible states of affairs. The example he gives is "If I had the opportunity to smash the jewel, that helps ground the inference that nothing but my own character is responsible for my not doing so."[39] By shifting the responsibility to "my own character," possibility is no longer grounded in the actuality of an object in time, but the actuality of my actions in time. Thus, if I had acted differently, different possible circumstances could obtain. Of course, as soon as the freedom of the will is brought into the equation, Chrysippus necessarily allows for the law of future excluded middle on contingent propositions to refortify his causal determinism. Finally, to finish defending his case of modality Chrysippus was plagued with the burden of overturning the Master Argument because its implications went in direct violation of his form of modality.

[39] Long, A. A., and D. N. Sedley. *The Hellenistic Philosophers: Translations of the Principal Sources with Philosophical Commentary*. Cambridge: (Cambridge University Press, 1987.) 235.

The Master Argument was first brought into the Stoic school by Zeno of Citium who studied under Diodorus Cronus. When Zeno first introduced the argument, one of his students, Cleanthes, immediately began work on objections. Cleanthes observed that the argument's application of propositions into the formula was valid, and thus he would have to object to one of the first two premises. Cleanthes, therefore, railed against the first premise which stated every past true proposition is necessary. As it turns out, there is more than one way of interpreting Premise 1 of the Master Argument. The first method is posed by Prior and implies that Diodorus was trying to transfer necessity from the past to the future. If this is the case, Cleanthes objection would be to "the transfer of necessity from past to future. In that case he will have argued as Ockham later did that only statements which are genuinely about the past, and not past-tensed statements in general, are necessary."[40] The second interpretation is that Diodorus truly meant to say that the necessity of the past was fixed. Because Cleanthes was the classic causal determinist, it is very possible he could have rejected the fixity of the past, *tout court*. In this manner, "he may have thought that no distinction can be made between the future and the past in point of openness or fixity, for if strict causal determinism obtains the past is as dependent on the future as vice versa".[41] Either way, Cleanthes passed on the idea of rejection of the Master Argument in favor of Stoic causal determinism to his student Chryssipus. Chryssipus, however, was attracted to the notion of the fixity of the past. Nevertheless, he was still invested in what he saw as the truth of determinism. As a result, he rejected Premise 2 of the argument which stated that the impossible does not follow from the possible. The best example that Chryssipus gives of

[40] Gaskin, Richard. *The Sea Battle and the Master Argument: Aristotle and Diodorus Cronus on the Metaphysics of the Future*. (Berlin: W. De Gruyter, 1995.), 297.

[41] Ibid, 298.

this principle failing to hold true is in his attack of a modal axiom similar to which one might start out with in the system K of modal logic.[42] The axiom is as follows:

A 1: $L[p \rightarrow q] \rightarrow [Mp \rightarrow Mq]$

Chryssipus felt that there was a valid counterexample in which the antecedent was possible and the consequent was impossible. Take the following axiom as Chryssipus' supposed counterexample,

A 2: If Dion is dead, this man is dead.

In this scenario, the referent *this man* points back to Dion. Since there is nothing impossible about the death of human men, the antecedent If Dion is dead holds possible. The second half of the conditional, however, proves contradictory in the mind of Chryssipus because "it is false while Dion is alive, and after his death the statement 'This man is dead' is destroyed, and so has no truth value at all".[43] In philosophy of language there are, broadly speaking, two types of contexts. Oblique contexts allow for the substitution of co-refering designators, while opaque contexts prohibit the substitution of co- referring designators. For example, an oblique context might contain debating academics using the names "Aristotle" and "The Philosopher" interchangeably, while an opaque context might contain a civilian in Gotham using the names "Batman" and "Bruce Wayne." In the former circumstance, the academics know the referents of both names are identical, but in the later, such identity is concealed. The point for the argument is that Chrysippus needs to argue for an opaque context, but as Gaskin points out, "Chrysippus evidently does not think that 'Dion' loses its sense after Dion's death."[44] But what then are we to

[42] For support of this modal axiom see Alexander, *In An Pr* 177.25-178. For attack of this modal axiom see An Pr 34a5ff.

[43] Gaskin, *Sea Battle and Master Argument* 302.

[44] Ibid.

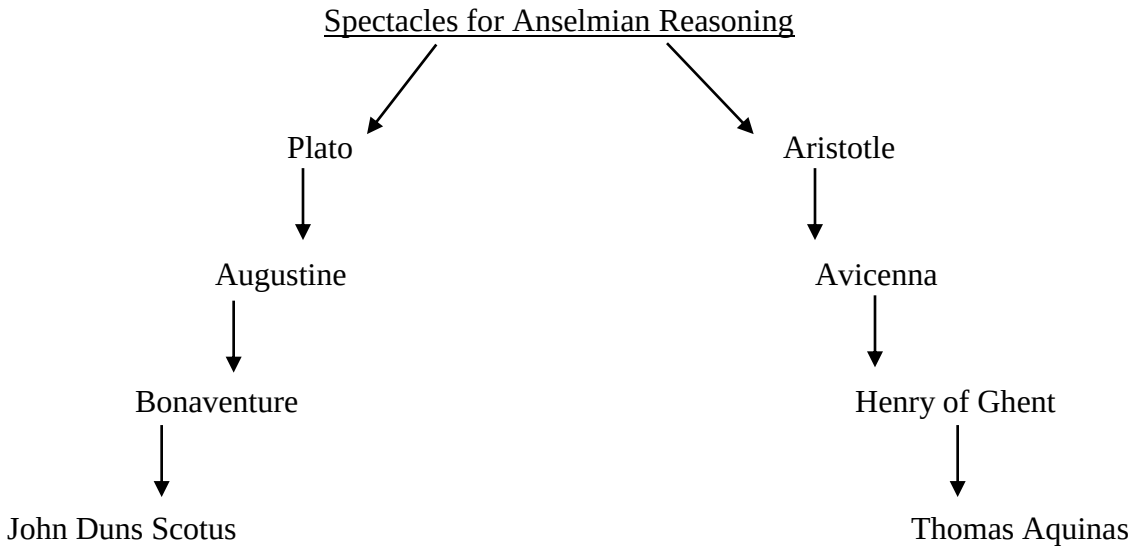
make about the above argument? Gaskin muses, "perhaps...he was a descriptivist about proper names."[45] On a more somber note, that would make sense of some of the similarities between the logical systems of Chrysippus and Gottlob Frege. Overall, the documentation on Chrysippus' objection is less than pleasing for a more than speculative result, but with the evidence that is given it is clear that Chrysippus helped end the legacy of the Master Argument to ensure the success of his own modal systems.

In sum, Chrysippus was a well put together and highly admired Stoic philosopher, and he stands alone as one of the greatest logicians of all time. Though a majority of his work is not extant today, a great deal has been elucidated on the modal systems he employed and the conditional positions he held on the freedom of the will. Relating to the development of modal definitions, there are hardly any to compare in the whole of Greek Philosophy. Moreover, the influence he spread not only on alethic logic, but logic in general was used by his successors such as Antipater of Tarsus and Diogenes of Babylon to further Stoic popularity. In fact, Diogenese of Babylon is perhaps responsible for using some of this reasoning to start arguing in a fashion suitable to an Anselmian format. The takeaway from this encounter is that the framework of matured Greek Modality culminated and was strengthened in the work of Chrysippus. Thus, the gift of the Greeks was an entirely consistent, completely applicable, formally workable system of modal logic malleable to the mind of one man in particular, Anselm of Canterbury.

[45] Ibid.

Medieval Philosophy

Until this point in history this thesis has relayed only one side of the philosophical tradition bearing influence on Anselmian thought. This is primarily due to the fact that the Aristotelian modal tradition is often overlooked in light of the more provocative Platonic tradition. In fact, it may have been completely missed if not for the illuminating work of Hartshorne (1967). In fairness to the reader, however, the doctrines of Plato will be spelled out for comprehension purposes. Additionally, while it will not be the main focus of the thesis, it is my opinion that contra Pegis[46] the ontological argument can mesh with either tradition. Thus from Greek to Medieval Philosophy the lines of thought should be laid out as follows:



The position on the left shall be labeled Common Platonic Realism (CPR), while the position on the right shall be labeled Neglected Aristotelian Modalism (NAM). The main consensus in the history of philosophy is that the Medieval Scholars "accepted or rejected the Ontological

[46] See Pegis, Anton C. *St. Anselm and the Argument of the 'Proslogion'*, (Medieval Studies 28 1966.): 228–67. His position is best summarized by Matthews as follows "recovery of the Anselmian argument in its original form involved stripping away the Aristotelian framework in terms of which the Proslogion has been read since Thomas." Matthews, Scott. *Arguments, Texts, and Contexts: Anselm's Argument and the Friars.* (Medieval Philosophy and Theology, 1999.) 83-104.

Argument on the basis of which lens they used to view the argument."[47] It will be made blatantly apparent that the reason the Ontological Argument fails for one side and works for another is due to a narrow minded approach over interpretation. Over the course of this paper, this fatal flaw will be ironed out, and then more suitable forms of the argument will be construed, one favoring each side.

Throughout history, scholars on the left generally accepted the argument, while scholars on the right generally rejected the argument. This is largely due to the different presuppositions each side brought to the debate. Usually CPRs were of the mind that realism is true, and therefore modal discourse should be looked at skeptically. By way of contrast, NAMs were of the mind that nominalism is true and thus modal discourse is unproblematic in ontological commitments. The problem was that both sides saw the argument as favoring realism. In fact, modality flew practically under the radar. While it is my personal inclination to side with a more modal approach to the argument, there are valuable lessons to learn from the Platonic position. Therefore, in light of the preceding remarks, purely Medieval discussions of the ontological argument will concern primarily the Platonic tradition.

Anselm of Canterbury (1033-1109 C.E.)

Gaining notoriety first as the Ave of Bec in Normandy, and then ascending to the position of Archbishop in Canterbury after the Second Norman Conquest, Saint Anselm is hailed as the Scholastic Father responsible for designing the Ontological Argument. While the work of this 10th century Saint was truly revolutionary, there has been much dispute amongst modern scholars as to how his texts should be interpreted. Even the correct numerical amount of

[47] Matthews, *Arguments, Texts, and Contexts*, 83-104. Additionally, "Half a century later, Jean Chattillon, following Étienne Gilson, affirmed the more common view of the issue, that the acceptance or rejection of Anselm's argument among the first scholastics of the thirteenth century depended upon their allegiance to Augustinian or Aristotelian traditions."

arguments Anselm was trying to advance has been hotly debated and picked apart. In a certain sense it feels that it is a right of passage in academic circles to add yet another interpretation to the Abbot's work. It is on this ground that the influences of Saint Anselm must be briefly mentioned before moving onto dense interpretations of arguments and modal systems.

By the time of Anselm, Aristotelian modal logic had gone through the rigorous improvements of the Islamic Golden Age. In this way, the idea of existence had been added to sentences that contained simple subjects and predicates. Instead of questioning whether *b* merely belonged to *a* or necessarily belonged to *a*, the question was if *existence* merely belonged to *a* or necessarily belonged to *a*. Starting with the work of Al Farabi in the Baghdad School and culminating in the time of Avicenna, many of the ideas brought out in the *Proslogion* can be read in the Islamic texts of Falsafa.[48] For example, Al Farabi is thought to be the first to apply modality to the existence of God with his famous argument from contingency, or Jawaz.[49] Additionally, Avicenna is said to have been the first to define God as a necessary being, and then derive other attributes from His necessity. Both techniques of applying modality to God and deriving God's attributes from His necessity are observed in *Proslogion*. The difference between Anselm and Islamic scholars is that Islamic scholars focused more on the temporality that modality had to offer, whereas Anselm focused on pure modality. Thus, Islamic logicians are usually cited for developing cosmological arguments, while Anselm is usually cited for developing ontological arguments.

While academics disagree over the specific manner in which to interpret Anselm, some of his ideas are viewed in much of the same way. The most famous text from his writings is

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[48] Most notably Fārābī, and Muhsin Mahdi. *Philosophy of Plato and Aristotle*. (New York: Free Press of Glencoe), 1962. and Avicenna, and Inati, Shams Constantine. *Remarks and Admonitions*. Toronto, Ont., Canada: (Pontifical Institute of Mediaeval Studies), 1984.

[49] Avicenna & Inati, SC. *Remarks and admonitions*. (1984).

Proslogion: Discourse on the Existence of God, and most of the following exegesis will center around this work. Some notable high points throughout the book are Chapters 2, 3, 15, and 22. In *Proslogion* 2, Anselm states that his definition of God as "that than which nothing greater can be conceived" entails that God exists.[50, 51] In *Proslogion* 3, Anselm follows up these remarks by pointing out that this definition also entails that it is impossible to conceive of God's nonexistence. Here, it is important to note that until the work of Charles Hartshorne in 1965, most thinkers throughout history had taken a solely *Proslogian* 2 approach to Anselm's thought.(?) Marcin Tkaczyk comments on this occurrence by saying, "Such claims appear e.g. in Bonaventure and Kant, and deserve no debate."[52] To be fair, Bonaventure and Kant were simply responding to the rather crude presentation of Anselm as carried out in Aquinas and Descartes.[53] Therefore the blame in this case should only go in part on the shoulders of Bonaventure and Kant for continuing the conversation, while the other part of the blame should be cast onto Aquinas and Descartes for misinterpreting Anselm so simplistically. It is not to say that Anselm did not contain ideas similar to the crude proof that,

1. God has all perfections
2. Existence is a perfection
3. Therefore, God has existence,

but it is outright lunacy to maintain that a Saint such as he would fashion these ideas in such lowly apparel. The significant point, however, is that after nearly a millennium, *Proslogian* 3

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[50] Anselm, Proslogion 1-2.

[51] This concept will be explicated in more detail below.

[52] For scholars who engage in these arguments individually and collectively see Thomas. *Summa Theologica*. (Westminster, MD: Christian Classics, 1981). and Kant, Immanuel, Marcus Weigelt, and F. Max Müller. *Critique of Pure Reason*. (London: Penguin, 2007).

[53] Specifically the rendering of Anselm in Anselm, Proslogion 15.

became the center not only of discussion, but of modal discussion. Turning sharply to *Proslogion* 15, Anselm adds a touch of apaphatic theology that often goes unnoticed in contemporary discussions. Namely, he stated that God was "something greater than can be thought."[54] This remark seems to go in the opposite direction of his *Proslogion* 1 definition, and tends to generate some unneeded confusion if not addressed carefully. For example, while it is conceivable that since God is the greatest being imaginable, He may possess some properties that humans cannot conceive, it does not follow that all of His properties are exemplified in this fashion. Absolute benevolence can be grasped in the concept of basic benevolence that has been taken to its highest extreme.[55] Lastly, *Proslogion* 22 acts as a basic summary of Anselm's move from God's necessity to His other attributes.[56] With these thoughts in mind, it is now appropriate to turn to the differing interpretations of Anselm.

Perhaps the first thought in the mind of the reader is that the above grounds, generally agreed upon by scholars, are enough to warrant a proper construal of the proof. This is an astute point, but much of the divisiveness over how to interpret Anselm lies in the purpose of the *Proslogian*. What did Anselm intend to write when he produced this work? A common account is that he wrote it in response to the monks in his abbey who challenged him to prove God's existence without an appeal to faith. From the manner in which Anselm wrote, however, this is not at all clear. In fact, professor Tkaczyk again delivers with an excellent summary of the work of the French philosopher, Mai'eul Cappuyns, who says that there are four main interpretations of the *Proslogian*,

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[54] Anselm, Proslogion 15.

[55] Dazeley, Howard L., and Wolfgang L. Gombocz. "Interpreting Anselm as Logician." *Synthese* 40, no. 1 (1979): 71-96. Accessed November 26, 2016. (doi:10.1007/bf00413946.), 87.

[56] Such as his un-circumscribable, eternal, and self identical nature.

> "logical, psychological, cosmological and theological...Only in the first interpretation Ratio Anselmi is regarded as an argument (either sound or not) from some premises to a conclusion. In the psychological interpretation, Anselm simply affirms the fact of God's presence in mind, the cosmological interpretation one has to do with a supplement to Monologian, an earlier work from Anselm, and in the theological interpretation one has to do with an affirmation of the act of faith".[57]

Taking a narrow and segmented approach by falling under one of the four categories above is unwise, especially when dealing with a great thinker of the likes of Anselm. Therefore the best move is to combine elements of each approach to arrive at a clear conclusion. For example, from the fact that Anselm was the father of scholasticism, it should be abundantly clear that he was in favor of having faith before reason. That, however, does not preclude the part about reason. Moreover, the *Monologian* is incredibly helpful to the ontological argument. No interpretation, therefore, should exclude it from the discourse of hermeneutical development. It just so happens to be the case that Anselm was looking to simplify his *Monologian* argument, so he wrote the more concise *Proslogion*. That in no way entails that the *Monologian* should be deemed irrelevant. The only interpretation that should be treated with vitriol is the psychological interpretation of Anselm's text. The spunk of some scholars to imply from the *Proslogion* that Anselm is a Platonic realist is beyond belief. The Psychological Argument is cast somewhat as follows,

1. Objects conceived by the mind exist in reality.
2. God exists in the mind.

[57] Tkaczyk, "A Debate on God" in *Ontological Proofs Today*: 121-122.

3. Therefore, God exists in reality.[58]

While this argument is obviously fallacious, it serves to point out why a common objection to the ontological argument goes south. The most common objection raised is the so-called leap from existence in the mind to existence in reality. In most cases, existence in the mind does not imply existence in reality. For example, simply because Luke Thurston can conceive of a winged Alvin Plantinga in his mind, does not entail that a winged Alvin Plantinga exists in reality. The reason for this is that there is nothing in the nature of Alvin Plantinga that provides that if Alvin Plantinga is conceived, he must necessarily be conceived with wings. Not so with God. For God, the greatness of His nature entails that if He can be conceived, He must be conceived with existence in reality and the mind. As for the argument above, Premise 1 is patently in error, considering the Plantinga predicament. Moreover, for a premise like this to be true, philosophers would have to subscribe to some sort of Psychologism under which human minds are the grounds for abstract objects. In regards to this line of thought, the objections of Gottlob Frege are so well known that they do not need to be rehearsed here.[59]

Understanding Anselm's purpose is crucial to seeing his arguments through the proper lens, but once that ideal is achieved, more engaging examination of his formal arguments can be pursued. To summarize, the current exposition will center around the so-called modal part of Anselm's argument, seeing as the existence part of the argument has received the most attention thus far. The main idea of the modal argument expressed in *Proslogian* 3 is something like the following,

1. It is possible that God exists.

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[58] This proof is my own rendition.

[59] Frege, Gottlob. *The Foundations of Arithmatic: A Logico-mathematical Enquiry into the Concept of Number*. (Blackwell, 1968.)

