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A Modalist Interpretation of the Modal Ontological Argument

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Modalistinė modalinio ontologinio įrodymo interpretacija

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CONTENTS

INTRODUCTION

'One day a mathematics teacher told me that there are proofs not only in mathematics but also in philosophy, and that there are indeed such things as philosophical proofs of the existence of God. <…> I went home and looked this up in an encyclopaedia. <…> Among various arguments for the existence of God introduced in the encyclopaedia, I was particularly impressed by the ontological argument. <…> We can sit down in an armchair and demonstrate through a mental exercise alone that God, as the being than which no greater is conceivable, exists in reality. I found it astonishing. I thought this could possibly be humanity's greatest discovery.'
(Nagasawa 2017: 1–2)

In the twentieth century, influential versions of the ontological argument for the existence of God were formulated, based on the explicit use of modal concepts and/or the principles of contemporary modal logic. These are the so-called modal ontological arguments, whose authors include thinkers such as Norman Malcolm, Charles Hartshorne, Alvin Plantinga, and Kurt Gödel. The main idea they defended is that if it is *possible* for God to exist, then his existence must be *necessary* (and thus *actual*). This dissertation focuses specifically on the modal ontological argument proposed by Plantinga; it is regarded as the main subject of this work.

The origins of ontological arguments, however, trace back much further in time. In the eleventh century, Anselm of Canterbury, in his *Proslogion*, sought to derive the existence of a being than which a greater cannot be thought. Anselm reasoned that if such a being did not exist, it would be possible to conceive a greater being – namely, one than which a greater cannot be thought and that actually exists – which is absurd. Therefore, he concluded that the being than which a greater cannot be thought has to exist in reality. In the seventeenth century, René Descartes defended a family of similar arguments. In his *Fifth Meditation*, he argued that conceiving a supremely perfect being who lacks existence is as contradictory as imagining a mountain without a valley or a triangle whose interior angles do not total 180 degrees. Such analogies were meant to reinforce the same general line that the idea of a supremely perfect being, when carefully examined, is entirely sufficient to reveal this being's existence. The next major episode in the history of ontological arguments came with Gottfried Leibniz, who attempted to refine Descartes' approach: Leibniz emphasised that first, the very possibility of the existence of a supremely perfect being must be demonstrated.

The underlying method of all ontological arguments is to derive the existence of God purely through logical principles or conceptual analysis, without relying on empirical observation. In this regard, the method represents an exceptionally high level of philosophical ambition – proving the existence of the most fundamental being, God, using the power of reason alone – and is situated within the broader rationalist tradition. Notwithstanding various critiques that arose from the empiricist camp, this method has remained one of the central ways for arguing for God's existence. Another essential aspect of ontological arguments is their intent to show that denying the existence of God, or the greatest possible being, results in contradictions. In other words, ontological arguments have as their conclusion that the existence of such a being is a necessary truth. Finally, as has already been made clear, these arguments generally rest on the understanding of God as the greatest conceivable being, or a being that possesses all perfections.

Ever since Anselm's formulation, the ontological argument has been the subject of considerable controversy. Critiques began with Anselm's contemporary Gaunilo of Marmoutiers, who parodied the argument with the aim to show that it could be misused to prove the existence of various non-existent entities. Thomas Aquinas rejected the idea that God's existence can be deduced from the concept alone. Immanuel Kant, who first coined the term 'ontological' for this argument, famously contended that ontological arguments are flawed due to their reliance upon the implicit assumption that 'existence' is a real predicate – a point that gained such traction that it led many to believe that the argument had been conclusively refuted.

Yet, ultimately, this proved to be untrue, as ontological arguments never disappeared from the landscape of philosophical thought. Advancements in formal, particularly modal, logic that occurred in the twentieth century, along with the development of possible worlds semantics, spurred the emergence of significant modal versions of the ontological argument. For instance, by applying his sophisticated theory of modality grounded in the ontology of abstract possible worlds, Plantinga (1974a, 1974b) proposed an argument based on the premise that a maximally great being – God – exists in at least one of the possible worlds. Given this premise and drawing on the standard principles of modal logic, it follows that God exists in all possible worlds, including the actual one.