2. God is not merely possible.

3. Therefore God exists.

Premises 1 and 2 are just the logical equivalents of the idea that God's nonexistence is inconceivable. For if God's nonexistence is inconceivable, then it is possible that God exists, and God is not merely possible, but necessary. The beauty of these ideas is that even though they can be modalized by the likes of Hartshorne and Malcolm, they do not have to be.[60] The above syllogism can be just as easily expressed in the form of modus ponens. Formally,

[Def G] $G =_{df}$ God exists

[Prem 1] $\Diamond G$
[Prem 2] $(\Diamond G \rightarrow G)$

{Con 1} G

In fact, if history had turned its gaze on *Proslogian* 3 instead of *Proslogian* 2, we may imagine this simple argument appearing in the work of Descartes as opposed to the argument from perfections. The fact that 20th century logicians were some of the first to engage with these ideas is evident in the complexity of *Proslogian* 3 expositions. On the up side, these more intense renderings are closer to the spirit of Anselmian thought. For example, if Anselm were to have formalized his own arguments, it would be unthinkable for him to have subscribed to the truth of [Prem 2] without further reasoning. But he does, indirectly, hint at the truth of [Prem 2] in the plain text. Therefore, most scholarly treatments have concluded that he relied on certain assumptions, particularly certain modal assumptions.[61] In lieu of the historical context and the

[60] For the benefits of the formalities see Harteshorne, Charles. *Anselm's Discovery: A Re-Examination of the Ontological Proof of God's Existence*. (Open Court Publishing Company, 1991). and Malcolm, Norman, "Anselm's Ontological Argument," *Philosophical Review*, vol. 69, no. 1 (1960), 41-62

[61] Malcolm (1960), Hartshorne (1991), Plantinga (1974), Adams (1971), Leftow (2005) Maydole (2009), ect.

degree of depth to which Anselm took in his work, it is rather obvious which underlying assumptions are brought to bear. Anselm was working under the idea that there are different modes of being. Existents□ say, in the mind, can simply be phrased in terms of possibility, and existents which *cannot be conceived not to exist* can be phrased in terms of necessity. Further, existents which can be conceived not to exist may be termed as contingent. In this particular instance it might be tempting to follow frivolously in the feet of David Lewis and posit that "In the context at hand, the appropriate sense of possibility is conceivability."[62] This, however, is a hasty move. At no point did Anselm claim that whatever is possible is conceivable. Instead, his ideas would be better characterized by the following subjunctive condition,

SC 1: If *x* is conceivable, then *x* is possible.

Such a reversal of SC1 as offered by Lewis is an easy rut to fall into and will go unnoticed if not properly addressed. That being said, it was disrespectful of the Modal Realist to impose such simplistic fallacy on such a great mind like Anselm. The point is that conceivability implies possibility, not the other way around. Moving back to the crux of the argument, it may be correctly deduced that if an existent is instantiated in reality, it is either contingent or necessary. God, being defined as *that than which nothing greater can be conceived*, must therefore exist necessarily if He exists at all. In this sense, *Proslogian* 3 should be viewed as an analogical mirror of *Proslogian* 2. That is to say, as Professor Hartshorne comments, "He (Anselm) repeatedly expressed the principle that 'contingently existing perfect thing' is contradictory in the same way as 'non-existing perfect thing.'"[63] In *Proslogion* 2 Anselm argued that God's perfection entailed His existence, in *Proslogion* 3 he reinforced this idea by giving

[62] Lewis, David. "Anselm and Actuality." *Philosophical Papers Volume I*, 1983, 10-20. (doi:10.1093/0195032047.003.0002.), 176.

[63] Hartshorne, Charles. *The Logic of Perfection: And Other Essays in Neoclassical Metaphysics*. LaSalle, IL: (Open Court Publishing Company, 1962.), 50.

more clarity to the type of existence that this entailed. With these concepts underway, we may now outline modern deductions that follow from Anselm's original argument. Hartshorne gives the following 10 premise formalization,

> "'q' for '(∃xPx)' There is a perfect being or perfection exists
> 'N' for 'it is necessary (logically true) that'
> '~' for 'it is not true that'
> 'v' for 'or'
> 'p→ q' for 'p strictly implies q' or 'N ~(p & ~q)'
>
> | | | |
> |---|---|---|
> | 1. | q→Nq | "Anselm's Principle": Perfection could not exist contingently |
> | 2. | Nq v ~Nq | Excluded Middle |
> | 3. | ~Nq→N~Nq | Form of Becker's Postulate: modal status is always necessary |
> | 4. | Nq v N~Nq | Inference from (2,3) |
> | 5. | N~Nq→ N~q that of | Inference from (1): the necessary falsity of the consequent implies the antecedent (Modal form of modus tollens) |
> | 6. | Nq v N~q | Inference from (4,5) |
> | 7. | ~N~q | Intuitive postulate (or conclusion from other theistic arguments): perfection is not impossible |
> | 8. | Nq | Inference from (6,7) |
> | 9. | Nq→q | Modal axiom |
> | 10. | q | Inference from (8, 9)"[64] |

Clearly the full force of this argument was not available to Anselm because certain modal axioms were not yet discovered, i.e. Becker's Postulate. However this argument goes to show the power behind interpreting Anselm's original arguments in a modal fashion as opposed to the simplistic format held to by most scholars in antiquity. Moreover, the basic modal formulations outlined above are intuitively obvious from the text itself and, as such, should not be ignored.

In sum, the genius of Anselm's presentation of the Ontological Argument captivated thinkers on two grounds. The first being the move from existence in the mind to existence in reality, and the second being the impossibility of a contingently existing perfection. Both arguments can be powerful if expounded and understood properly. Unfortunately many philosophers who have tried to either support or negate the argument have fallen into the same

[64] Ibid, 51.

hermeneutical mistakes. This, however, does not render their works useless. For the remainder of the historical review, the gems that lie among misinterpretations and misrepresentations shall be tacitly exposed.

Bonaventure (ca. 1221-1274 C.E.)

Classical apologetics is often construed by contemporary theologians as having its foundation on three major argument schemas: teleological, cosmological, and ontological. If the awe of the universe is not enough to encapsulate your mind in the heavens, then reason through causation can be achieved with the study of cosmology. The Ontological Argument can run as a last resort only when your tastes are *a priori*. Today's traditional telling of Natural Theology, with negative leanings toward ontological proofs, would have appeared unlearned and anachronistic to Bonaventure. Therefore the best approach, moving forward, would be to directly consult him for his opinion of how to properly construe Natural Theology.

Inquirer: I say, dear Saint, would you enlighten a wearier traveler as to the road of truth regarding proofs for the existence of God?

Bonaventure: That I would, dear sir, but first you must present your motives for such an inquiry. I would not want to start up a tradition of gainsaying for the simple purpose of satisfying your perplexities.

Inquirer: I beg you, dear Saint, think of me not as a gainsayer, but as a Christian, noble and good, wishing ever more to learn the way of the master so as to strengthen my faith.

Bonaventure: If you duly proceed not out of doubt or admonition, for it is out of doubt and admonition that you drive yourself further from the truth[65], then it shall be my privilege to impart upon you my reflections of the divine.

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[65] "Thus there is danger in descending to the originals; there is more danger in descending to the summas of the masters; but the greatest danger lies in descending to philosophy. This is because the words of the originals are

Inquirer: I don't!

Bonaventure: Then first, we must observe the world around us. Everything that exists, exists because it had a cause in the divine agency.[66] From this fact we know that talk about existents in the world leads us to talk truly about those existents. But to imply truth in the world is to imply the Truth which is the agency for all truth. Thus to speak of truth is to imply One who grounds all truths.[67, 68]

Inquirer: (a contemporary interjection) What if we implement one of the following retorts: 1.) redefine our theories of reference such that vacuous singular terms do not refer, 2.) naturalize our propositions, or 3.) negate logical entailment on some neutral pre-theoretic a priori ground in which every truth is already pre-determined in a reflective equilibrium of sorts? Strategy two is clearly the most promising, correct?

Bonaventure: Let us move on then to a second form of argumentation. Consider in this way, not simply truth, but truth that bears on existence, ontological truth.

Inquirer: Is this not the same argument played yet again, but dressed in more eloquent apparel?

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pretty and can be too attractive; but the Holy Scripture does not have pretty words like that." Hyman, Arthur, and James J. Walsh. *Philosophy in the Middle Ages: The Christian, Islamic, and Jewish Traditions*. (New York: Harper & Row, 1967.), 458.

[66] This is not the cosmological argument. Bonaventure simply means to maintain that "all things in the created order are... signs of the Uncreated Wisdom, each sphere of reality must be seen in its connection to that Wisdom" Gracia, Jorge J. E. "Philosophy in the Middle Ages: An Introduction." *A Companion to Philosophy in the Middle Ages*, 2002, 4.

[67] The reasoning at this stage of Bonaventure's apologetic is usually referenced as the Illumination or Imagination Argument. Today this line of thought would best be associated with what has become known as the Transcendental Argument for God's existence.

[68] In this way, he sided with "Plato that the forms of sensible things were separate from the material particulars" Dumont, Stephen D. *History of Medieval Philosophy*. Class Notes, 105. "Hence Bonaventure privileges Augustinian wisdom over and against introduction 4 Aristotelian science, rejecting the latter as the highest canon of judgment regarding human knowledge." Gracia, "Philosophy in the Middle Ages". A Companion to Philosophy, 5.

Bonaventure: No, listen to my words and contemplate their meaning![69] I am intending to say that God must ground the causes of creaturely beings. For how is one creature to beget another, on and on, ad infinitum without there first beginning a transcendental agency to put into cause the entire agency?

Inquirer: (turning skeptical) Perhaps, Aristotle is correct! Perhaps the universe is fundamental such that it can produce matter from its substratum.

Bonaventure: You are well versed in the ancients but you lack the ability to see the light of modern arguments.[70, 71] If you still remain unconvinced, I will try, then, my strongest form of persuasion. Be hasty, and take head, lest your mind mold! Consider my methods in two stages. The first: Fancy yourself to the talk of propositions and sentences. Remember the parts of language and bring them to bear in your mind. A sentence is composed of a subject, a verb, and a predicate. Cuthbert is loving. Cuthbert is the saintly source of inspiration for the subject of this sentence. Loving has the position of the predicate and is has the position of the verb. When we take into account all of these jobs we get the indubitably true proposition, "Cuthbert is loving." Take also into consideration the writings of Boethius who states that propositions that reference themselves substantiate their claims with more truth.[72] Take here, for example,

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[69] "Just as his illumination argument uncovered God as a kind of formal and efficient cause of certitude, so Bonaventure's aitiological argument uncovers God as formal cause of truth in creatures." Noone, Tim and Houser, R. E., "Saint Bonaventure", *The Stanford Encyclopedia of Philosophy* (Winter 2014 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/win2014/entries/bonaventure/>.

[70] Boethius, and John F. Wippel. *On the Supreme Good ; On the Eternity of the World ; On Dreams*. Toronto, Ont. Canada: Pontifical Institute of Mediaeval Studies, 1987.

[71] Bonaventure, Siger, and Thomas. *On the Eternity of the World; (De Aeternitate Mundi)*. Milwaukee: Marquette University Press, 1964.

[72] "Bonaventure has no doubt read in Boethius' II Perihermeneias, 'No proposition is more true than that which affirms itself',2" quoted from Mench, James. "Bonaventure and the Ontological Argument." 1970, 1.

Cuthbert is Cuthbert. Clearly the later statement has more epistemic veracity than the former because it is a mere tautology.

Inquirer: I concede, what is to follow?

Bonaventure: Now examine similar reasoning with God. God is God is a merely tautology, therefore it is invariably true. We may flout the statement, God is, but God is God cannot have its truth value called into question!

Inquirer: Clearly, but what follows of such significance?

Bonaventure: Consider the essence of God. God must have certain properties and lack other properties. Those properties which exemplify His character and make Him great are indeed the properties which God must have. God must exist by the definition of His very nature, because existence is a quintessential property of supremacy, and God is supreme. Therefore, when we assign the nature of God to the nature of God, we endow God with existence. Now, not only does the statement *God is* incur His existence, but the statement *God is God* doubly incurs His existence. Further, *God is God* is impossibly false because it is a mere tautology and thereby true from the necessity of its nature!

While Bonaventure did not explore the full modal implications of the Ontological Argument, the common history of said argument often graces over this great thinker. More bluntly, studying the work of this Saint would have saved or at least altered the objections raised by Kant centuries later. In this way, philosophers and theologians were offered another escape to the Kantian criticism of "Existence is not a predicate."[73] Bonaventure also goes into more detail in *Collations of Hexameron* and *Commentary on Sentences* on the fallacies in Guanilo's writings.

[73] "If God is His own existence, the statement "Deum esse" can be substituted. for "God is God", a proposition affirming itself. And, contrariwise, "Deus est Deus" is equivalent to "Deum esse" since "Deus" and "esse" are equivalent terms." Mench, "Bonaventure and Ontological Argument." 1970, 1.

He also touches on the inter-relations between the Ontological Argument and the transcendental reasoning of his Illumination Argument. Unfortunately, while both of these subjects are interesting to study, they are not patently pertinent to modal discourse. Thus, the above dialogue should simply suffice to explain the folly of Kant and spark interest in this great Medieval thinker.

John Duns Scotus (ca. 1266-1308 C.E.)

In the context of developed Medieval thought, figures such as Anselm of Canterbury and Thomas Aquinas were hailed as intellectual giants. However, another name that is often passed over in popular circles is that of John Duns Scotus. If not for this great thinker, a vast majority of Christian history would have been altered in the areas of theology and philosophy. For example, in metaphysics, the groundbreaking work of Duns Scotus on Platonic realism has been used on multiple occasions to argue against theories such as the static conception of time.[74, 75] Moreover, in theology, he transposed philosophical maneuvers into the field to dissect the Illuminationism of Saint Bonaventure and Henry of Ghent.[76] Such a talented individual, endowed with the ability to intertwine subject matters from vastly different domains, is clearly worthy of our attention on matters of ontological significance.

In Natural Theology, Scotus' claim to fame is his complex combination of the ontological and cosmological proofs to obtain a route to God. The clearest explication of this incredibly

[74] Scotus, John Duns, Edward Buckner, Jack Zupko, and John Duns Scot. *Duns Scotus on Time & Existence: The Questions on Aristotle's "De Interpretatione"* Washington, D.C.: Catholic University of America Press, 2014.

[75] Massie, Pascal. "Time and Contingency in Duns Scotus - Saint Anselm College." 2006. Accessed November 26, 2016.

[76] Dunaway, Bill. "Duns Scotus's Epistemic Argument Against Divine Illumination." July 15, 2016.

complex argument is found in the pages of his Tractatus de Primero Principa. Timothy O'Connor beautifully summarizes the argument as follows,

> "(1) Whatever is by definition such that the possibility of existing from something else is incompatible with it is such that, if it is logically possible for it to exist, it is logically possible for it to exist from itself (a se).
> (2) A first effective is by definition such that the possibility of existing from something else is absolutely incompatible with it...
> (3) It is logically possible that a first effective exist...
> .˚. (4) It is logically possible that an absolutely first effective exist from itself. (from 1-3)
>
> But (5) It is impossible that what is nonexistent bring anything into existence.
> And (6) Even if [per impossible] what is nonexistent could bring itself into existence, it would not be altogether uncausable.
> . ˚. (7) It is not logically possible for something to exist from itself which does not [actually] exist from itself.
> . ˚. (8) An absolutely first effective does exist from itself. (from 4&7)"[77]

At first glance this argument sounds incredibly complex, but from O'Connor's reduction this argument can be reduced further still. Thus a summary of Scotus' reasoning in a more modern format will proceed as follows:

P1. If a first cause exists, it exists necessarily.
P2. There is nothing logically inconsistent about the notion of a first cause.
P3. It is possible that a necessary first cause exists. (from 1,2)
P4. If it is possible that a necessary first cause exists, then a necessary first cause actually exists because:
A. What is nonexistent cannot bring into being anything. (Parmenides)
B. Some contingent things exist.[78]

A key point to notice about the argument as summarized by O'Connor is that Scotus only needs to prove Premise 3 to ensure the argument is sound. Unfortunately, it does not seem at first that Premise 3 is the only premise in need of support. Scotus assumes that his reader is aware of all of his metaphysical baggage. This is clearly not the case in the 21st century, thus an explanation of his underlying assumptions is in order.

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[77] O'connor, Timothy. "Scotus on the Existence of a First Efficient Cause." *International Journal for Philosophy of Religion* 33, no. 1 (1993): 17-32. (doi:10.1007/bf01314314.), 5.

[78] This is my own rendering.

On the whole, the argument's assumptions are not as fearsome in number as they are in detail. This means that understanding *seemingly obvious* principles is crucial to obtaining the content of the argument. For example, in Premise 1, the implication is that Scotus is not talking about the existence of propositions *themselves*, but the existence of the beings to which the propositions *describe*. This is important to note because one could easily take Scotus' commitments to realism as a warrant to conceive of existing propositions and then be tempted to think of logical entailment. On the contrary, "existing from something else" is meant to imply one being having its existence in another being as opposed to one proposition being entailed from another proposition. From the discussion of beings, it is then easy to see that in the chain of antecedent causal beings, the first such being must necessarily exist from itself, or *a se*. Also, it is important to understand the distinction between two types of existing entities. Entities such as God exist *a se*, or independently of any causal explanation outside themselves, while entities that fall into the rest of creation exist *ab alio*, or under the constraint of causal explanation or dependence.[79] With these basic principles under way, Part 1 of the argument begins to gain more strength.

The later part of Scotus' statements involves the commitment to principles that are more modal by nature. Here too, one might be tempted to raise objections to his argumentation, and here again we must be attuned to his underlying assumptions. Premise 5 (P4, Sub A.), for example, states that what does not exist cannot bring anything into existence. It might be said in response to this that an eminent threat, which is now nonexistent and non-actual, can cause the invention of a super weapon. One can simply anticipate the now eminent threat and build the weapon to prevent the threat. In this way, something that does not exist now, the eminent threat,

[79] Please note that *ab alio* and *a se* are by no means synonymous with possible and necessary. The best way to differentiate them is using possible worlds, which, unfortunately, is not introduced until Leibniz.

caused the existence of something that does exist now, a super weapon. For Scotus, this line of reasoning is unproblematic because of his unwavering commitments to realism. Even though the eminent threat is not actualized now, it exists as a concept, now, in the mind of its beholder. Thus, because concepts for Scotus are abstract objects and really exist, they do not fall under the domain of causally effete bodies. What then, should the nominalist reply to this line of inquiry? Conceptually, a nominalist might raise the point that concepts convey a description of reality that is either true or false. Therefore, the concept itself had nothing to do with the building of the super weapon, but it was the intentionality of the concept or the concept's aspectual shape that was responsible for the actualization of the super weapon. The intentionality of the concept, however, is contingent upon the circumstances of reality. Thus, it is reality that shapes the concept, and reality that is the benefactor of causation. In other words, the causal buck stops at reality. Under this reasoning, the nominalist too has cleared her slate of inequity. Once Premise 5 goes through, the argument assumes that it is obvious that something exists now. Therefore, there must be an independently existing first cause of that which is in existence now.[80]

The only flaw that remains currently is the criticism of soundness in Premise 3. Premise 3 will also be denoted as the plausibility premise. Scotus was acutely aware of this crumbling point and thus gave two auxiliary arguments to support his conclusion. To understand his reasoning we must distinguish between what O'Connor has categorized as accidental and essential ordering in the proof.[81] Accidental Ordering (AO) is simply causal ordering in numerical format. It would take the form of A begets B, B begets C, and so on. Essential Ordering (EO) is when the nature of the causal antecedent is higher than the nature of its cause.

[80] In addition to resembling the cosmological argument from a first cause, and the ontological move of possibility to actuality, this argument also seems to imply a hint of the argument of contingency from Al Farabi and Avicenna insofar as that which is assumed to exist now is assumed to exist contingently.

[81] O'Connor, Scotus on the Existence." 1993, 5.

Here, O'Connor cites the medieval example of a human moving a stone with a stick. "The movement of the stick is dependent for its causality on the simultaneous movement of the arm, which is in turn dependent on a continued decision or intention on the part of the agent to carry out such an action."[82] The first argument is then summarized by O'Connor as follows,

"(1) A secondary element in an AO series can cause when an element prior to it does not exist.
∴ (2) An infinity in an AO series (if one is posited) is not simultaneous but only successive (one element after another), in such a way that a secondary element does not depend on a prior element as regards causing (although it is from it in some way).(from (1))

(3) All the elements of [an infinite AO] succession are of the same sort.
∴ (4) The difformity [of nonsimultaneity in an infinite AO succession] is preserved only in virtue of something permanent that does not belong to the succession. (from (3))

∴ (5) Such a nonsimultaneous infinity of succession is possible only on the basis of some infinitely-enduring nature [Z], on which the whole succession and every element of it depend. (from (2)-(4))

(6) This dependence of the whole succession and every element of it on what is essentially prior is dependence in an order different from dependence on a proximate cause that is something belonging to that succession.
∴ (7) Z is essentially prior to the whole succession and every element of it. (from (6))"[83]

The only real place for confusion in the first argument is in the first conclusion where it states "a secondary element does not depend on a prior element as regards causing (although it is from it in some way)." Here we should take lack of dependence to mean lack of sustaining dependence as opposed to causal dependence in general. That is to say, if the father of John died, John could still conceptually live, where as if the sun was vanquished, the rays from the sun would also be vanquished. O'Connor, however, does not make himself quite clear as to why this sub-argument fails. The best stab he takes, seeing as he actually upholds a modified form of the argument later in the paper, is that Scotus did not go far enough. "Still, it seems that something broadly along

[82] Ibid, 7.

[83] Ibid, 9-10.

these lines is needed for Scotus' argument to go through - some sort of consideration(s) concerning the nature of an infinite AO series and its elements which will necessitate postulating an EO series between it and some object of a 'higher' sort of nature."[84] A possible reply to O'Connor's retort might be to say something of the sort that every constituent of AO is causally contingent. In addition, the set of AO is causally contingent, and thus there must be a cause that lies in a different order. If, however, the cause is in a different order then it must be a higher order, and an EO must be invoked between the higher order and the AO. If textual evidence for this reasoning is being sought, consider Duns Scotus' discussion of causal circularity in a set,

> "From the universal statement 'Every being is ordered,' then, it follows that not every being is posterior and not every being is prior, since in either case an identical thing would be ordered to itself or else a circle in the ordered would be assumed. Consequently there is some prior being which is not posterior, and is therefore first."[85]

But let that pass. Consider Scotus' second argument summarized by O'Connor once more,

"(1) Being an effective does not necessarily imply any imperfection.
∴ (2) Being an effective can occur in some nature without imperfection.

But (3) If being an effective occurs in no nature without dependence on something prior, it occurs in none without imperfection.
∴ (4) [Essentially] independent effectivity can occur in some nature.

(5) A nature in which [essentially] independent effectivity occurs is absolutely first.
∴ (6) Absolutely first effectivity is possible."

On Scotus' second sub-argument, O'Connor seems to give more ground. The only difficulty he has is with Premise 3. Instead, he would rather replace Premise 3 with Premise 3'

"(3') If being an effective cannot (logically) occur in any nature in essential independence of anything prior, then it cannot occur in any nature without imperfection."[86]

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[84] Ibid, 12.

[85] Scotus, John Duns, and Allan B. Wolter. *A Treatise on God as First Principle*. Chicago: Franciscan Herald Press, 1983.

[86] O'Connor, Scotus on the Existence." 1993, 13.

In O'Connor's opinion, Premise 3' is better suited to express the notion that existence that is causally dependent is imperfect by nature. Abstaining from this slight ambiguity, it is reasonable also to commit ourselves to the force of this argument.

The main point to take away from these arguments is that Scotus could not take up a purely ontological argument alone because of his tacit restrictions upon nominalism. That is to say that both atheists and theists use the concept of God and that concept is real, but for Scotus the real concept of God no more entails its existence than the real concept of an Avicennian Pegasus. Instead, his realistic outlook forces him to combine traditions to form an incredibly interesting and deeply neglected Cosmo-Ontological Argument for God's existence. In this case, what makes God necessary is His role as a first effective cause. After that concept is fully explicated, the rather looming modal question of possibility can be introduced and explored. In fact, the remainder of productive history on the Ontological Argument post-Scotus is a series of correspondences to try to resolve this problem.

Modern Philosophy

From the beginning of the 1600s on into the latter half of the 19th century, the flourishing of Modernity among philosophical thinkers changed the way commonly held ideas were construed by the academic community. Skepticism, a long held tradition among the ancient Greeks, and a thorn in the side of scholastic fathers, was stopped in its tracks with the fury of hard foundationalism. Reason and experience via sense were both put in the high places, and idols were constructed to please each figure of light. All of this talk was capped off by Kant, who was said to have found a happy medium between sense and reason, and to have reopened the door to subjectivist thought. Ultimately, however, the base of all this thought is centered around being. That is to say it involves ontology, and where discussion of ontology is found

there is usually a critique of the Ontological Argument. Alas, the defenses of the Ontological Argument in the Modern Period are spat upon as weak definitional victories, while the criticisms are revered as in-depth and insightful. While criticism in the Modern period opened the door for more enlightened discussion, it is also my view that those who supported this argument exposed some keen lines of conversation. Thus, by downplaying an entire half of the Modern era, most scholars miss out on interesting and cutting questions.

Baruch Spinoza (1632-1677 C.E.)

Perhaps the most radical metaphysician to ever appear on the philosophical stage, Baruch Spinoza was an 800 pound gorilla that had no time for the modern tradition of ontological conformity. In every aspect of his scandalous system, this barely bearded brute ravaged the ancient literature in search of ontological ideologies that would make David Lewis cringe. The crayon that he used to color outside the lines of rational thought was a pantheism that bled into the minds of other modern thinkers. Particularly, the entire system of Leibnizian thought was an open mouthed response to Spinoza's ethics. Consequentially, the rummage of this extremist position too often finds its way into the work of current scholarship. For example, Spinoza's necessitarianism is worshiped by the brilliant logician, Timothy Williamson, and Spinoza's pantheism is lapped up by the somewhat sane mind of Robert Adams. With all of this ludicrous talk about the necessity of being and ways the world might be, it is only natural to question the sanity of these scholars. This being the case, it is merely prudent to complete a mock psychological exam in order to find out exactly what is going on in the heads of these academics.[87]

[87] I am well aware that Sigmund Freud would not appreciate conducting a psychoanalysis on dead people, but considering the circumstances, the truth is more important to ascertain than Freud's would be objections.

First, an examination will be conducted on Spinoza's broader system of thought. It is from here that these extremist principles arose. Once Spinoza's system has been drowned in criticism, so too will his followers rest at the bottom of the sea. At this psychological exam, Spinoza and all of his adherents will be present. This is important because they need to be able to hear each other's testimonies. The examination will be administered by a highly educated therapist. Following are the germane portions of the transcript of this ground-breaking examination:

Therapist: Mr. Spinoza, I see you have come to me regarding questions over your sanity and how best to treat this "predicament." I think first we must discuss your ideas as they might shed light on your situation. Then we may continue with proper treatments. Is that alright?

Spinoza: The only substance is God and there are infinitely many modes of that substance!!!

Therapist: Precisely, I see that traditionally, Anselmian dialogue begins with the idea of God. However, in your system of reason, ontological arguments begin with the idea of existence. Could you explain yourself?

Spinoza: In a way, my ontological arguments are reverse ontological arguments. Two principles underlie the groundwork of my system. The first inadvertently relies on Descartes' desideratum of self existence.[88] To be clear, I hate Descartes, but I like the idea that at least one entity must exist, namely myself, because if I did not exist there would be no doubter of objects. Next, is the definition of God. "By God I mean an absolutely infinite being, that is, a substance

[88] Specifically this is the Cogito, but in general, Spinoza hates Descartes. This connection, therefore, is more due to happenstance than to any other factor.

consisting of infinite attributes, each of which expresses eternal and infinite essence."[89] From these two principles the following argument flows forth,

> "God or substance is the ongoing activity of self-actualisation. Its causality is the infinite unfolding of its own essence, and its eff ects are its own infinite and finite modes that unfold from it according to the necessity of its nature. God's power is to actualise its essence according to the necessity with which it unfolds. In other words, 'God's power is his essence itself'. This proposition nicely sums up Part I, in which we have struggled to understand how being is God and how God is active causal power." [90]

For comprehension purposes, the modern reader would be better served if this passage was reworded into the form of a syllogism. Consider the following reversal of my reversal of the ontological argument,

1.) God's perfection entails his infinitude.

2.) If God is infinite, then he has infinity of attributes, each consisting of infinite depth.

3.) There is at least one existent.

4.) Therefore, God exists.[91]

Therapist: Okay, at first blush, the unfortunate consequence of this argument is that the universe must be infinite. If God has an infinity of attributes, each of which is infinite, and you are a pantheist, it seems you must take Space to be infinite?[92]

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[89] Spinoza, Benedictus De, and G. H. R. Parkinson. *Ethics*. Oxford: (Oxford University Press, 2000.), Book 1, Def 6.

[90] Spinoza, Ethics, 45.

[91] This is my own rendition.

[92] A generous interpretation might turn to his original wording and try to portray the universe as an "effect" of God rather than an "attribute." Under this light, an effect could be finite whereas the Spinozan divine attribute *must be* infinite.

Spinoza: In a way, yes, but there is more to it. The term pantheism needs to be properly defined, and people who read my work must be cognizant of how I use it and how philosophers throughout history use it. Traditional pantheists like Bruno or Heraclitus would maintain that the universe is identical to God. From the presentation above, this is not my point. The idea is that the universe is an attribute of God. The only way to combine the idea that the universe is an attribute of God, with the thought of my pantheism, is to say something like the following, "if substance x has attribute A then x = A." To reiterate the words of my friend across the room, Peter Van Inwagen, the attempt to promote this premise "is awkward for Spinoza's metaphysics."[93] Moreover, "From this it follows trivially that if x has A and y has A then x = y, which means that no two substances can share an attribute."[94] Indeed, my system becomes less "awkward" when definitions are delved into even further. For example, when I discuss the universe, I am talking about the components of thought and extension. In this light, *thought and extension* are attributes of God, and the only sense in which I would label them infinite is that they are indivisible. This is to say that God's attribute of space is not an aggregate of finite parts, because there is no such thing as a smallest finite division of thought or extension. With this concept nailed down, the most radical label that I can receive is that of a strong panentheist. If you want a thorough defense of this view, I suggest you read my pal, Robert Adams, in his excellent book...

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[93] Bennett, Jonathan, and Peter Van Inwagen. "Jarrett Charles. The Logical Structure of Spinoza's Ethics, Part I. Synthese, Vol. 37(1978), Pp. 15–65." *The Journal of Symbolic Logic* 49, no. 03 (1984): 996-97. doi:10.2307/2274163.

[94] Ibid, 997. I am well aware that there is quite the controversy on what Spinoza thought about attributes. The reason I do not dive into these controversies here is that they are mainly a matter of translation. This is to say that taking the time to talk about Objectivism and Subjectivism would distract from the focus of this paper. Additionally, I am cognizant of the fact that the way in which these attributes relate to one another is questioned as well. It seems to me that the best way to relate Spinoza's attributes consistently is to adopt some sort of Modal Parallelism. For a further explication of which historians I favor see the general work of Karl Jaspers and Martial Gueroult on Spinozan Attributes.

Therapist: Believe me I will get to him. Continue on with your current system.

Spinoza: Okay, I apologize. This is the only position that allows the universe to be "in God" as an attribute, but not identical to him in the way that an Emerson or Thoreau would describe. At this point, it might be fun to dive into the philosophical musings of whether God is the universe or whether something can exist non-spatially, but I expect you would rather me talk about modality?

Therapist: That will be the main thrust from now on. My first purpose was to talk about your views on the Ontological Argument. I believe that we have seen your version is different because of how you view substance and mode? You think that God is the only substance and that there is infinity of modes, thus your structure is reversed.

Spinoza: Precisely. If you need more on modes you have only to ask.

Therapist: Actually, before the talk of modes, I have some slight criticisms of your method. First, it is not the case that the property of God's infinitude implies an infinity of attributes in His essence. According to the pioneering work of Georg Cantor, the concept of a finite set of infinite properties makes sense.[95]

Spinoza: I actually haven't read the youth. If I may have a chance to get a copy of his work...

Therapist: Using transfinite numbers, consider the set {Aleph-null, Aleph-1, and Aleph-2}. Each member of the aggregate is infinite, but the set as a whole is finite. In the same way, simply because the depths of God's attributes are infinite, it does not follow that He has infinite attributes. Continuing with cardinal arithmetic, not even all of God's attributes must be infinite. For example, there can be an actual infinite set of points between 4 and 5, but 6 will never be a

[95] Note that I am not saying that there is a greatest set of all sets. Cantor simply proves that it is possible to have a finite series with each member consisting of an actual infinite. For more explication see Cantor, Georg in E. Zermelo (ed.) 1966, *Gesammelte Abhandlungen mathematischen und philosophischen Inhalts*, Olms, Hildesheim

part of that set. Analogously, space does not have to be infinite along with the other infinite attributes of God. As for the doctrine of Pantheism, we can at the very least listen to the arguments of Nagasawa over the reasoning of Bob Adams. Moreover, to the scholar looking for a traditional doctrine of God and the universe, the popular view is to say that God is incorporeal, and thus his relation to the universe is one of coexistence with every point in space.

Spinoza: Dag nab it son, can we get onto modes?

Therapist: Precisely, consider the following question, "What is your view on modes?"

Spinoza: Okay, for simplicity's sake, I adhere to a doctrine called the necessity of the modes. I believe "Nothing in the universe is contingent, but all things are conditioned to exist and operate in a particular manner by the necessity of the divine nature."[96]

Therapist: As a child, what was your life like?

Spinoza: Well my father buried three wives, and three of his six children died before reaching adulthood. My mother...

Therapist: Never mind that, please tell us more about this Necessitarianism.

Spinoza: Now just a second, you have been making subtle jabs at me for the last 20 minutes. I am trying to explain my philosophy, but every time I start you cut me off. Do you realize that I was just listing a proposition? I proved the claim in the proof and notes! Anyway, "Things could not have been brought into being by God in any manner or in any order different from that which has in fact obtained."[97] If you want a secular defense of this view read Timothy Williamson's excellent book...

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[96] Ethics, Prop 29.

[97] Ibid, Prop 33.

Therapist: I have read both and I have some problems with both of them. I would like to discuss them if...

At this point, Mr. Spinoza could not bear the conversation any longer. The unfortunate reality of the situation was even if we had been able to continue, the claims were too radical and not related closely enough to the topic at hand. Therefore, it is with these nuggets of discovery that the reader must move forward.

Gottfried Wilhelm Leibniz (1646-1716 C.E.)

Influenced by the pantheism of the Spinozan tradition, Leibniz embraced the core tenets of rationalist dogma. At the top of the list, under his rather radical theory of relations, is his connection of contingency to the stream of scholarship on the Ontological Argument. Following in the tradition of Descartes and Spinoza, Leibniz saw the advantages of Anselmian reasoning. However, unlike most rationalist philosophers, Leibniz also saw the flaws in this progression. In his mind, the way to patch up the Ontological Proof was to demonstrate the possibility of God's existence. Up until this point, the only person who had seriously considered the idea was Duns Scotus. Leibniz, however, took it upon himself to create an entire framework dedicated to the analysis of possibility. With such work he paved the way for later thinkers such as Robert Maydole and later progressions such as the conceptualist argument.

There are two roadblocks that arise when trying to construct a proof for the possibility of God. First, there are those who consider this feat impossible because they believe it is an assumption that relies upon intuition and not proof. Second, there are those who would posit that theism and the concept of God are incoherent by nature. This is to say, they think there are

contradictions in the nature of God.[98, 99] Contra both of these concepts, Leibniz makes the argument that there is positive proof that establishes the possibility of God's existence. In his heavily contentious work, *Monadology,* he presents his proof as follows,

> "Thus only God (the necessary being) has this privilege: if he is possible then he must exist. Now, something that has no limits involves no negation; ·every truth about it is positive·; so it involves no contradiction (·because all contradictions boil down to something of the form 'P and not-P', which contains a negation·). So God must be possible, from which it follows that God exists—giving us an •a priori proof of his existence."[100]

Since its humble beginnings in the Leibnizian closet, this argument has been remodeled and redone to fit the fashion of Robert Maydole's designer wardrobe of logic. Before delving into the depths of his reasoning it is important to get some basic definitions under the belt,

> Definition 1: A Perfection is a simple positive quality that expresses what it expresses without limits.
>
> Definition 2: A maximally great being is a being, all of whose essential properties are perfections and all of whose essential properties entail perfections.

Maydole's summary of the Leibnizian Argument is as follows,

> "L1 All perfections are compatible.
> L2 Every essential property of a supremely perfect being (God) is a perfection.

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[98] These contradictions mainly arise with the attributes of God. For example, in regards to omnipotence, one might raise the paradox of the stone. This essentially asks if God can create a rock too heavy for Him to lift? In regards to omniscience, one might ask if there is a greatest set of all sets for God to know?

[99] There are some theists, such as Cornelius Van Til, who would maintain that any such contradictions are not contradicitons but paradoxes. A paradox is something that seems contradictory at first, but is, in reality, true. Another way to stage this reasoning is that there is a difference between a contradiction and a mystery. Mysteries are possibly true, whereas contradictions are flatly false. A contradiction may have the form A=~A, whereas a mystery might take the form, "As the positive ions entered the atmosphere, my mood became negative." Therefore the Vantilian argument is an argument from analogy. Mysteries are not contradictions, and contradictions are not mysteries.

[100] Leibniz, Gottfried Wilhelm., and Herbert Wildon. Carr. *The Monadology*. (London: Favil Pr., 1930.), 7.

L3 If something's essential properties are perfections and all perfections are compatible, then its essential properties are compatible.
L4 If the essential properties of something are compatible, then it is possible that it exists.

Therefore,

D3 It is possible that a supremely perfect being (God) exists."[101]

The only flaw in this line of progression is that L1 seems to be left without any backing. As such, an auxiliary argument is given in favor of L1,

"S1 If any two perfections are compatible, then all perfections are compatible.
S2 If any two perfections are incompatible, then they are necessarily incompatible.
S3 If any two perfections are necessarily incompatible, then it is either self-evident That they are incompatible or it can be demonstrated that they are incompatible. (Because necessary truths are *a priori*, and *a priori* truths are either self-evident or demonstrable.)
S4 It is not self-evident that any two perfections are incompatible.
S5 If it can be demonstrated that any two perfections are incompatible, then either one is the negation of the other or some part of the one is incompatible with the other.
S6 If one perfection is the negation of the other, then one of them is not positive.
S7 Perfections are simple, positive qualities.
S8 If some part of a perfection is incompatible with another, then one of them is not simple.

Therefore,

L1 All perfections are compatible."[102]

Stepping back from contemporary advancements, the talented polymath also created a system under which to analyze the notion of possibility. Since its inception, much ink has been spilt as to the validity of the framework of so called possible worlds. The very idea of what it is to be a possible world is indeed a bombshell in contemporary philosophy of logic. There are also a wide variety of differing accounts as to how possible worlds should be construed and interface

[101] Maydole, Robert E. "The Ontological Argument." *Craig/The Blackwell Companion to Natural Theology The Blackwell Companion to Natural Theology*, 2009, 553-92. (doi:10.1002/9781444308334.), ch10.

[102] Ibid.

with one another.[103] Going forward, these accounts will be explored in more detail, but for now, only simplistic definitions will be used. Leibniz talked about possible worlds as if they were possible states of affairs. In this way, he most closely models the hand of Wittgenstein. However, Leibniz used his possible worlds framework to say something much more radical than would be expected from a trained logician. Leibniz maintained that out of all of the different possible worlds that there could be, there is one possible world that is the best. Moreover, because of the absolute benevolence of God, the current world is the best possible world. Aside from the flippant mockery of Voltaire, Leibniz's radical notions sparked a plenum of serious conversation in the modern and contemporary eras. At first the idea seems incredibly counterintuitive. For example, the gratuitous evil that abounds in the actual world could surely have been blotted out by the Creator. This goes against the idea that God created the best possible world. More fundamentally, there seems to be a growing trend in analytic philosophy to reject the idea of a best world. Instead, one might posit a range of worlds between W_1 and W_∞. In this range there is no best world because for every world, W_n, there is always a greater world, W_{n+1}. Off the basis of these two simplistic objections, a fury of contemporary outrage has arisen to Leibniz's argument. Most notably, Bill Rowe's Argument from Improvability has been thought to have shaken the foundations of Leibnizian thought. Michael Almeida in his book, *The Metaphysics of Perfect Beings*, gives a formalized version of this proof. Before we analyze the formal proof we must understand,

> "The variables x and y have as a domain the set of possible worlds in the infinite sequence of worlds. The variable O has as a domain the (possibly empty) set of omniscient and omnipotent beings. The quasi-formal language includes □ and ◊ representing, respectively, broad logical necessity and possibility, and a predicate for actualization A. The propositions GodAy and OAy are the quasi-formal counterparts of

[103] A beautiful summary of this framework is explicated in the Blackwell companion to Natural Theology Pruss, "Leibnizian Cosmological Argument." in *Blackwell Companion to Natural Theology*, 24-34.