The widespread impact of advancements achieved through possible worlds semantics may have led many to consider this framework as the most suitable for the modal ontological argument. In other words, this might have been the reason why the question of which theory of modality shall be assumed in the context of this argument has been practically neglected. This

dissertation is precisely an attempt to contribute to filling this gap and to show that the aforementioned question is neither trivial nor, even less so, settled. It is an attempt to claim, perhaps somewhat surprisingly, that the most fitting theory is neither the one employed by Plantinga himself nor other widely accepted possible worlds theories – namely, modal concretism and modal fictionalism. It is argued that a much more promising alternative comes from modalism – the view that, during the dominance of possible worlds semantics, has been left in the margins of modal logic and the philosophy of modality. Modalism posits that modal operators such as 'necessarily' and 'possibly' should not be analysed in terms of possible worlds; indeed, it holds that these operators are not analysable at all – just as are the truths conveyed through them. Throughout this dissertation, I will argue that despite the prevailing popularity of the possible worlds approach – including its application within the philosophy of religion – modalism offers a much more intuitive and theologically coherent framework for interpreting the modal ontological argument.

Despite being frequently overlooked, the aforementioned question is of considerable significance in the current context. Assuming that the modal ontological argument is sound (and God exists), it is crucial to examine the relationship between God's existence and the general approach to modality adopted in the argument's formulation. Specifically, it must be assessed whether the theoretical framework underpinning the argument is consistent with the core tenets of theism itself, for should the argument be sound and God indeed exist, there must be no conflict between God's existence and the modal principles employed. Without this condition met, the argument can hardly be viewed as a successful piece of reasoning. This highlights the necessity of searching for a theory that best meets these criteria: one that not only supports a formal derivation of the conclusion from the premises but also maintains metaphysical compatibility with the broader theistic worldview. The dissertation is primarily intended to bring to light the critical importance of this previously underappreciated issue.

Aim of the Dissertation

This dissertation will not seek to determine whether Plantinga's modal ontological argument has true premises, and thereby (assuming its formal validity) a true conclusion; neither is a general defence of the argument against criticisms among its chief purposes. Rather, the dissertation will mainly work around the supposition that the argument *is* sound and that God, or a maximally great being, exists. The adoption of this perspective opens up some

fundamental issues – foremost among them being the question of which theory of modality best supports this argument.

While Plantinga himself framed the argument within the context of modal abstractionism – the thesis that there are possible worlds and that they are abstract in nature – in this dissertation, it will be argued that interpreting the modal ontological argument through the lens of possible worlds theories yields notable challenges, particularly in reconciling possible worlds ontology with the theistic ontology. The overarching aim, therefore, will be to substantiate this latter thesis and offer an alternative interpretation of the argument founded on modalism. The aim will be pursued through the following steps:

1. To conduct an extensive analysis of interpretations of the modal ontological argument based on the three leading possible worlds theories: modal abstractionism, modal concretism, and modal fictionalism. Each of these theories will be shown to suffer from internal difficulties and prove problematic within the context of the modal ontological argument, given that they either struggle to reconcile their modal principles with the existence of God or even fail to support the argument's conclusion;
2. As an alternative, to introduce a modalism-based interpretation of the modal ontological argument. This will begin with a presentation of the core principles of modalism along with a brief overview of its development. After that, the dissertation will address major objections to the modalist stance, arguing that none of them shall be seen as decisive. A modalist interpretation of the modal ontological argument will be then laid out, starting with an exploration of how the argument can be formally represented within the modalist framework. Finally, an account of how modalist principles could be reconciled with theistic metaphysics will be provided. This will lead to the development of a theory called *theistic modalism*, designed to bespeak a successful integration of the theistic and modalist perspectives.

General Thesis and Claims

The dissertation is dedicated to defending the thesis that modalism both supports a formal derivation of the conclusion that God necessarily exists and is compatible with the essential tenets of theism (such as God's freedom, self-sufficiency, independence, and supremacy over all entities) itself, which attests to the suitability of this theory as an interpretative foundation for the modal ontological argument and shows that in this regard it is superior to possible worlds theories – modal abstractionism, modal concretism, and

modal fictionalism, – each of which falls short of satisfying at least one of the specified criteria (i.e., supporting a formal derivation of the conclusion that God necessarily exists and being compatible with the essential tenets of theism).