> the English propositions God actualizes y and an omniscient and omnipotent being actualizes y."[104]

Now that we have the basic symbols underway, the formal proof may follow,

> "1. $(\forall O)(\forall x)((O \text{ is essentially perfectly good}) \& OAx)) \supset$
> $\sim(\exists y)((x < y) \& \Diamond(OAy))$ *Principle B*
> 2. $\Diamond(\exists O)(\exists x)((O \text{ is essentially perfectly good}) \& OAx)$ Assume for RAA
> 3. $\Diamond(\text{God is essentially perfectly good and God}Aw)$ 2, Instantiate
> 4. $\Diamond\sim(\exists y)((w < y) \& \Diamond(\text{God}Ay)$ 1,2, MP
> 5. $\Box(\forall O)(\forall x)(\exists y)((x < y) \& \Diamond(OAy))$ *No Best World*
> 6. $\Box(\forall x)(\exists y)((x < y) \& \Diamond(\text{God}Ay))$ 5, Instantiate
> 7. $\Box(\exists y)((w < y) \& \Diamond(\text{God}Ay))$ 6, Instantiate 4,7 !@#
> 8. $\sim\Diamond(\exists O)(\exists x)((O \text{ is essentially perfectly good}) \& OAx)$ 2, RAA
> 9. $\sim\Diamond(\forall O)\sim(\exists x)((O \text{ is essentially perfectly good}) \& OAx)$ 8, equiv.
> 10. $\sim\Diamond(\forall O)(\forall x)\sim((O \text{ is essentially perfectly good}) \& \sim(OAx))$ 9, equiv.
> 11. $\sim\Diamond(\forall O)(\forall x)((O \text{ is essentially perfectly good}) \check{S} \sim(OAx))$ 10, equiv.
> 12. $\Box(\forall O)(\forall x)((O \text{ is essentially perfectly good}) \check{S} \sim(OAx))$ 11 equiv.
> 13. $\Box(\forall O)(\exists x)((O \text{ is essentially perfectly good}) \check{S} (OAx))$ *Kretzmann's Conclusion*
> 14. $\Diamond(\exists O)((O \text{ is essentially perfectly good})$ Assume for RAA
> 15. $\Diamond((\exists O)(\exists x)(OAx) \& (\exists O)(\forall x)\sim(OAx))$ 14,13, 12 MP
> 16. $\Diamond(\text{God}Aw \& \sim\text{God}Aw)$ Instantiate 15, !@#
> 17. $\sim\Diamond(\exists O)((O \text{ is essentially perfectly good})$ 4, RAA"[105]

To reduce this proof down to the level of the non-academic philosopher, there are two basic principles that found the progression. The first idea is Principle B, which states that a maximally excellent being would have to actualize the best possible world because of his absolute benevolence in every situation. The second principle was weakly explicated above, and can be labeled the No Best Worlds Principle. It basically states that there is no best possible world. The problem that bluntly arises is that if a Maximally Excellent Being must actualize the best possible world, and there is no best possible world, the Maximally Excellent Being is incoherent by nature. While this seems troubling at best, the critical responses of William Hasker and Alvin Plantinga have helped formulate a response to this reasoning. First, Hasker notes that the "moral

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[104] Almeida, Michael J. *The Metaphysics of Perfect Beings*. (New York: Routledge, 2008.), 15.

[105] Ibid, Appendix A.

standard expressed in Principle B is too high."[106] By this we can summarize Hasker's reasoning as follows,

"1. □ (∀x)(((GodAx) ⊃ (∃y)(~(GodAy) & (GodAy) & y > x) *Hasker's NBW*
2. □ (∀O)(∃x)((O is essentially perfectly good) ⊃(OAx)) *Kretzmann's Conclusion*
3. ◊(∃O)((O is essentially perfectly good) *Coherence of Perfect Beings*
4. ◊(God is essentially perfectly good) 3, Instantiation
5. □ ((God is essentially perfectly good) ⊃ (GodA*w*)) 2, Instantiation
6. □ (God is essentially perfectly good) 4, S5, Necessary Existence
7. □ (GodA*w*) 5,6, MP
8. □ ((GodA*w*) ⊃ (∃y)(~(GodAy) & (GodAy) & y > *w*) 1, Instantiation
9. □ (∃y)(~(GodAy) & (GodAy) & y > *w*) 7,8 MP
10. □ ((GodA*w*) & (∃y)(~(GodAy) & (GodAy) & y > *w*)) 7,9, Conj.
11. /:. □ (∃x)((GodAx) & (∃y)(~(GodAy) & ◊(GodAy) & y > x)) 10, EG
12. □ (∀O)(∀x)((O is essentially perfectly good) & (OAx)) ⊃
~(∃y)((x < y) & ◊(OAy)) *Principle B*, Assump.
13. □ ((God is essentially perfectly good) & (GodA*w*)) ⊃
~(∃y)((*w* < y) & ◊(GodAy)) 12, Instantiation
14. □ (God is essentially perfectly good & (GodA*w*)) 6,7 Conj.
15. □ ~(∃y)((*w* < y) & ◊(GodAy))
16. □ ((GodA*w*) & ~(∃y)((*w* < y) & ◊(GodAy)) 7,15 Conj.
17. /:. □ (∃x)((GodAx) & ~(∃y)(*w* > y & ◊(GodAy))) 16, EG,
18. /:. *Principle B* demands the impossible 17, 11 !@#"[107]

Again if simplicity is more effective in argumentation, it might be noted that moral obligations must be possible to fulfill. For example, we should not condemn the owner of a small town restaurant in New Zealand for the deaths of a Tsunami in Taiwan. First off, the restaurant owner could not have stopped the storm because he was not in Taiwan, but secondly even if he was in Taiwan, he would not have had the ability to stop the storm. Likewise, because the obligation to actualize a best possible world cannot be fulfilled, considering there is no best possible world, we cannot hold it over the head of a maximally excellent being for not choosing

[106] Ibid, 21.

[107] Ibid, Appendix B.

the best. An interesting connection at this point might be to try to insert Alvin Plantinga's ideas about theodicy and see where it goes. This is interesting because Leibniz used the best of all possible worlds to cure the problem of Evil and now Plantinga, who hates the idea, is also dissolving the problem of evil with possible worlds. Plantinga's attempt at theodicy basically states that because God is absolutely good, when He wants to actualize one possible world out of all the possible worlds He could actualize, He wants to actualize a world with the most good. In order for a world to be good, it must contain great making properties. Let's just do a thought experiment. Let's say that Incarnation and Atonement are great making properties. Now let's say that these great making properties are so great that no matter how much good there is in a world, it could not equal the amount of good that could be gained from Incarnation and Atonement. Also, no matter how much bad there could be in a possible world, it could not equal the amount of bad that would occur without Incarnation and Atonement. The Logical Conclusion to draw from the above information is that God, being good, would create a world that has *in it* Incarnation and Atonement at some point in time. But to have Incarnation and Atonement, there must be sin, and for there to be sin, there must be evil.

Gottlob Frege (1848-1925 C.E.)

With the publication of his magnum opus, *Begriffsschrift*, in 1879, Frege set the stage for the flourishing of Analytic Philosophy. While most scholars would take this work as a sign of his place in the logical era, he can be explicated just as thoroughly among men like Spinoza and Leibniz. Let us not forget, the latter of the two single handedly invented calculus, the fount of mathematical philosophy. In his seminal work, Frege built upon Leibniz's formal systems by highlighting the significance of a clear cut logical framework. In this respect, his remarks on logic were helpful, but when he tried to transfer these ideas past the first order into concepts like

ontology or the Ontological Argument, his analysis was less helpful. Therefore, the breakdown of Frege will cover two trends: his work on logic and his work on the logic of ontology. By dismantling his ideas on ontology, so too will his objections to the Ontological Argument be proven void.

First, with regard to his logical framework, Frege was able to revolutionize the field by expounding a clear and concise definition of mathematical proof. His thoughts on defining proofs ultimately boiled down to his problems with the nature of grammar. Frege thought grammar was unclear and needed the help of logic to make it understandable.

> "If the task of philosophy is to break the domination of the word over the human spirit by laying bare the misconceptions that through the use of language often...arise concerning the relations between concepts...then my concept notation, being developed for these purposes, can be a useful instrument for philosophers...I believe the cause of logic has been advanced already by the invention of this concept notation."[108]

Frege noticed that in English, grammar can be interpreted differently in different contexts. This is problematic if one is trying to present premises with only one denotation. The consequence of a looser grammatical format is usually a fallacy of equivocation or one of its kin. Frege's solution to the problem was simple: change the format of language. In his day, every conjuring of language was done in subject-predicate form. In fact, the same basic shape holds true today. The form is as follows,

> Subject-Predicate Form: Subject + Verb + Predicate[109]

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[108] Frege, Gottlob and Dietrich Alexander. *"Begriffsschrift"* (Jena: Friedrich-Schiller-Universität, 1979.), 7.

[109] It is important to note that in Frege's time, definitions of subjects and predicates were different than they are today. Back then, a sentence was comprised of a subject which acted with a verb on a predicate. For example, "John kicked the ball." Today, predicates are defined as every part of the sentence which is not the subject ("kicked the ball"). For the purposes of this analysis as well as the remainder of the paper, the use of a predicate shall entail the Fregean use of the word.

There is, however, nothing about the rules of logic that would allow us to deduce this form in argumentation. In argumentation, logic would include a format that is more mathematical by nature. Thus, Frege introduced the "concept notation" now known as Function Form:

Function Form: F(a)

In this format, one would not argue, "John is human" because this would follow subject-predicate form. Instead, John would be equivalent to the variable, J, which could be substituted into the function F(a) for the value of *a*.[110] The property of humanity would be ascribed to John in words as follows,

> For any function F(a) if F belongs to *a* then *a* possesses the property of humanity. F(J), therefore, entails that humanity is ascribed to J.[111]

This property ascription approach to philosophy is not only more engaging, but it is more complex and therefore less susceptible to misinterpretation. For this reason, function notation is implemented in most of the formal arguments throughout the paper. Indeed, most Analytic Philosophers are members of the Fregean cult. Some find logic so precious that they refuse to argue with any premises of pure grammar. Obviously they use grammar outside of their formal jargon, but in argument, logical form alone is in use.[112]

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[110] In more modern renditions, replacing a predicate with the value of a variable is called using an atomic formula as opposed to using a function form.

[111] In reading formal proofs most people have the idea that they may simply translate function form into subject-predicate form. Thus, they would read F(J) as John is human. For simplicity's sake this is usually allowed, but having the full formal definition in mind is important when trying to explicate clear terms for complications such as property relations.

[112] The only reason I emphasize this point with such consistency is that most outsiders to the Analytic Tradition, think this approach is used as a method to keep others out. That is most certainly not the case. There is good reason for such formalities, and none better is qualified to explicate those formalities, but the grandmaster himself, Gottlob Frege.

Another concept which is important to grasp when progressing through formal arguments is the type of quantification that is being used.[113] The two forms that appear the most frequently are existential quantification and universal quantification. Existential quantification is symbolized with the backwards E as follows,

$\exists$ (x)F(x)=$_{def}$ there exists an x such that x has the property of the atomic formula F(x).

Sometimes this type of quantification can be seen with an exclamation point as follows,

$\exists$!(x)F(x)=$_{def}$ there exists only one x such that x exists and x has the property of the atomic formula F(x).

The second type of quantification is broader ranging in its domain, and is referenced as the universal quantifier. Universal Quantification is expressed as follows,

$\forall$ (x)F(x)=$_{def}$ for every x such that x exists, x is F

With these basic principles in place, the reader is in a position to understand the main thrust of the task Frege is undertaking. However, the more interesting point arises when one examines the metaphysical and ontological conclusions that he drew from these principles. It is important to note that before proceeding, Frege eventually gave up his god of logic when he met the force of Russell's liar paradox. "A scientist can hardly meet with anything more undesirable than to have the foundations give way just as the work is finished. I was put in this position by a letter from Mr. Bertrand Russell when the work was nearly through the press."[114] It is not that

[113] When an atomic formula is quantified it becomes a proposition. This concept will have more relevance in later dialogue on formal proofs.

[114] Frege, Gottlob. *The Foundations of Arithmatic: A Logico-mathematical Enquiry into the Concept of Number*. (Blackwell, 1968.), 253.

Frege began to think of logic as impotent, but Russell was able to show him the perils of praying five times a day to a blurry image in the platonic heaven.[115]

The first appearance of Frege's musings on the ontology of logic and mathematics appear in his 1884 book, *Foundations of Arithmetic*. It was there that Frege maintained the view that, "Every individual number is a self subsistent object."[116] After diagnosing the problems with other theories of numbers, such as psychologism, and defending the radical notions of his own theory, Frege literally meant to convey that numbers "exist." Since ancient times, a view such as this would be labeled realism with respect to numbers. It is important to point out that Frege did not believe that numbers existed spatially, but he did maintain their weaker existence as concepts. In fact, he even made some fairly persuasive points along his way. For example, Frege notes that Existential Statements are a type of number statement. In at least some basic sense this theory seems to be true. For example, if something exists, it does not have 0 instantiations. At minimum, it has 1 instance that is either tensed or tenseless. The problem with Frege's thinking is that it later leads to unruly forms of quantification in which existence is almost read off of language. Particularly, in the Quinean sense, quantification tends to lead to positing the existence of objects like Cyclops and Centaurs so long as someone has thought of them.[117]

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[115] Without delving into the formalities of Russell's version, basic liar paradoxes state something like the following, "This sentence is false." The idea is that, if "This sentence is false." is true, then it is false, and if it is false, then it is true. Many attempted solutions to this problem have been offered by notable logicians like Tarski, Prior, Kripke and so forth, but their solutions often create more problems than they solve. More notably, Kurt Gödel applied this reasoning to his first theorem of incompleteness to show the improvability of certain mathematical axioms that were traditionally held as valid.

[116] Frege, Foundations of Arithmetic, table of contents pg x.

[117] I understand that this is a longer debate and that technically it is not always the Cyclops or the Centaur that is said to exist, but their concept alone. I still object to arguments of that form, as well as Fregean and Quinean quantification on the basis of strict nominalism. These objects are fictional even in the mind. Conception, however, is a physical process that occurs within the brain, a concrete entity.

The application of realism combined with a strong form of logicism led Frege to dismiss the Ontological Argument because he thought,

> "all existence talk should ultimately be carried by the existential quantifier, together with high-order concepts. Thus, "exists" should never occur as a first-order primitive predicate. Russell went so far as to say that "God exists" is bad grammar. On the other hand, Frege claimed that the statement, "God exists", when asserted, is really an assertion about the concept of God, namely, that there exists something falling under this concept, or equivalently, this concept is not empty. There is no first-order concept of existence, according to Frege."[118]

First off, it is somewhat unclear what Frege means by there is "no first-order concept of existence." If by this terminology, he is implying that existence is an umbrella under which certain properties must be kept to comprise an object's essence, then he is accurately restating a doctrine that has been in existence for thousands of years. But simply expounding this situation of how objects exist does nothing to touch the validity of the Ontological Argument. The point has always been that necessity is one of the attributes under the umbrella. If this is true, then existence must obtain; not just as a concept, but as reality as well. Second, saying "God exists" is not akin to saying something exists under the concept of God, or the concept of God is not empty. Saying "God exists" is to speak about definition in the same way that saying "a triangle has three sides" is to speak about definition. The truth is in how the term is defined. Lastly, and too commonly neglected is the idea that the only statements that are true are those whose referents can fall under the domain of the existential quantifier. This type of talk is obtuse. Is it really the case that the statement, "Snow White = Snow White" is false? Clearly this statement

[118] Friedman, Joel I. "Was Spinoza Fooled by the Ontological Argument?" *Philosophia* 11, no. 3-4 (1982): 307-44. (doi:10.1007/bf02380843.), 308.

is a tautology, and tautologies are true by definition. This is not to say that the referent, Snow White, exists, but it does show that not "all existence talk should ultimately be carried by the existential quantifier." For if this were the case, we could never prove the falsity of statements such as "Snow White = Sleeping Beauty" or "Sleeping Beauty ≠ Sleeping Beauty." To be fair, Frege does launch other objections to the Ontological Argument, but because of their complexity and because of the fact that most of them rely on his faulty theory of descriptions, they will not be explicated here.[119]

Analytic Philosophy

The analytic approach to philosophy of religion is unique in that it brings logic and logic alone to the conversation. Emotional analysis and appeal to the way the world seems are unreliable as methods of proving the existence of God. Although this approach may seem to mandate a worship of rationalism, the analytic tradition is filled with Pragmatists and Quinians who would lay down their lives to relay the glory of sense-related knowledge. It just so happens that when one is going through logic deductions and formal proofs, the rational method is the best way to maneuver. Beginning with the work of Alexus Meinong on realism and nominalism, the debate on ontology began to pick up pace with respect to quantification and meaning. Once established, subsequent scholars such as Kurt Gödel and Alvin Plantinga were able to structure their proofs to accomodate such discussions.

Kurt Gödel (1906-1978 C.E.)

Perhaps the most brilliant intellectual to walk the grounds of a modern university, Kurt Gödel is grouped along with Aristotle and Gottlob Frege as one of the finest logicians in all of human history. At the age of 25, he laid the foundation for his two Theorems of Incompleteness.

[119] For a supportive analysis of Frege's theory see F.J. Pelletier and Bernard Linsky (2008). For a critical analysis see Speaks (2009).

Roughly, these state that proving the consistency of mathematics is philosophically impossible.[120] To be clear, at the age of 25, he exenterated a movement that was backed by the most academically adept minds of his time. David Hilbert, A.N. Whitehead, and Bertrand Russell all tried, unsuccessfully, to provide a consistent set of axioms to complete mathematics. Their work was halted by the studies of this mere postdoctoral researcher from the town of Vienna. Gödel was also the man who walked beside Albert Einstein and corrected him when he trespassed on the possibility of time travel.[121, 122] Commenting on Gödel's success as a logician the esteemed cleric of theoretical computer science, John Von Neumann, noted, "Kurt Gödel's achievement in modern logic is…more than a monument, it is a landmark which will remain visible far in space and time."[123]

Needless to say, if any readers are not enlightened as to the modern advances in non-classical logic, Gödel is a building block of the field. Interestingly enough, this talented polymath also had ideas on the veracity of the Ontological Proof. To properly understand the context of his philosophical system, Gödel gave a 14 point outline of his beliefs,

1. "The world is rational.
2. Human reason can, in principle, be developed more highly (through certain

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[120] Godel, Kurt. "Über formal unentscheidbare Sätze der Principia Mathematica und verwandter Systeme, I", in Solomon Feferman, ed., 1986. *Kurt Gödel Collected works, Vol. I*. (Oxford University Press, 1931) 144–195.

[121] Gödel, Kurt. "An Example of a New Type of Cosmological Solutions of Einstein's Field Equations of Gravitation." *Reviews of Modern Physics* 21, no. 3 (1949): 447-50. doi:10.1103/revmodphys.21.447. In his solution to the Einstein Field Equations, Gödel used the Gödel metric to prove the viability of closed Spacetime curves in which time travel is seemingly possible. The idea is that Spacetime eventually returns to its starting point. Thus, if the traveler is able to speed faster than light back to his original position, he will have traveled to an earlier time. Though the mathematics of this theory seem valid, some academics point out that so-called circular constructions of time take away A-determinations, such as "earlier-than" and "later-than." For a more detailed analysis of this problem as well as general questions on the nature of time and philosophy see, (Craig 2000), (Craig 2000), (Craig 2001), (Craig 2001) and Walker (2016).

[122] Godel metrics can also be used to explain Fold light cone structures with respect to differing signals and circularly.

[123] Halmos, P.R. "The Legend of von Neumann", The American Mathematical Monthly, Vol. 80, No. 4. (April 1973), 382–394.

techniques).
3. There are systematic methods for the solution of all problems (also art, etc.).
4. There are other worlds and rational beings of a different and higher kind.
5. The world in which we live is not the only one in which we shall live or have lived.
6. There is incomparably more knowable *a priori* than is currently known.
7. The development of human thought since the Renaissance is thoroughly intelligible (durchaus einsichtige).
8. Reason in mankind will be developed in every direction.
9. Formal rights comprise a real science.
10. Materialism is false.
11. The higher beings are connected to the others by analogy, not by composition.
12. Concepts have an objective existence.
13. There is a scientific (exact) philosophy and theology, which deals with concepts of the highest abstractness; and this is also most highly fruitful for science.
14. Religions are, for the most part, bad– but religion is not."[124]

In these fourteen points, it is patently obvious that Gödel was under the spell of modern philosophy. At bare minimum, he was a theist, but from there, he seems to also embrace the Leibnizian notion of a plurality of worlds. He staunchly rejects the idea of physicalism, and prizes above all else the rationality and orderliness of the universe we inhabit. In sum, Gödel was the analytic instantiation of Leibniz.

In much the same way that he jotted down his philosophy in a notebook, so too was his version of the Ontological Proof preserved. A basic summary of Gödel's proof can be found by Oppy as follows,

"Definition 1: *x* is God-like if and only if *x* has as essential properties those and only those properties which are positive.
Definition 2: *A* is an essence of *x* if and only if (iff) for every property *B*, *x* has *B* necessarily iff *A* entails *B.*
Definition 3: *x* necessarily exists iff every essence of *x* is necessarily exemplified.
Axiom 1: If a property is positive, then its negation is not positive.
Axiom 2: Any property entailed by—i.e., strictly implied by—a positive property is positive.
Axiom 3: The property of being God-like is positive.
Axiom 4: If a property is positive, then it is necessarily positive.
Axiom 5: Necessary existence is positive.
Axiom 6: For any property *P*, if *P* is positive, then being necessarily P is positive.

[124] Wang, Hao. A Logical Journey: From Gödel to Philosophy. (A Bradford Book, 1997), 316.

Theorem 1: If a property is positive, then it is consistent, i.e., possibly exemplified.
Corollary 1: The property of being God-like is consistent.
Theorem 2: If something is God-like, then the property of being God-like is an essence of that thing.
Theorem 3: Necessarily, the property of being God-like is exemplified."[125]

In presenting his ideas, Gödel used his Leibnizian vein to bleed out a predecessor proof of Plantinga's modal ontological argument. The similarity between this quick note in Gödel's scribblings of Axiom 5 and the reasoning of Plantinga in *The Nature of Necessity* are striking. Additionally, because Gödel is quantifying over properties, he is technically using third order modal logic.[126] Generally, the logic of first order ontology describes existence, the logic of second order ontology is concerned with what properties that object exemplifies, and third order discourse will be concerned with what modal, temporal, or deontic status is assigned to the property of the being. In this case the modal status of the properties of God will be discussed.

The most notable criticism of Gödel's argument was presented in Sobel (1987).[127] Sobel points out that if certain axioms of Gödel's proof are accepted, there will be a modal collapse where every proposition is necessarily true. To be clear, the formal validity of the proof is not in question. Instead, the implications of such a proof as sound are put in the crosshairs. Indeed, there do seem to be some rather odd metaphysical implications of the above proof. At first, it would seem that Gödel is implying a view that mimics the necessitarianism of Williamson.[128] Necessitarianism is the view that all propositions hold necessarily and that there are no such things as contingent truths. In other words, this is the only way that the world could be, and all

[125] Oppy, Graham. *Ontological Arguments and Belief in God*. Cambridge: (Cambridge University Press, 1995), 224-225.

[126] Any logic that is above the second order is called High Order Logic. From here onwards, reference to higher order logic will be denoted in this way.

[127] Sobel, Jordan Howard. *Logic and Theism: Arguments for and against Beliefs in God*. Cambridge: Cambridge University Press, 2004.

[128] Williamson, Timothy. *Modal Logic as Metaphysics*. Oxford, United Kingdom: Oxford University Press, 2013.

other possibilities are impossible. The reason Gödel falls into this trap is because of the method he uses to define properties. In his mind, there are two types of properties: positive properties and negative properties. The idea is that a property is "positive in a moral-aesthetic sense or in a sense of pure attribution."[129] The key word here is "or." If properties are only to be taken as positive in the sense of pure attribution, then saying God is necessary and God is a being that has all positive properties, implies that all attributions must be necessary. This is not word for word what Williamson believes, but it is pretty darn close. While one might see this as loss, the upside is that if one is to adopt necessitarianism, there then becomes an objective manner in which to label positive and negative properties. The problem is that the cost of accepting this view of modal metaphysics is literally worse than espousing modal realism. It is essentially modal suicide. Consider the most mundane and out-of-the way examples such as, if "F is the property of being present at the Eiffel Tower on May 17 at 9:35 a.m. then we might be willing to accept that Pos(F) is true" while not being present at the Eiffel Tower on May 17 at 9:35 a.m. would be considered false for Pos(F).[130] The failure is not that there is no good reason to think that F is positive. Clearly if the property is attributed, then it is positive. The obstacle is that before delving into the academic problems with this position, our modal intuitions impale us out of submission. What then, might we say about moral-aesthetics as a guide to positivity? The dilemma here is one of decision. Who or what should decide which properties are positive or negative in the moral-aesthetic sense? The answer cannot be God, for God is the existent of the proof. Thus, it is with good standing that the reasoning of Kurt Gödel can be rejected in favor of a stronger form of argumentation.

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[129] Small, Christopher. "Kurt Gödel's Ontological Argument - University of Waterloo." Accessed October 25, 2016. http://www.stats.uwaterloo.ca/~cgsmall/ontology2.html.

[130] Ibid.

Alvin Plantinga (1932-present)

The groundbreaking work of Alvin Plantinga in the field of analytic theism sent shockwaves through the thought of natural theology and changed philosophical models of God's existence. Most notably, his reformed approach against Natural Theology has countered the common evidentialist method of presenting proofs for the existence of God. Instead, Plantinga addresses epistemology as a means of maintaining the existence of God. While he raises objections to the guiles of proof plastering, he humors their efforts by reviving discussion on the Ontological Argument. Prior to his 1974 piece, *The Nature of Necessity*, the common consensus among academic philosophers was that the Ontological Proof failed due to the problem of contingency presented by J.N. Findlay in 1948.[131, 132] Findlay's paper maintained that only contingent truths/entities could exist in reality. Because of this premise, God's existence would be impossible because necessity is one of His attributes. Even with the revitalizing efforts of scholars such as Hartshorne and Malcolm, the argument still fell prey to this problem.[133, 134] As such, Plantinga was not attempting to use this argument to convince others of God's existence; his deeper point was that the current criticism was flawed and that there could be a proof that is both logically valid and sound that constitutes the existence of God.[135]

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[131] Plantinga, Alvin. *The Nature of Necessity*. Oxford: (Clarendon Press, 1974.)

[132] Findlay, J. N. "V.—Can God's Existence Be Disproved?" *Mind* LVII, no. 226 (1948): 176-83. (doi:10.1093/mind/lvii.226.176.)

[133] Hartshorne, Charles. *The Logic of Perfection.* LaSalle, Il: (Open Court, 1962).

[134] Malcolm, Norman. *"Anselm's Ontological Arguments".* in *John Hick. The Existence of God (Problems of Philosophy).* (Philosophical Review, 1969).

[135] To be fair he would make haste to add that such a proof is not *necessary* to constitute the existence of God.

Even if one is to maintain that no necessary truths exist in the actual world, exempting tautologies, and thus there is no such thing as a necessary being, most philosophers would concede that the existence of such truths is possible. This means that in one possible world there exist necessary truths even though no such truths exist in the actual world.[136] The purpose of Plantinga's work is to show that this contention is contradictory. For contingent entities this reasoning may be valid, but when the line is transposed to necessary agents, the progression fails. For example, in the actual world, philosophizing cats do not exist, but in some possible world, W_n, there is a consistent state of affairs in which philosophizing cats are instantiated. The reason this goes through is that philosophizing cats are contingent beings; that is to say they exist in some possible worlds, but not others. On the other hand, necessary beings exist in every possible world.[137] Thus, there is no way that if a necessary truth holds in one possible world, that it does not hold in all other possible worlds. It simply follows by definition that it holds at all worlds.

Once clear on this basic principle, Plantinga proceeds to apply it to the existence of God. The testimony of Findlay already proclaims that "an adequate object of our worship must possess its various excellents in some necessary manner."[138] Thus, the only question that remains is whether God's existence is possible. For a moment, let's respond with the affirmative. Also, we

[136] There is some dispute in general over what entails the possibility of an object. The major discussion is whether conceivability and/or our modal intuitions are an adequate guide to possibility. It seems likely that in most circumstances this holds, however there are some instances which are more questionable. For a beautiful treatment of this question see Gendler, Tamar, and John Hawthorne. *Conceivability and Possibility*. Oxford: Clarendon Press, 2002. The main lesson here is that in each situation the circumstances must be thoroughly examined and nothing must be taken blindly as possible because it coheres with our modal intuitions.

[137] The idea of an entity existing in some possible world is a bit misleading. Possible worlds on this account are simply collections of propositions. This is not to say that they actually are collections of propositions, but Plantinga is using them to mean such. In fact there is a lively debate over the definition of possible worlds and their relationship among each other. All of this to say that if possible worlds are just collections of propositions and propositions are just the abstract, immaterial content of a truth statement, then an entity cannot exist in a possible world. Truths about the entity are either true or not true at W_n. Also, trivially to my mind, but explosive in the mind of others, the truth that a necessary being exists is also itself necessary, which means it must hold in all possible worlds.

[138] Findlay, "*God's Existence Disproven?*", 5.

are subconsciously aware that the term God is defined using the description, "the greatest being imaginable." What is there that follows thus far?

"(11) It is possible that God exists.

(12) So there is a possible world W such that God exists in W (from (11)).

(13) God exists in W and God does not exist in the actual world (from (9) and (12)).

(14) If God exists in W and God does not exist in the actual world, then the greatness of God in W exceeds the greatness of God in the actual world (from (10)).

(15) So the greatness of God in W exceeds the greatness of God in the actual world ((13) and (14)).

(16) So there is a possible being x and a world W such that the greatness of x in W exceeds the greatness of God in actuality (15).

(17) So it is possible that there be a being greater than God is (16).

(18) Hence it is possible that there be a being greater than the being than which it is not Possible that there be a greater (from (17) by definition of 'God').

Our supposition at step (9), therefore, with the help of the premisses expressed by (10) and (11), implies a false statement; for surely (19) It is not possible that there be a being greater than the being than which it is not possible that there be a greater. Step (9) accordingly must be false and the existence of God established."[139]

There are many variants of Plantinga's work and indeed most are more simplistic than the one listed above, but to change up the pace of ontological progression and add some stylistic flare, the above proof was explicated. The more common argument that most non-academic philosophers implement is summarized by Bill Craig as follows,

"1. It is possible that a maximally great being exists.

[139] Plantinga, "*Nature of Necessity*" 202.

2. If it is possible that a maximally great being exists, then a maximally great being exists in some possible world.
3. If a maximally great being exists in some possible world, then it exists in every Possible world.
4. If a maximally great being exists in every possible world, then it exists in the actual world.
5. If a maximally great being exists in the actual world, then a maximally great being exists.
6. Therefore, a maximally great being exists."[140]

Here, a Maximally Great Being is defined as a being that has all great making properties. Great making properties are properties that are better to have than to lack. The idea is that having all power, all knowledge, and absolute beneficence are better properties to have than to lack. Examples of lesser making properties may take the form of sloth, apathy, and peccability. While this format may please those who have not been trained academically, there are other formats and definitions that appeal to the mind of a philosopher. For example, consider this format in a critical paper on the work of Plantinga,

"Premise $\diamond\Box(\exists\Box x)(x \text{ is god})$
Axiom $(\forall\Box x)(\Box\diamond\Box x \dashrightarrow \Box x)$
Conclusion $\Box(\exists\Box x)(x \text{ is god})$"[141]

Following Frege, this proof could be made more formal by implementing function notation,

[Def 1] $G(x) =_{def}$ x has the property of divinity

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[140] Craig, William Lane. *Reasonable Faith: Christian Truth and Apologetics*. Wheaton, IL: (Crossway Books, 2008), 185.

[141] King, Peter J. "Plantinga & World-Indexed Properties." 2004, 1-5.

[Prem 1] ◇□(∃□x)(G(x))

[Axiom 1] (∀□x)(□◇□x→□x)

[Con 1] □(∃□x)(G(x))

In this light, the definitions of what constitutes great making properties would be altered as well, "A property, F, is great-making if and only if an object, *a*, that has F is greater than every object, *b*, like *a* in all particulars save that *b* lacks F and any properties whose possession is implied by the possession of F."[142] The more fundamental question after understanding this definition is "What is it that makes *a* greater than *b*?" It may seem to the layman that there is nothing that constitutes this definition of greatness except personal preference. This is to say, greatness becomes a judgment call. Under normal circumstances this guideline may be true. For example, what is great to one theologian may not be great to another theologian. However, in formal logic, greatness is a technical relation that can be explicated in more fundamental terms than preference. Formally, the greatness relation is a strict partial order because it meets the following conditions,

"asymmetry: if x is greater than y then y is not greater than x;[18]

transitivity: if x is greater than y, and y is greater than z, then x is greater than z."[143]

It is not, however, a strict total order because it fails to meet the trichotomy where exactly one of the relations hold,

(i) x is greater than y;
(ii) y is greater than x;
(iii) x is the same individual as y.

[142] Hill, Daniel J. *Divinity and Maximal Greatness*. London: (Routledge, 2005), 9.

[143] Ibid, 8.

Additionally, a member, *m*, in an order is maximal if there is no member greater than *m* in that order. "The claim of metaphysical perfect being theology is that any maximal member is divine, and any divine being is maximal with respect to greatness, or 'maximally great', for short[19]"[144]

Originally, the way Plantinga progressed through his definitions was by adding the notion of maximal excellence. The updated version above, however, is less susceptible to criticisms. Briefly to state Plantinga's definitions,

> "we might say that the excellence of a being in a given world W depends only upon its (non world-indexed) properties in W, while its greatness in W depends not merely upon its excellence in W, but also upon its excellence in other worlds. The limiting degree of greatness, therefore, would be enjoyed in a given world W only by a being who had maximal excellence in W and in every other possible world as well."[145]

Formally, this is,

[Def 1] X is Maximally Excellent$=_{df}$ X exists in Possible World, W, and exemplifies the properties of Omnipotence, Omniscience, and Absolute Benevolence.
[Def 2] X is Maximally Great$=_{df}$ X exemplifies Maximal Excellence and X exists in every Possible World.

Taking this line leads us back to a more Craig-like construal where,

[Prem 1] It is possible that there is a being that has maximal greatness.
[Prem 2] Possibly, it is necessarily true that an omniscient, omnipotent, and perfectly good being exists.
[Prem 3] No counterexample can be derived for Axiom S5 of Modal Propositional Logic.
[Prem 4] It is necessarily true that an omniscient, omnipotent, and perfectly good being exists.

[Con 1] Therefore, an omniscient, omnipotent, and perfectly good being exists.

Using these same definitions we might also argue,

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[144] Ibid.

[145] Nature of Necessity, 214.

[Prem 1] If Divinity is instantiated in some world, W, it can only be instantiated in the form of [Def 2].
[Prem 2] If a being of the form of [Def 2] is instantiated in some world, W, it is necessarily divine.
[Prem 3] Maximal Greatness is possibly exemplified by a being. (It is hard to come to terms with correcting the Grandmaster, but truth waits for no man.)
[Prem 4] For Maximal Greatness to be possibly exemplified by a being, the following proposition must hold true, "There is some possible world, W, in which a being coherently exemplifies the property of maximal greatness."
[Prem 5] If [Prem 2] is sound, then all possible worlds, that are not themselves impossible worlds, have instantiated inside/among (this terminology will be more lucidly communicable once the definition of a possible world is explicated) them a Maximally Great Being.
[Prem 6] The possible world that corresponds to the actual state of affairs is itself a possible world that is not itself impossible.

[Con 1] Therefore, a Maximally Great Being exists in the actual world.
[Con 2] Therefore, that Maximally Great Being is divine.

Combining all of these formulations and definitions, a final proof may arise as follows,

[Def 1] X is Maximally Excellent $=_{df}$ X exists in Possible World, W, and exemplifies the properties of Omnipotence, Omniscience, and Absolute Benevolence.
[Def 2] X is Maximally Great $=_{df}$ X exemplifies Maximal Excellence and X exists in every Possible World.
[Def 3] $G(x) =_{def}$ x has the property of Maximal Greatness

[Prem 1] $\Diamond\Box(\exists x)(G(x))$

[Axiom 1] $(\forall x)(\Diamond\Box x \dashrightarrow \Box x)$

[Con 1] $\Box(\exists x)(G(x))$

Notice here that the success or failure of the proof is dependent upon the definition of the existent *x*. This proof is definition heavy in that the most work is put around the words in the definition. This is intentional because most construals lead the reader to worship the work of the formulas; they should not. Instead they should become aware immediately of the importance of the defining terms.

In posing this proof another detail is significant: the question of God's existence has moved from whether God exists to whether God is possible, from Natural Theology to philosophical theology, and from the existence of God to the coherence of theism. Whether or

not theism is consistent, this is a giant blow to the atheist. It entails on its face that positions like agnosticism are less tenable. That is to say that most people have an opinion about the possibility of God whereas most people do not want to admit His existence in the actual world. This then forces them to come to terms with their intuitionistic beliefs. If they think God is possible, they must concede his existence. If they disagree on logical grounds, they must state a logical contradiction in the nature of God. Their argument would have to proceed as follows,

1. There is some contradiction in the nature of God
2. God exists in no possible worlds. (from 1)
3. Thus the existence of God is not possible. (from 2)
4. If the existence of God is not possible, then God exists in no possible worlds.
5. If God exists in no possible worlds, then He does not exist in the actual world.
6. If God does not exist in the actual world, then God does not exist.
7. God does not exist. (from 4-6)

A second approach would be to prove that there is some possible world in which God does not exist. If this is true, then God is not necessary and thus does not exist under our common sense definition. An example would be the existence of a non-sentient world, a world in which no life exists. Such a world is conceivable and appeals to intuition, but is not a possible world if God exists. Such a world would be along with the impossible worlds that contain squared circles and blue, four-sided triangles.

Two more observations remain before diving into the defense of this thesis proof: 1) There is a chance that maximal excellence may be reduced, thus increasing the probability of my rendition of Plantinga's proof. 2) When examining properties that God exemplifies there may be more classes than great making properties and lesser making properties.

Beginning with the first observation, simple examination of omniscience and omnibenevolence reveals their subservient status to the property of omnipotence. If this is true, then having omnipotence entails the properties of omniscience and omnibenevolence, and theism is better suited to dull the edge of Ockham's razor. Consider the following argument,

1.) If an agent, *a*, does not know how to perform an action, *x*, then *a* is not able to actually perform *x* of *x's* own volition.

2.) If an agent, *a*, is not able to actually perform *x* of *x's* own volition, then *a* does not have the power to actually perform *x* of *x's* own volition.

3.) If *x* has the property of omnipotence, then *x* has the power to actually perform an infinite amount of actions of *x's* own volition.

4.) Having the power to actually perform an infinite amount of actions out of *x's* own volition, entails having the knowledge to perform an infinite amount of actions. (from 1,2)

5.) Thus having the property of omnipotence entails having the property of omniscience.[146]

A secondary argument is suited to show that omnipotence entails moral perfection.

1.) Omnipotence entails the creation of rules.

2.) Moral rules are rules.

3.) Thus the omnipotent being creates the moral rules.

Moving past these arguments over properties, it stands to reason that there may be more than two simplistic classes for property grouping. Obviously the class of great making properties would include impeccability, incorporeality, etc. There is, however, a third class of

[146] This is suited to rebut the counter that *x* has the ability but not the know-how, and that someone else that has the know-how hypnotizes them into performing the action.

specification that needs to be added to the debate, neutral making properties. These properties include timelessness or temporality, absolute beauty or aesthetic misalignment, etc. These are properties which have no bearing on the greatness of God, but they are properties nonetheless that God exemplifies. It is also important to note that they may be accidental insofar as they do not have to be exemplified by God in every possible world. God's essential properties, omnipotence, sub-omniscience, sub-absolute benevolence, would, however, be exemplified by God in every possible world.

With these considerations under way, we may now turn to the contemporary academic response to the modal argument of Alvin Plantinga. While my thesis proof is a variation of this argument, most of the common criticisms and remarks still apply.

Thesis Proof

Opening Considerations

The first requirement for properly engaging with Plantinga's proof, is to properly understand the history of his argument. Once this general sense is gained, one can thoroughly and completely speak to the points that Plantinga raises. The above compilation serves as a reference for those not acquainted with this history. It also seeks to offer new light from a scholarly level on the history of the ontological argument. Henceforth, historical review will cease and strict logical analysis of argument will proceed. In order to defend Plantinga's argument, this thesis will first apply pesticide to the criticisms of his proof and then offer revitalization to the forgotten support of his bronzed argument. Although discussion of the best way to formulate Plantinga's proof can be found in the historical analysis, the final product will be defended as follows,

[Def 1] X is Maximally Excellent $=_{df}$ X exists in Possible World, W, and exemplifies the properties of Omnipotence, Omniscience, and Absolute Benevolence.

[Def 2] X is Maximally Great $=_{df}$ X exemplifies Maximal Excellence and X exists in every Possible World.

[Def 3] $G(x) =_{def}$ x has the property G, Maximal Greatness

[Prem 1] $\Diamond\Box(\exists x)(G(x))$

[Axiom 1] $(\forall x)(\Diamond\Box x \dashrightarrow \Box x)$

[Con 1] $\Box(\exists x)(G(x))$

Introduction to Contemporary Objections

To be frank, prospects for the success of the ontological argument are slim when one considers the objections that have been launched over the last fifty years. Within that time

period, the Ontological Argument has gone through a blood bath. W.V.O. Quine launched objections to the entire system of Modal Logic, J.L. Mackie and Jordan Howard Sobel called into question the entire system of theism as incoherent, and Richard Gale and William Rowe have maintained that the modal ontological argument is question begging. To put this in a different light, if their objections stand, the modal-ontological-argument for the existence of God fails because it is modal, theistic, and a non-argument. The only method of defense to fend off such an attack is to fight fire with fire, to return analyticity with analyticity, and to replace logical negation with logical disjunction.

Incoherence of Modality

As it stands, a prime strength of the Plantinga Ontological Argument, henceforth POA, is that it employs the use of a type of modality, S5, which is almost unquestioned as a valid axiom throughout the field of Non Classical Logic. The problem is that most logicians and philosophers are perfectly willing to accept the aspects and schemas that riddle modal logic, but they are not as willing to carry the implications of these axioms through to the field of modal metaphysics. One such philosopher who resisted the perils of S5 and the entire system of modal logic was W.V.O. Quine, a dyed in the wool Analytic who detested metaphysics on the whole and carried his claims about ontology to the extreme.[147] Because he let himself go in the area of ontology, his radical philosophical views spilled over into other areas, most relevantly *de re* and S5 modality in modal logic. To combat Quine's unorthodox attack, a brief history of modern modal logic will be explicated for comprehension purposes. This will be followed by an analysis

[147] By the use of the term extreme, I am by no means implying that he is on par with someone like Van Inwagen, and for Pete's sake, I am not equating his radical tendencies to match those of Spinoza or Bob Adams. I am simply stating that to a normal, sound minded analytic who is trying to study philosophy, his claims are a bit unsettling.

of his criticisms and then a construal of how modal logic should be formulated in order to avoid Quine and others concerns.

The story of modern modality began in what is commonly called The Syntactic Era. This was a period of time from about 1918 to 1959 in which almost all logicians were hoodwinked by the Positivist Movement. Because of their affiliations with Positivism, they allowed themselves to cast doubt on notions such as necessity and possibility because of their intuitive ambiguity. For example, who is to say in a logical and objective sense what is and is not possible and necessary? Claims about such statements are largely up to the observer. It was in this context that the famous, American logician, C.I. Lewis, delved into the field of Modal Inquiry.[148] Lewis began his exploits by calling into question one of the fundamental modal operators, implication. Lewis observed that implication was the only one of the six foundational operators of logic that did not cohere on a commonsensical interpretation. For example, logical negation is practically the same for philosophers as normal negation is for civilians. If a logician writes ~F(x) this is the same as a civilian who writes, "X is not F." The same types of examples hold for disjunction and equivalence. For implication, however, the definitions are different. In basic propositional logic, implication is only false if the antecedent is false and the consequent is true. Spelling this out in the form of a truth table,

p	q	p → q
T	T	T
T	F	T
F	F	T
F	T	F

[148] To be painstakingly clear, C.I. Lewis is not at all the same human being as David Lewis. David Lewis is the man with a theory of possible worlds that will burn the hair off of your chest. C.I. Lewis basically founded the field.

Notice that this definition is not at what a common person means by "P implies Q." Normally, implication in the non formal sense is restricted to the first line of the truth table. "If p is true then q is also true" describes implication under an everyday vocabulary. For Lewis, this jump between so-called material implication and everyday implication was a problem. Therefore he needed to find a way to bridge the gap between the logician and the common person. Out of this conundrum, strict implication was bred from material implication using modality. In his 1918 piece, *A Survey of Symbolic Logic*, Lewis pointed out the following,

> "The systems discussed in the last chapter were all based upon material implication, peg meaning exactly 'The statement, ' p is true and q false/ is a false statement'. We have already called attention to the fact that this is not the usual meaning of 'implies'… The present chapter intends to present, in outline, a calculus of propositions which is based upon an entirely different meaning of 'implies'- one more in accord with the customary uses of that relation in inference and proof."[149]

The idea was that when necessity was applied to material implication, the result was a more everyday definition of implication called strict implication. Instead of writing material implication as p→q, strict implication says p ⥽ q. This just means □(p→q). In this case the truth table must only show one truth condition, "If p is true, then q is also true." The point of spelling all of this out is to clarify the way in which modality came to fruition. At first this idea of modality seemed like a good idea to help clarify and explain formal logic, however in its original and weak form, modality was filled with problems. For example, in normal propositional logic, operators could be mixed and stacked in front of each other. To a trained logician, the formula (~~p→(q&~(z&~x)) might take a moment to decode, but the fact is that

[149] Lewis, Clarence Irving. *A Survey of Symbolic Logic*. New York: (Dover Publications, 1960), 291.

this is decodable and it does have a series of corresponding truth tables.[150] However, using modal logic, what would a similar formula mean? For example, the formula □□◊◊□□◊◊□◊□◊□x means absolutely nothing under the Lewisean system. There is no value because stacking operators over one another does not make sense in modalities. In fact, without any of the developments of the 1950s and 1960s modal logic would be, by and large, a massive failure due to its broad range of ambiguity and sloppy approach to formalities. It is also appropriate to note at this point that most of Quine's objections came before these developments. Even the objections he tried to launch afterwards seemed to indicate that he was stuck in this lovely Lewisean Era of Syntax.

In his 1953 article, "Three Grades of Modal Involvement," Quine laid out his famous objections to the system of modal logic. At first, Quine does not seem to do away with the entire framework, however, by the end of his paper, the parts of modality that he does reject are so substantive that "modal logic might as well go."[151] The three varieties are as follows: modal operators can be applied to a "singular term…a statement operator…by a sentence operator."[152] Quine expressed slight discontent towards the first two and genuine hatred towards the last. Examples of each of these models are as follows,

1. □ '11>7'
2. □ (11>7)
3. x(□(x>7))

[150] In words, this formula is just saying that *p* implies the conjunction of *q* and not the conjunction of *z* and not *x*.

[151] MacFarlane, John. "Objections to Quantified Modal Logic." Http://johnmacfarlane.net/. (Accessed November 4, 2016), 1.

[152] Quine, W.V. "Three Grades of Modal Involvement - PhilPapers." (Accessed December 4, 2016), 156-157.

At first glance, these statements may seem very much alike, however for Quine they were radically different. Statement 1 is very noncommittal to Quine because the quotes around 11>7 signify that this phrase is a name, and it is not actually an existent. Because Quine is a realist, he would take the abstract proposition 11>7 to exist, but the referent '11>7' to exist in a different way. Imagine referring to a person named W.V.O. Quine. When one wishes to refer to the man, he uses his name, W.V.O. Quine, but if one wishes to refer to the man's name, he would have to use quotes and write 'W.V.O. Quine.' Quine does not object to Statement 1 because he sees the quantification of a name as meaningless.[153] In Statement 2, Quine is more hesitant to pass over the content as harmless, but because the use of parentheses indicates the range of quantification is being extended to a logical function, there is no problem. After all, what is so ontologically committing about quantifying over the truth of a mathematical or logical function? There is nothing truly modal about reading ontology off of language; it is this reductive feature that can be completed in standard propositional logic. To repeat, Statements 1 and 2 pass the Quinean test because they are essentially referring to propositions as necessary. They are not referring to the content of those propositions as necessary. This type of propositional modality is called modality *de dicto*. Modality *de dicto* is up to par under Quinean standards. What Quine launches his objection to is Statement 3 because it incorporates modality *de re*. In modality *de re*, the content is being quantified by the necessity operator. Statement 3 literally states that *x* is *necessarily* greater than 7. While Quine would ultimately like to only use *necessary* as a description of propositions, he eventually had to concede and admit that additionally propositions can be necessarily true. Although it may seem as if the terms *necessary* and

[153] When I use quantification in this context I mean to say that there is a logical operator that brings existence into the conversation. In normal propositional logic, the existential quantifier and the universal quantifier are the most common operators to bring existence into the conversation. In modality, however, a quantified modal logic can be brought about even with the use of the necessity operator. It is important to note that this quantified version of modal logic is what Quine objected to the most.

necessarily are the same thing, they were different for Quine. Regardless, he had to allow both as long as they applied to propositions and not the content of those propositions. To stress this point, he would not for a minute admit that such quantification could be made over individuals or objects of propositional or intentional attitudes. To support such thinking on this topic, Quine gave the following argument,

> "1. Necessarily $9 > 5$.
> 2. 9 = the number of planets.
> 3. So, necessarily the number of planets > 5.
>
> Quine thinks that the conclusion is clearly false, and both premises clearly true.[1] So the argument is invalid. By Frege's criterion, this shows that (4) is an opaque context. Since it doesn't make sense to have an (objectual) variable in an opaque context, we can't make sense of
>
> (8) $\Box x > 5$
>
> and so we can't make sense of
> (9) $\exists x \Box x > 5$".[154]

It is important to note that if the above argument succeeds, modal logic is vacuous in its *de re* form and thus the ontological argument is also invalid. The problem, however, with Quine's argument against *de re* modality is that it commits a rather glaring fallacy of ambiguity. That is, Premise 2 seems to be a statement about a number and Premise 3 seems to be a statement about planets. Because of this, there is no common theme among the premises which the reader can follow through to the end. Instead, there is confusion over what the argument exactly means. As far as the observer is concerned, Premise 1 is true, but Premises 2 and 3 are unrelated. This sort of syllogism is comparable to the old joke, "I once met a man with a wooden leg named Smith, so I asked him, 'What is the name of your other leg?'" In order for this ambiguity to be ironed out, Quine would have to state whether he wants to talk about numbers the whole way

[154] MacFarlane, Objections to Quantified Modal, 3.

through or whether he wants to talk about planets the whole way through. As of now, he seems to be talking about both. In the terms of the joke, there is no clear direction whether the man means to say that his name was "Smith" or that his wooden leg was named "Smith." Therefore upon this fallacy the entire argument falls down.

While it is nice to simply say that Quine is being ambiguous, the reader may feel that if he fixes his ambiguity, the argument may be valid and modal logic may crumble. The problem, however, is that Quine's terms are constructed such that fallacy cannot be fixed. To understand this, there must be a distinction made between rigid and non rigid designators in modal logic. To understand this distinction, the notion of possible worlds must first be explicated.

In 1959, Saul Kripke dropped a bombshell on the field of modality when he introduced an old method for analyzing possibilities known as possible worlds. Possible Worlds talk originated in the work of the 17th century philosopher and mathematician, G.W. Leibniz. However, they had not been applied to formal notions of modality until Kripke entered stage left. The reason that Kripke's Possible World's Framework succeeded on such a large scale was that it made repairs to C.I. Lewis' shaky five system approach. Originally, Lewis' system was futile because there was no hint of a Semantic, i.e. a linguistic interpretation of the formal systems. When the Possible World's Framework was first introduced it came with a Possible Worlds Semantics. A common presentation of the Possible Worlds Semantic can be seen as summarized by Zimmerman,

> "Here is a very simple Kripke-style semantics for modal logic:
>
> A 'model structure' is an ordered triple (w, K, R), where w is the actual world, K is the set of all possible worlds (including w), and R is a reflexive, symmetrical, transitive relation on K (so the resulting modal logic is S5). If W1 stands in R to W2 , then,

according to the intended interpretation, W2 is ‘possible relative to’ W1 – that is to say, it is one of the worlds that is relevant, from the point of view of W1 , to determining what is possible.

A ‘model’ is a model structure plus a function, V, from pairs consisting of an atomic formula (‘p’, ‘q’, etc. for propositional modal logic) and a world (W1 , W2 , etc.) to a truth-value – truth or falsehood, depending upon whether p is true or false of that world (i.e., whether p would have been true, had that world been actual).

A function V* assigning truth-values at worlds to all the formulas of the language, relative to an assignment V, is given recursively. V* agrees with V on the truth-values of atomic formulas at worlds, and is extended to complex formulas along these lines:

(1) A&B is assigned True at a world W iff A is True at W and B is True at W, otherwise it is False at W.

(2) ∼A is assigned True at W iff A is not assigned True at W, otherwise ∼A is False at W.

(3) A is assigned True at W iff A is assigned True at every W* such that W R W* (i.e. W* is possible relative to W); otherwise, A is False at W.

The possibility operator, ◊, is defined as ∼∼.

(4) Truth, period, is Truth at the actual world; so A is true iff A is True of w, and otherwise false.

The extension of this approach to predicate logic utilizes such rules as:

(5) x is F is assigned True at W iff x is in the domain of things existing at W, and in the set of things-that-are-F-at-W.

A notion of validity can be defined as truth on every model.

> This semantics provides truth-conditions for all the well-formed statements of this simple modal language. The truth conditions for atomic sentences will have the form 'p is true iff p is True at w', and the rules show how to generate them for all the other sentences of the language."[155]

Under this framework, philosophers have been able to clear away other confusions such as how to combine operators. Using the system of S5, formulas like □□◊◊□□◊◊□◊□◊□x can be broken down to □x. This relies on some very simple deductions which were built off axioms Kripke helped create. Kripke's notion of possible worlds also worked to clear up some of the ambiguity over what is possible and what is necessary. Although there are different types of possibility and necessity, most commonly an object is possible if it exists in one possible world, and an object is necessary if it exists in every possible world. Now that possibility and necessity are defined, the issue is one of epistemology, i.e. coming to know which types of objects are in each world, instead sorting out which definitions go with which term.

With this simple understanding of possible worlds the distinction between rigid and non-rigid designators can be grasped. A rigid designator is a referent that picks out the same object across all possible worlds, and a non-rigid designator is a referent that picks out different objects in different possible worlds. An example of a rigid designator would be √16 because the square root of 16 will always pick out +/-4 no matter which possible world in the framework one decides to pick out. It is not the case, however, that 9 will always pick out the number of planets. For in some possible worlds, 10 will pick out the number of planets and in other possible worlds 2 will pick out the number of planets. Thus, the number of planets is a non-rigid designator. Thus, even if Quine were to try to specify and say that he means only to talk about numbers or

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[155] Zimmerman, Dean W. "The A-Theory of Time, The B-Theory of Time, and 'Taking Tense Seriously'" *Dialectica* 59, no. 4 (2005): 401-57. (doi:10.1111/j.1746-8361.2005.01041.x.), 416-417.

only to talk about planets, the use of a non-rigid designator in the syllogism means that there will always be ambiguity.

The conclusion to draw from these remarks is that the attempts of Quine to level out and destroy modal logic are in the end flawed and obsolete. In fact, the more modern versions of modal logic that are used in the contemporary setting are much stronger than their original Lewisean counterparts.[156] Even those who object to *de re* modality on other grounds are not going to accept the criticisms of Quine or the rebuttals that he tried to formulate against Saul Kripke. The fact stands that they are simply flawed by their nature. The take away, then, is that modal logic is indeed valid in its stronger form and that the *de re* modality that undergirds the ontological argument is valid for use. Thus an objection to the ontological argument will have to come in the argument itself, not against the foundations upon which it is laid.

Incoherence of Theism

Perhaps the most commonly cited objection to the Plantinga Ontological Argument, henceforth POA, is the inconsistency of the plausibility premise, [Prem 1]. Formulating this objection into a proof, consider the following,

1. There is some contradiction in the nature of God.
2. If there is some contradiction in the nature of God, then God's existence is not possible. (from 1)
3. God exists in no possible worlds. (from 2)
4. If God exists in no possible worlds, then God does not exist in the actual world. (from 3)
5. If God does not exist in the actual world, then God does not exist. (from 4)
6. God does not exist.

[156] This is an attempt at irony. Please do not read into this remark a referent to David Lewis' system of possible worlds.

Essentially this problem addresses the coherence of theism. If God exists in no possible worlds, then it is most likely because there is some contradiction in His nature, and if there is a contradiction in the nature of God, then Theism is incoherent by definition. It is almost the same thing as trying to say that a circle with only two sides exists in one possible world. By definition, a circle is a shape with infinite sides, thus to say it only has two sides is incoherent and means that there is no solely two-sided circle in any possible worlds. In other words, there are no possible worlds in which incoherent existents exist. In fact, it is the nature of incoherent objects to not exist and not possibly exist.[157] Before proceeding to specific objections to the coherence of theism, such as omni-contradictions and so forth, the best way to introduce this branch of philosophical theology is to outline a list of the major attributes ascribed to God alongside their justifications in Perfect Being Theology,

Omnipotence and Infinitude	To be maximally great, it is more advantageous to have power than to lack it. To be maximally great, it is more fitting to be infinite than to be finite.
Omniscience and Free Will	To be maximally great, it is more advantageous to have knowledge than to lack knowledge, and it is better to be free than to be constrained.
Absolute Benevolence and Impeccability	To be maximally great, a being's nature must be absolutely benevolent. Absolute benevolence entails the inability to sin.
Timelessness and Immutability	To be bound by time is not as great as not being bound by time. At the peak of perfection there is no change because there is no better state to attain.
Incorporeal	To be bound by the physical is not as great as not being bound by the physical.
Aesthetic Perfection	If God has aesthetic properties, he must maximally exemplify them.
Personhood and Immanence	A being with Personhood is greater than a being without personhood. Personhood requires God to be imminent in His creation.
Transcendence	A maximally great being must not be constrained by reality, in order of magnitude, thus a maximally great being must transcend reality, in order of magnitude.

[157] By saying this, I do not mean to imply that incoherent existents "exist" or have a "nature." Both of these concepts are non-sense for incoherent concepts.

Obviously there are a plethora of arguments behind the reasons for each statement and a thorough examination of each attribute would require a thesis of its own. Indeed entire works have been written solely on each of these properties by themselves.[158] To counter, entire works have been written against each of these properties by themselves.[159] Because this topic is so committing by nature, the most timely response in this thesis will involve a brief treatment of the major attributes and a long list of references for the reader who is ready for further inquiry. A second issue that arises before defending the attributes that should be ascribed to God is spelling out the attributes that should not be ascribed to God. First, the idea of infinity is not well defined. This means that when it is applied to a divine being, confusion arises. Philosophers try to ascribe infinity to God as a first-order attribute. Surely, this is a mistake. For what sense does it make to say, "God is infinite."? That statement is far too vague. Instead, infinitude makes more sense when used as a second order property. It is a property of properties. God Himself is not infinite, but there are some of His attributes which are infinite. God possesses an infinite amount of knowledge, an infinite amount of power, and an absolutely infinite amount of benevolence.[160] Consider the concepts that this tenant clears up when it is applied to the panentheistic musings of Descartes. God is not infinite because saying this makes almost no sense. Instead, it is the attributes of the divine being which are themselves infinite. Not even *all* of God's attributes are infinite. For example, while God's knowledge and power are infinite, God's spatial instantiation in the second person of the trinity is itself finite. Even, the master of foundationalism himself must concede on this point. Thus his idea that all of the attributes of

[158] See Swinburne (1977), Craig (1990), Craig (2001) and Hill (2004)

[159] See Mackie (1983), Sobel (2003), and Martin (2003).

[160] It is important to note that on this definition of omniscience, an open theist could board the Anselmian Train. God could know an infinite amount of facts about the position of a point across a curve, without knowing future contingents. Thus, an open theist, albeit uneasily, could be an Anselmian.

God are infinite would fall down. Even if space is said to be an attribute of God, which is incoherent on the view of Luke Thurston, and space is infinite, the second person of the trinity (on earth?) would be a finite amount of that infinite space. The point remains that the attribute of infinity in the God-head must be restricted as a property of some but not all of His properties. Secondly, the necessity of timelessness and the attribute of immutability would prove problematic as subsets of the nature of a maximally great being. This is not to say that a maximally great being could not be timeless or immutable, but the construal of these attributes by current philosophers is what is problematic. Absent the beginning of Spacetime, God may remain timeless, but at and after this beginning point there is nothing about the nature of God that necessarily mandates that He remain in a timeless state. In fact, some have argued that, necessarily, God must enter into temporal relations at and after the beginning of Spacetime.[161, 162] Further, the doctrine of immutability is a theological hoax. It is ridiculous when considered as anything other than a second order property of properties. God does not change in His power or knowledge, but if God is personal, can He really have a static being? Surely the nature of a relationship that involves beings in Spacetime is dynamic.[163] In sum, a logical proof demonstrating that it is greater to be timeless than temporal involves how exactly time restrains God's existence. Until this is proved there is no reason to think God is greater as construed timelessly.

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[161] See Craig (2001) and Walker (2016).

[162] By the beginning of Spacetime, I do not mean to imply the beginning of the universe. The beginning of Spacetime is simply the beginning of thermodynamic expansion. This is the beginning of what we know as Space and Time commonly combined by Einstein and Minkowski as Spacetime. Neither am I implying by Spacetime that Space and Time can be ontologically separated. I am simply pointing out the instantiation of distasteful argumentation.

[163] I understand that there are some philosophers that embrace paradox in the dynamic and static relations of God without problem, but because theological paradox is foreign to my academic inquiries, I must maintain a philosophical rejection of the notion until further study can be explicated in my work on the transcendental argument.

While there are other attributes that are in need of refinement, it is necessary in the vein of time to move on to inconsistency proofs. The most scathing academic attacks on theistic belief culminate in the works of three men, J.L. Mackie, Patrick Grim, and Michael Martin. All of these men have maintained that God's existence is non-possible in addition to it being non-actual. First, let us consider the criticisms of J.L. Mackie with respect to the Problem of Evil and the Problem of Omnipotence. In regards to the Problem of Evil, Mackie's qualm is usually denoted as the Logical Version. In his own words, the

> "simplest form of the problem is this: God is omnipotent; God is wholly good; and yet evil exists. There seems to be some contradiction between these three propositions, so that if any two of them were true the third would be false. But at the same time all three are essential parts of most theological positions: the theologian, it seems, at once must adhere and cannot consistently adhere to all."[164]

The idea here is that for every possible world, W_n, if God exists in that world, W_n, evil cannot exist in W_n because evil is incompatible with the nature of God. As stated above, God is absolutely benevolent by nature, and evil is the opposite of benevolence. Thus God and evil of any variety cannot coexist in the same set of circumstances or the same possible world.

A curious part of the logical problem of evil is that its central claim is unsettlingly strong. It must literally be the case that there is no possible world, W_n, out of the entire plenum of possible worlds in which God and evil coexist. This means that if there is just one possible word, W_n, in which God exists and evil exists, the logical problem of evil dissipates. Plantinga maintains that there are such possible worlds in which an absolutely benevolent God and evil coexist. Plantinga's reasoning is commonly referenced as the Free-Will Defense. If a "'world

[164] Mackie, J. L. "Iv.—Evil And Omnipotence." *Mind* LXIV, no. 254 (1955): 200-12. (doi:10.1093/mind/lxiv.254.200), 1.

containing creatures who are significantly free…is more valuable, all else being equal, than a world containing no free creatures at all,' then 'God can create free creatures, but He can't cause or determine them to do only what is right. For if He does so, then they aren't significantly free after all.'"[165]

Before moving a step further the astute analytic will ask for a clear definition of the term "freedom." As Plantinga points out,

> "If a person is free with respect to a given action, then he is free to perform that action and free to refrain from performing it; no antecedent conditions and/or causal laws determine that he will perform the action, or that he won't. It is within his power, at the time in question, to take or perform the action and within his power to refrain from it."[166]

It might seem odd to use freedom in the definition of freedom, but Plantinga is narrowing his definition down to freedom with respect to an action. In this sense freedom is the ability to perform or restrain from performing a certain action.

The implications of the Free-Will Defense are so far reaching that they can be felt on the popular level. Indeed, some of the most uneducated defenders of the faith can mouth the words, Free Will, even when they have no idea of its commitments. On an academic level, however, more argument needs to be made than simple recitation of the words, "Free Will." Professional philosophers might ask Plantinga why he has abused the notion of Free Will so tempestuously. They would gawk at a notion of Freedom that does not make sense of a compatiblist option. Under compatiblism, God could cause people to perform correct actions and have humans remain free. In general, compatiblism is the claim that human actions can be determined by

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[165] Plantinga, Alvin. *God, Freedom, and Evil*. Grand Rapids: (Eerdmans, 1977), 30.

[166] For more information on this subject see Almeida, Michael J. *Freedom, God, and Worlds*. Oxford: Oxford University Press, 2012.

some force, such as the laws of nature/physics or in this case, God, and that humans can retain free will. In fact, most Compatiblists would point out that absent determinism, humans could not be free because there would be no causes of people's actions. In other words, human actions would be random, and random human action is not the same as free human action. Thus they maintain that Plantinga is not only wrong about his notion of Free Will, but he is necessarily wrong about this idea. In response to this forward objection from Compatiblists, Michael Almeida in his book, *Freedom, God, and Worlds*, points out that the standards raised by the Compatiblists violate their own definitions of freedom. To say that an action is free, one must have the ability to refrain from performing that action. In other words, there must be at least one possible world in which the agent, *a*, did not perform the action, *x*. On compatiblism, God can determine the actions of free creatures in some possible worlds, but not all possible worlds. If the actions of a creature are determined in every possible world, then a creature is no longer simplistically determined to perform an action, he is fated to perform the action. The compatiblist has thus jumped past their own position from embracing determinism and free will, to embracing fatalism. On the determinism and free will approach there are some worlds in which God and evil coexist because there are some worlds where the free creature abstains from performing moral actions. Remember, for the logical problem of evil to fail, there must only be one world in which evil and God coexist. The choice for the atheistic compatiblist is either to give up human freedom in favor of fatalism or to give off atheism in favor of theism.[167]

The second prong of Mackie's attack on the coherence of theism is his problem with the attribute of omnipotence in the maximally great being. Traditionally, if a being is said to be maximally great, then that being would have to possess omnipotence because it is greater to be

[167] Hill, 129.

all powerful or to have all power, than to lack all power. This argument is especially persuasive when greater is construed from a pragmatic standpoint. For a formal definition of this term, let us turn to Daniel J. Hill, professor of philosophy at the University of Liverpool, to see the following,

"(D5.2) For every being, *x*, *x* is omnipotent if and only if for every action, *A*, *x* has the power to perform *A*."[168]

Mackie's problem with this definition is commonly labeled the Paradox of the Stone. It mischievously questions whether an omnipotent being can "make things which he cannot subsequently control?"[169] Although this problem may at first cause a moment's pause, the well trained philosopher will recognize that the task being required of God is literally impossible because there is nothing that God cannot do. Mackie anticipates this, or at least he thinks that he does. If someone were to put this to him in a lecture or at a bar, Mackie would duly note that it is possible for powerful agents to construct creations that exceed their own power. For example, humans can create machines that are more powerful than they are at crunching numbers. Mackie would say that the same idea can be applied to God. Indeed, Nelson Pike argued similarly in 1969.[170] The heart of Pike's argument, however, centered more around contrasting God's omnipotence with his impeccability. There are standard responses that adequately address his concerns, but the heart of the matter here is pure omnipotence and Mackie best captures this qualm. He does through his paper single out omnipotence, but he does not destroy it coherently. It seems apparent to a great deal of philosophers that Mackie's problem should not lie with the

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[168] Hill, 129. You actually had this as footnote 11, so I am copying this from 11 and then putting others afterwards. Daniel J Hill Divinity and Maximal Greatness, 129.

[169] Mackie, Evil and Omnipotence, 210.

[170] Pike, Nelson (1969) "Omnipotence and God's Ability to Sin," *American Philosophical Quarterly*, Vol. 6, No. 3: 208-216.

omnipotent being, but instead should lie with the action. The action is self contradictory, not the idea of omnipotence. Humans can construct machines that exceed their own power precisely because they are not all powerful. It is just true by definition that if an agent, *a*, is not all powerful, then there can be a being, *b*, that is more powerful than they. The circumstances of the situation just so happen that the cause of the greater being is the lesser being. This is not problematic. For God, however, He is the greatest being, and He has the most absolute amount of control. Thus to ask if there is an entity that could escape His control is like asking, "If God can control everything, is there something that God cannot control?" The answer is "no", but that does not limit His power. In fact, it increases it. If the answer were yes, God's power might be in some way diminished, but this denial is actually an affirmation of God's omnipotence. Again, the contradiction is not in the nature of omnipotence, it is in the nature of the action. In fact, it is in the nature of the question. A question on par with the madness of this statement might be, "Can run God marathon shark full of rivers?" The point is that this question is no longer a question, it is just a contradictory combination of words, and a contradictory combination of words is fundamentally no different than any combination of words. Thus, it is hopefully and elatedly the case that Mackie's qualms can be put to rest on an intellectual, not a popular, level.[171]

Moving forward from the traditional attack on omnipotence, let us now consider the problems posed against logical omniscience. The most aggressive atheistic attacks on logical omniscience are presented by Patrick Grim in his 1985 article, *Against Omniscience*.[172] In this

[171] For a more elucidated defense of the attribute of Omnipotence, see Flint, Thomas P "Maximal Power" in Alfred J. Freddoso, ed., *The Existence and Nature of God* (Notre Dame, IN: University of Notre Dame Press, 1983), 81-113.

[172] Grim, P., 1985, "Against Omniscience: The Case from Essential Indexicals," *Noûs*, 19: 151–180.

work, Grim argues that the attribute of omniscience fails because there are facts that an omniscient being cannot know. This is to say if a theist claims that a divine being exists, he must not claim that the divine being "knows all that is known."[173] At first blush, this may seem confusing, but Grim proves his point by employing the use of an i*ndexical*. In philosophy, an *indexical* is a referent that is not well defined. Indeed, it is a referent that can take on different meanings within different contexts. Consider the following spatial indexical, *here*, and the following temporal indexical, *now*. Both *here* and *now* may refer to different places and times within the context of different conversations. When Johnny tells his mother, "Come here now", he means something very different at the park than he does at home. For example, it would be absurd within the context of the park to say that "here" should refer to home. Moreover, if the boy and his mother left the house at 10:00 A.M. and arrived at the park at 10:30 A.M., it would be unreasonable to assume that his use of the indexical "now" is referring to a time prior to 10:30 A.M. In the same way that indexical terms apply to space and time, they also work with human beings. "You," "your," "me," "my," and "I" are all indexical terms that apply to human beings. Different human beings are singled out within the context of different settings. Grim uses this to his advantage with the following propositions,

> "1. I am making a mess…
>
> 3. Patrick Grim is making a mess.
>
> There is the following difference between (1) and (3) on the traditional view. I can express the proposition at issue in (1) and (3) by using (1), with its indexical 'I'. Others

[173] Ibid 151.

cannot, and are forced instead to use some mode of reference such as the 'Patrick Grim' of (3).”[174]

Grim points out that if this rule applies to other human beings, than it must certainly apply to God. For God may well know the true statement, “Luke has blonde hair and blue eyes.”, but surely he does not know the proposition, “I have blonde hair and blue eyes.” It is simply not true for God to know the proposition, “I have blonde hair and blue eyes.” because God is incorporeal and thus does not have physical attributes. The trouble here gets even worse when indexical statements that are more restrictive are uttered such as “Luke is not omnipotent.” Is it the case that God knows the truth of the proposition “I am not omnipotent.”? Surely not! Grim’s point is that when an indexical is known by an agent, it must refer to the agent who knows it. In the context of human knowledge, these statements are logically closed to the God of the Universe. There are facts that God does not know, indexical facts.

Because this critique is so devastating it may come as a shock that one of its opponents is the atheistic hardliner and author of *Logic and Theism*, Jordan Howard Sobel. In Sobel’s massive work he spends a fair amount of time criticizing the theistic position, especially the Christian Theistic position. However, in the sections on the Coherence of Theism, his work on omniscience is less critical. Sobel goes after Grim on one of his more complex objections to omniscience that makes use of propositions. In this context, Grim was criticizing theists who wished to restrict the definition of omniscience to something like the following,

1.) God’s omniscience only entails that He knows all true propositions.

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[174] Grim, Patrick. "Problems with Omniscience." *The Cambridge Handbook of Christian Theology*, Forthcoming, 2016. (Accessed November 28, 2016.)

Because certain indexical terms are not true when applied to God, God would not need to know them. Grim maintained that saying this was living like "'You are,' Grim might say, 'in denial.'"[175] Sobel, inflamed by this cantankerous response, writes lividly,

> "The argument of Section 11 is an invitation to write off omniscience as a bad pre-Cantorian idea, to write it off on the strength of an unexplained theory of propositions, their existence, and aboutness that would persuade that while, given the assumptions under which it is introduced, T* of the argument would be a proposition, premise (2) is not a proposition (that is, the sentence for would-be premise (2) does not express a proposition). A more reasonable response, I think, given the present state of theory of propositions, is to decline the invitation, confess uncertainty concerning the existence and aboutness of propositions, and accept (2) as a proposition premise 'on faith.'"[176, 177]

In conclusion, when each divine attribute is examined by itself, the contention of this thesis is that it may be spelled out consistently. The short exploits into this field of deep water have proven that even some of the most virulent atheist attacks are not as fruitful on their face as they appear after thorough thought. Even so, the burden of proof in this scenario is not on the theist to prove that the divine attributes are consistent; it is on the non-theist to show that they are contradictory. Originally the burden of proof fell on the theist to say that "God exists", but now the agent that makes the affirmation is atheist and thus the burden of proof is on him.

The Oxford School

In the last half century, one of the most rigorous defenses of British Philosophy of Religion has stemmed from the work of Richard Swinburne. Making substantive contributions

[175] Sobel, 392.

[176] Sobel, 393.

[177] When Sobel references 2 it is almost the same as 1.) above.

to the Philosophy of Science and numerous extensions to the formal backings of Baysean Epistemology, Swinburne has dominated a field that was already filled with a pool of world-class philosophers.[178] Because of this onslaught of academic success, Swinburne has come to shape the thinking of most philosophers of religion on the arguemtns for God. It should then be surprising to learn that on the area of Perfect Being Theology, he has taken radically critical doubts with the notion of God and necessity. For Swinburne, the problem is not so much that modal logic is invalid, though he does raise modal qualms. Nor is it the fact that the structure of the POA is invalid. The major problem raised by the British Philosopher is that the notion of necessity as described in the POA is not the notion of necessity that Swinburne wishes to apply to God.

For Swinburne, saying, "God is necessary" does not make sense unless negating that statement brings out a self contradiction.[179] For example, if one were to say "Numbers are necessary" they would be speaking accurately under a Swinburnean view because a person who negates the necessity of numbers, winds up speaking in contradictions. Numbers are necessary for thoughts. That is to say there is a fixed *number* of thoughts. If one thinks he does not have at least 1 thought, than he is literally speaking in contradictions. In this way numbers are necessary because the negation of numbers bears contradictions. To be clear, this notion of necessity that Swinburne is trying spell out is called Strict Necessity. He does not agree,

> "I shall understand by 'metaphysical necessity' the strongest kind of necessity there is, and by 'metaphysical impossibility' the strongest kind of impossibility there is, and so by

[178] Most notably J.R. Lucas, Alan Padgett, and Brian Leftow. This is not to say that theists are normal at Oxford, but in the branch of philosophy of religion, there has been significant advancement in the Oxford School and Richard Swinburne has been the fount of this progression.

[179] Presuppositionalists and Advocates of TAG would simply be able to prove that negating God's existence leads to a contradiction. Indeed, it leads to every contradiction, but that is a battle for another day.

> 'metaphysical possibility' the weakest kind of possibility there is. My concern in this paper is with whether it is metaphysically possible that God be a metaphysically necessary being in these senses."[180]

Swinburne makes it gut wrenchingly obvious over the next 15 pages that his notion of Metaphysical Necessity is in fact Strict Necessity. He has confused the terms. To be clear, let us examine the differences. Strict necessity entails that the existent in question must exist in order for contradictions to not exist. The analogy above with regards to thought is an excellent example of strict necessity. Swinburne rejects this notion when it is applied to God; so do most theists. This is because most theists will say that atheists can have a logically consistent account of the world. In other words, they would deny God, the property of strict necessity. It is only radicals like Pantheists and Presuppositionalists that would say that the negation of God's necessity is contradictory.[181] Pantheists would say this because God is the universe and negating the universe while living inside it is obviously contradictory. A proponent of TAG would say that the logical absolutes are mandates from a divine being. Thus denying the existence of God is the prime of illogic and contradiction. Most theists, however, are not privy to these forms of reasoning, and if they are, they usually reject them with little examination. Most theists would think of God as explanatorily necessary. This is to say that there is some area of reality, be cosmology, teleology, or what not, that cannot be explained without the existence of God. In this way, to have a total explanation of reality, God must fit in the picture. The difference between strict and explanatory necessity is that explanatory necessity is more open for debate. There is

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[180] Swinburne, Richard. "16. What Kind of Necessary Being Could God Be?" *Ontological Proofs Today*. (doi:10.1515/9783110325881), 345.

[181] While I am not a pantheist, if TAG is valid, there would be no reason to reject the notion of strict necessity as a applied to God.

no contradiction state outright. Thus if a theist and an atheist began to dialogue over explanatory necessity, it is possible that the atheist could emerge with a consistent worldview. There is some possible world in which they explain away the contradiction. Not so with strict necessity. Because of the contradictions that are entailed, there is no possible world in which the atheist can respond. Thus the radical responses are radical because they are stronger in their claim of proof.

In the context of this debate, Swinburne would like to avoid calling God necessary, but if he had to pick a type of necessity, the closest variety he would fall under would be factual necessity. He does not know he would claim factual necessity because he conflates terms in his wonderful paper, but this is the view he argues for with such extravagant analysis. On a basic level factual necessity is simply possessing an existence that is eternal, immutable, and indestructible. There is no reason to say that God does not have this form of existence, but most theists would attribute in addition one of the stronger necessities along with it. It is important to note that simply because one says God is factually necessary, they are not saying that he is factually necessary in all of his properties. This is to reiterate the idea of essential and accidental properties.[182] God need not be unchanging in his personal relationships, but in his knowledge, power and benevolence, he must be immutable.[183]

The notion of necessity that is at work in the POA is different from all of these necessities. One of the nice features about the POA is that it remains silent on all other notions

[182] Essential properties are properties a being possesses in every possible world, whereas accidental properties are properties a being possesses in some but not all possible worlds.

[183] Some would argue that because God is perfect, he could not lack any of the properties he has currently. This is surely a mistake! The property of God's personal relationships with other human beings is dependent on the fact that he allowed their existence to obtain, but if God has Freedom of the Will and Omnipotence, then he must be able to actualize two equally perfect scenarios. Thus there would be a possible world in which God abstained from creating the universe, but remained perfect because he had allowed perfection to continue. In this world, God would be maximally great, but he would not have the property of personal relations with human beings. Thus this property is accidental because it is possessed by the being in some but not all possible worlds.

of necessity but the one it advocates. Thus one's opinions on the other necessities will not affect one's opinion on the necessity in the POA. Swinburne, an astute reader of Plantinga, has picked up on the idea that Plantinga is using the word Metaphysical Necessity. It is unfortunate that he was not also able to grasp the concept. Metaphysical Necessity as explicated by Plantinga is as follows,

> "In the first place, truths of logic—truths of propositional logic and first order quantification theory, let us say—are necessary in the sense in question. Such truths are logically necessary in the narrow sense… But the sense of necessity in question—call it 'broadly logical necessity' is wider than this. Truths of set theory, arithmetic and mathematics generally are necessary in this sense, as are a host of homelier items such as
>
> No one is taller than himself
>
> Red is a colour
>
> If a thing is red, then it is coloured
>
> No numbers are human beings
>
> and
>
> No prime minister is a prime number"[184]

In the above statements there are no contradictions of logic. Although a non academic philosopher might be tempted to point to each statement and call it contradictory, what they really mean is that it is not actualizable. That is, in the actual world, there is no way that red is not a color, but in some other possible world, red may only be a wavelength and no attribute of color may be ascribe to it. In the actual world, no one is taller than himself, but in other possible

[184] Plantinga, Nature of Necessity, 1-2.

worlds, humans may have achieved different heights. The arguments go on and on. This broad logical necessity is also called metaphysical necessity.

Instead of trying to attack this notion of necessity as incoherent in some fashion, Swinburne lectures his reader in philosophy of language and then precedes to describe context and what statements entail contradictions. To be fair, Swinburne is a brilliant philosopher. Thus, towards the end of his paper he expands a bit upon what may be included in metaphysical necessity. Swinburne seems to object to the fact that we can understand God's essence, his maximal greatness, before we understand his existence. This rejection of essentialism using intesional and extensional co referring designators has already been addressed above. Thus in conclusion of this analysis, there is no reason that has been brought forth to accept Swinburne's objection as valid.

Coda

Based on the above failure of any academic attack to stand against Plantinga's defense, it seems evidence, that the Modal Ontological Argument for the Existence of God is both formally valid and logically sound. Because of this victory on the part of the theist, there is no reason to reject the conclusion that follows from the proof: God Exists! And blessed be His Name! With respect to academic defenses of the Faith, the ontological argument is not a sole contender. There are others proofs, but a vast majority of them are *a posteriori* by nature. This entails that they largely depend on the status of the science at the time. Exceptions include the Ontological Argument, the Transcendental Argument, the Argument from Possibility, the Argument from Intentionality, and the Gale-Pruss Modal Version of the Cosmological Argument. Relevant extensions germane to the topic of this thesis primarily involve the Argument from Possibility. However, if one is wishing to brush up on their modal metaphysics, it would be helpful for them to investigate the validity of the Transcendental Argument and the Argument from Intentionality.

Appendix A: Table of Relevant Formal Logic

As with any form of logic, connectives are crucial. The following five connectives of classical logic are:

Connective	Symbol
Negation	¬
Disjunction (Or)	∨
Conjunction (And)	∧
Implication	→
Equivalence	↔

In addition, the modal operators are standard: possibility and necessity. At this point it should be obvious that modal forms of logic are simply proposition logics with the additional two operators M and L.

Modal Operator	Function Notation	Symbol
Possibly	M(x)	◊
Necessarily	L(x)	□

Additionally to make the operators of necessity and possibility primitive in the way that the five connectives are primitive, it must be shown that they can be mutually inter-defined.

Necessarily A	is logically equivalent to	Not possibly Not A
Possibly A	is logically equivalent to	Not necessarily Not A

Also, the notion of inheritance plays well into the discourse of modality.

If A_1, A_2,...A_n	entail	B
so does necessarily A_1, necessarily A_2,...necessarily A_n	entail	necessarily B

Lastly, the notion of interrelations via consequence and denied consequence are crucial to basic modal discourse. The three consequence relations are as follows:

If necessarily A,	then possibly A.
If necessarily A,	then A.
If A,	then possibly A.

The three relations of denied consequence are:

Possibly A	does not entail	necessarily A
A	does not entail	necessarily A
Possibly A	does not entail	A

Basic Sentential Quantifiers:

Quantifier	**Definition**	**Function Notation**	**Symbol**
Existential Quantifier	There exists an x such that x is f	∃(x)F(x)	∃
Universal Quantifier	For every x such that x exists, x is f.	∀(x)F(x)	∀

Bibliography

Adams, Robert Merrihew. "The Logical Structure of Anselm's Arguments." *The Philosophical Review* 80, no. 1 (1971): 28. (doi:10.2307/2184310.)

Alexander, *In An Pr* 177.25-178 and An Pr 34a5ff

Almeida, Michael J. *Freedom, God, and Worlds*. Oxford: Oxford University Press, 2012.

Almeida, Michael J. *The Metaphysics of Perfect Beings*. (New York: Routledge, 2008.)

Algra, Keimpe. *The Cambridge History of Hellenistic Philosophy*. Cambridge, U.K.: (Cambridge University Press, 1999.) 89.

Anselm of Canterbury. Proslogion.

Aristotle. *On Interpretation*. (Whitefish, MT: Kessenger, 2005.) part 9.

Aristotle, Harold P. Cooke, and Hugh Tredennick. *The Organon*. Cambridge, MA: (Harvard University Press, 1955).

Aristotle, and Hippocrates George Apostle. *Metaphysics*. (Bloomington: Indiana University Press, 1966.) 129.

Avicenna, and Inati, Shams Constantine. *Remarks and Admonitions*. Toronto, Ont., Canada: (Pontifical Institute of Mediaeval Studies), 1984.

Bennett, Jonathan, and Peter Van Inwagen. "Jarrett Charles. The Logical Structure of Spinoza's Ethics, Part I. Synthese, Vol. 37(1978), Pp. 15–65." *The Journal of Symbolic Logic* 49, no. 03 (1984): 996-97. (doi:10.2307/2274163).

Bobzien, S., 1993, “Chrysippus' modal logic and its relation to Philo and Diodorus”, in *Dialektiker und Stoiker*, K. Döring and Th. Ebert (eds.), Stuttgart: Franz Steiner, pp. 63–84.

Bobzien, Susanne, "Dialectical School", *The Stanford Encyclopedia of Philosophy* (Fall 2011

Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/fall2011/entries/dialectical-school/>.

Boethius, and John F. Wippel. *On the Supreme Good ; On the Eternity of the World ; On Dreams*. Toronto, Ont. Canada: Pontifical Institute of Mediaeval Studies, 1987.

Bonaventure, Siger, and Thomas. *On the Eternity of the World; (De Aeternitate Mundi)*. Milwaukee: Marquette University Press, 1964.

Cantor, Georg in E. Zermelo (ed.) 1966, *Gesammelte Abhandlungen mathematischen und philosophischen Inhalts*, Olms, Hildesheim.

Corcoran, John, 1972. "Completeness of an Ancient Logic". (*Journal of Symbolic Logic*, 37): 696–705.

Craig, William Lane. *Divine Foreknowledge and Human Freedom: The Coherence of Theism: Omniscience*. (Leiden: E.J. Brill, 1990).

Craig, William Lane. *The Tensed Theory of Time: A Critical Examination*. Dordrecht: (Kluwer Academic, 2000).

Craig, William Lane. *The Tenseless Theory of Time: A Critical Examination*. Dordrecht: (Kluwer Academic, 2000).

Craig, William Lane. *Time and the Metaphysics of Relativity*. Dordrecht: (Kluwer Academic, 2001.)

Craig, William Lane. *God, Time, and Eternity: The Coherence of Theism II: Eternity*. Dordrecht: (Kluwer Academic Publishers, 2001).

Craig, William Lane. *Reasonable Faith: Christian Truth and Apologetics*. Wheaton, IL: (Crossway Books, 2008)

Dazeley, Howard L., and Wolfgang L. Gombocz. "Interpreting Anselm as Logician." *Synthese*

40, no. 1 (1979): 71-96. Accessed November 26, 2016. (doi:10.1007/bf00413946.)

Denyer, N.C., “Diodorus Cronus: Modality, the Master Argument and Formalisation”, (*Humana Mente*, 2009), 8: 33–46.

"Diodorus Cronus." Diodorus Cronus - New World Encyclopedia. Accessed November 26, 2016. http://www.newworldencyclopedia.org/entry/Diodorus_Cronus.

Dôring, frs. 96, 128; D.L., ii111; S.E. M i309, 672 Bekk.; Pfeiffer: fr. 393, 14, Epigrammatum fragmentu, i.

Dumont, Stephen D. *History of Medieval Philosophy*. Class Notes.

Dunaway, Bill. "Duns Scotus’s Epistemic Argument Against Divine Illumination." July 15, 2016.

Fārābī, and Muhsin Mahdi. *Philosophy of Plato and Aristotle*. (New York: Free Press of Glencoe), 1962.

Findlay, J. N. "V.—Can God's Existence Be Disproved?" *Mind* LVII, no. 226 (1948): 176-83. (doi:10.1093/mind/lvii.226.176.)

Flint, Thomas P "Maximal Power" in Alfred J. Freddoso, ed., *The Existence and Nature of God* (Notre Dame, IN: University of Notre Dame Press, 1983), 81-113.

Frege, Gottlob and Dietrich Alexander. *"Begriffsschrift"* (Jena: Friedrich-Schiller-Universität, 1979.)

Frege, Gottlob. *The Foundations of Arithmatic: A Logico-mathematical Enquiry into the Concept of Number*. (Blackwell, 1968.)

Friedman, Joel I. "Was Spinoza Fooled by the Ontological Argument?" *Philosophia* 11, no. 3-4 (1982): 307-44. (doi:10.1007/bf02380843.)

Gaskin, Richard. *The Sea Battle and the Master Argument: Aristotle and Diodorus Cronus on*

the Metaphysics of the Future. (Berlin: W. De Gruyter, 1995.)

Gracia, Jorge J. E. "Philosophy in the Middle Ages: An Introduction." *A Companion to Philosophy in the Middle Ages*, 2002.

Grim, P., 1985, "Against Omniscience: The Case from Essential Indexicals," *Noûs*, 19: 151–180.

Grim, Patrick. "Problems with Omniscience." *The Cambridge Handbook of Christian Theology*, Forthcoming, 2016. (Accessed November 28, 2016.)

Gendler, Tamar, and John Hawthorne. *Conceivability and Possibility*. Oxford: Clarendon Press, 2002.

Gödel, Kurt. "An Example of a New Type of Cosmological Solutions of Einstein's Field Equations of Gravitation." *Reviews of Modern Physics* 21, no. 3 (1949): 447-50. doi:10.1103/revmodphys.21.447.

Gödel, Kurt. "Über formal unentscheidbare Sätze der Principia Mathematica und verwandter Systeme, I", in Solomon Feferman, ed., 1986. *Kurt Gödel Collected works, Vol. I.* (Oxford University Press, 1931) 144–195.

Halmos, P.R. "The Legend of von Neumann", The American Mathematical Monthly, Vol. 80, No. 4. (April 1973), 382–394.

Harteshorne, Charles. *Anselm's Discovery: A Re-Examination of the Ontological Proof of God's Existence*. (Open Court Publishing Company, 1991).

Hartshorne, Charles. *The Logic of Perfection: And Other Essays in Neoclassical Metaphysics*. LaSalle, IL: (Open Court Publishing Company, 1962).

Hill, Daniel J. *Divinity and Maximal Greatness*. London: (Routledge, 2005)

Hyman, Arthur, and James J. Walsh. *Philosophy in the Middle Ages: The Christian, Islamic, and Jewish Traditions*. (New York: Harper & Row, 1967.)

Immanuel, Marcus Weigelt, and F. Max Müller. *Critique of Pure Reason*. (London: Penguin, 2007).

Inwood, Brad. *The Cambridge Companion to the Stoics*. Cambridge, U.K.: (Cambridge University Press, 2003).

Jamison, Trevor. "Great God in Boots!- Malcolm's Argument is Valid!" (Thesis, Fort Bend Christian Academy, 2013).

King, Peter J. "Plantinga & World-Indexed Properties." 2004, 1-5.

Leftow, Brian. "The Ontological Argument." *Oxford Handbooks Online*, 2007. (doi:10.1093/oxfordhb/9780195331356.003.0005.)

Leibniz, Gottfried Wilhelm., and Herbert Wildon. Carr. *The Monadology*. (London: Favil Pr., 1930.)

Lewis, Clarence Irving. *A Survey of Symbolic Logic*. New York: (Dover Publications, 1960)

Lewis, David. "Anselm and Actuality." *Philosophical Papers Volume I*, 1983, 10-20. (doi:10.1093/0195032047.003.0002.)

Long, A. A., and D. N. Sedley. *The Hellenistic Philosophers: Translations of the Principal Sources with Philosophical Commentary*. Cambridge: (Cambridge University Press, 1987).

Łukasiewicz, Jan. *Aristotle's Syllogistic from the Standpoint of Modern Formal Logic*, second edition, (Oxford: Clarendon Press, 1957) .

MacFarlane, John. "Objections to Quantified Modal Logic." Http://johnmacfarlane.net. (Accessed November 4, 2016)

Mackie, J. L. "Iv.—Evil And Omnipotence." *Mind* LXIV, no. 254 (1955): 200-12. (doi:10.1093/mind/lxiv.254.200)

Malcolm, Norman, "Anselm's Ontological Argument," *Philosophical Review*, vol. 69, no. 1 (1960).

Martin, Michael. *"The Impossibility of God,"* (Promethius Books, 2003).

Massie, Pascal. "Time and Contingency in Duns Scotus - Saint Anselm College." 2006. Accessed November 26, 2016.

Matthews, Scott. *Arguments, Texts, and Contexts: Anselm's Argument and the Friars.* (Medieval Philosophy and Theology, 1999.)

Maydole, Robert E. "The Ontological Argument." *Craig/The Blackwell Companion to Natural Theology The Blackwell Companion to Natural Theology*, 2009, 553-92. (doi:10.1002/9781444308334.), ch10.

Mench, James. "Bonaventure and the Ontological Argument." 1970.

Noone, Tim and Houser, R. E., "Saint Bonaventure", *The Stanford Encyclopedia of Philosophy* (Winter 2014 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/win2014/entries/bonaventure/>.

O'Connor, Timothy. "Scotus on the Existence of a First Efficient Cause." *International Journal for Philosophy of Religion* 33, no. 1 (1993): 17-32. (doi:10.1007/bf01314314.),

O'Connor, Timothy. *Theism and Ultimate Explanation: The Necessary Shape of Contingency*. (Chichester: Wiley-Blackwell, 2012.)

Oppy, Graham. *Ontological Arguments and Belief in God*. Cambridge: (Cambridge University Press, 1995), 224-225.

Papazian, Michael. "The Ontological Argument of Diogenes," Phronesis 52, no. 2 (2007): 197-200, accessed October 2, 2013. http://www.jstor.org/stable/40387928

Patterson, Richard. *Aristotle's Modal Logic: Essence and Entailment in the Organon*.

(Cambridge University Press, 1995.)

Pegis, Anton C. *St. Anselm and the Argument of the 'Proslogion'*, (Medieval Studies 28 1966.): 228–67.

Pelletier, Jeffery, and Bernard Linsky. "What Is Frege's Theory of Descriptions." (2008, 195-250).

Pike, Nelson (1969) "Omnipotence and God's Ability to Sin," *American Philosophical Quarterly*, Vol. 6, No. 3: 208-216.

Plantinga, Alvin. *God, Freedom, and Evil*. Grand Rapids: (Eerdmans, 1977)

Plantinga, Alvin. *The Nature of Necessity*. Oxford: (Clarendon Press, 1974.)

Prior, A. N. "Diodoran Modalities." *The Philosophical Quarterly* 5, no. 20 (1955): 205. (doi:10.2307/2957434.)

Pruss, Alexander R. "The Leibnizian Cosmological Argument." in *Craig/The Blackwell Companion to Natural Theology*, 2009, 24-100. (doi:10.1002/9781444308334.)

Quine, W.V. *On What There Is*. Washington, D.C.: Catholic University of America, Philosophy Education Society, 1948.

Quine, W.V. "Three Grades of Modal Involvement - PhilPapers." (Accessed December 4, 2016), 156-157.

Rescher, Nicholas. "A Version of the "Master Argument" of Diodorus." *The Journal of Philosophy* 63, no. 15, 1966: 438. (doi:10.2307/2024064).

Scotus, John Duns, and Allan B. Wolter. *A Treatise on God as First Principle*. Chicago: Franciscan Herald Press, 1983.

Scotus, John Duns, Edward Buckner, Jack Zupko, and John Duns Scot. *Duns Scotus on Time & Existence: The Questions on Aristotle's "De Interpretatione"* Washington, D.C.: Catholic

University of America Press, 2014.

Small, Christopher. "Kurt Gödel's Ontological Argument - University of Waterloo." Accessed October 25, 2016. http://www.stats.uwaterloo.ca/~cgsmall/ontology2.html.

Smiley, Timothy, 1994. “Aristotle’s Completeness Proof”, *Ancient Philosophy*, 14 (Special Issue): 25–38.

Sobel, Jordan Howard. *Logic and Theism: Arguments for and against Beliefs in God*. Cambridge: Cambridge University Press, 2004.

Speaks, Jeff. "Frege's Puzzle and Descriptive Enrichment." *Philosophy and Phenomenological Research* 83, no. 2 2010: 267-82. (doi:10.1111/j.1933-1592.2010.00419.x).

Spinoza, Benedictus De, and G. H. R. Parkinson. *Ethics*. Oxford: (Oxford University Press, 2000.), Book 1, Def 6.

Swinburne, Richard. *The Coherence of Theism*. Oxford: (Clarendon Press, 1993).

Swinburne, Richard. "16. What Kind of Necessary Being Could God Be?" *Ontological Proofs Today*. (doi:10.1515/9783110325881)

Thomas. *Summa Theologica*. (Westminster, MD: Christian Classics, 1981).

Tkaczyk, Marcin "5. A Debate on God: Anselm, Aquinas and Scotus," in *Ontological Proofs Today*: (doi:10.1515/9783110325881.)

Vuillemin, Jules. *Necessity or Contingency: The Master Argument*. Stanford, CA: Center for the Study of Language and Information, 1996.

Walker, Ethan. "God! It’s About Time!" (Thesis, Fort Bend Christian Academy, 2016).

Wang, Hao. A Logical Journey: From Gödel to Philosophy. (A Bradford Book, 1997)

Williamson, Timothy. *Modal Logic as Metaphysics*. Oxford, United Kingdom: Oxford University Press, 2013.

Zimmerman, Dean W. "The A-Theory of Time, The B-Theory of Time, and 'Taking Tense Seriously'" *Dialectica* 59, no. 4 (2005): 401-57. (doi:10.1111/j.1746-8361.2005.01041.x.), 416-417.