More explicitly, the following claims shall be defended:

1. Possible worlds theories – modal abstractionism, modal concretism, and modal fictionalism – fail to provide suitable grounds for interpreting the modal ontological argument because:
   1.1. Even though modal abstractionism – at least in the version defended by Plantinga – supports a formal derivation of the argument's conclusion, it remains problematic in the sense that reconciling God's existence with the existence of abstract possible worlds proves to be highly challenging;
   1.2. There are strong arguments indicating that modal concretism is incompatible with the conclusion of the modal ontological argument, which asserts the necessary existence of God. Furthermore, attempts to conjoin modal concretism with theistic metaphysics face the problem of necessary creation and exacerbate the problem of evil;
   1.3. Modal fictionalism cannot establish the real (i.e., non-fictional) existence of God. This theory can only show that God exists within the fiction of possible worlds.
2. Modalism represents a more advantageous approach for interpreting the modal ontological argument, given that:
   2.1. It supports a formal derivation of God's necessary existence through a standard syntactic proof equipped with possibility and necessity operators;
   2.2. A cohesive account combining modalism with the core tenets of theism can be offered. Namely, an account called *theistic modalism* is developed, in which:
      2.2.1. Modalism is integrated with theistic creationism – it is suggested that God created the world in such a way that primitive modal truths hold in it;
      2.2.2. The S5 principle of modal logic is preserved by asserting that modal truths are not only characteristic of the world but also essentially pertain to the necessary being's, or God's, thinking;
      2.2.3. Although it is claimed that modal truths are not created by God and that God cannot arbitrarily change their content, God's supremacy is upheld in the sense that it is God who

instils modal truths within the world. Moreover, their existence remains fundamentally tied to God's perfectly rational intellect;

2.2.4. No rich and complex ontology is needed, especially since there is no requirement to posit abstract entities, be they modal or non-modal.

Methodology of the Research

The dissertation presupposes a mainstream Christian conception of God, reflecting the traditional and widely accepted interpretation within Christian theology. Central to this view is the idea of a singular, personal God who is omnipotent, omniscient, omnipresent, morally perfect, non-physical, eternal, transcendent to the world, perfectly free, self-sufficient, and sovereign over all things. It is also held that such a God must possess necessary existence, meaning that, if he exists, he cannot do so otherwise than necessarily. The analysis of the modal ontological argument throughout this dissertation is built upon this conception, particularly drawing on Plantinga's account of divine attributes and his notion of God as a maximally great being.[1]

The exploration of modality in this dissertation is in turn confined to alethic modalities. Alethic modality, as understood here, deals with objective truths about what could or must be the case. Epistemic or deontic modalities, dealing with knowledge and obligation, respectively, lie beyond the scope of this study. Among alethic modalities, the foremost significance will be given to logical ones (concerning what is possible or necessary according to the principles of logic) and metaphysical ones (addressing what is possible or necessary in the most fundamental sense). Overall, the dissertation follows the standard classification of alethic modalities into logical, physical, and metaphysical, concentrating primarily on the latter, given that the modal ontological argument as such is meant to operate precisely within the metaphysical notion of necessity and possibility.

The dissertation also adopts a methodological approach that integrates both analytical and historical perspectives. This means that the considerations are based not only on works within contemporary analytic philosophy (specifically in the fields of religion and modality) but also on relevant insights from medieval thinkers. The theory of theistic modalism is directly influenced by this philosophical legacy: for example, it builds upon Augustine's assertion that necessary truths must reside in the intellect of a perfect being – namely,

[1] Refer to section 1.1.1.1 for a fuller discussion of the concept of God used in this work.

God. It is argued that necessary truths require a necessarily existing and perfectly rational being to apprehend them, and that such a being can only be God. The idea of God as an essentially rational being, which, in turn, ensures the inherent rationality of the world itself – a prevalent element in the philosophy of thinkers such as Aquinas – is employed.

When criticising interpretations of the modal ontological argument based on modal abstractionism, the dissertation consistently engages with the works of William Craig (2014b, 2016b). Craig's arguments supporting the idea that abstract entities cannot be identified with God's thoughts or his creations, as well as insights revealing the problematic nature of the thesis of abstract objects existing independently of God, are applied. In substantiating the inadequacy of modal concretism as a basis for interpreting the modal ontological argument, the works of Paul Sheehy (2006, 2009), Richard Davis (2008, 2009), Chad Vance (2016), and Matthew Collier (2019) prove particularly significant; they point out the key obstacles involved in attempting to reconcile God's existence with that of concrete possible worlds. Ted Parent's (2016) article plays a vital role in challenging an interpretation of the modal ontological argument rooted in modal fictionalism: the article was the first to propose that, when approached from the perspective of modal fictionalism, the modal ontological argument cannot establish the real (i.e., non-fictional) existence of God. This stance is also maintained in the present work.

The Relevance of the Dissertation

It has already been mentioned that the issue of selecting (the most) suitable theory of modality for interpreting the modal ontological argument has thus far been rather neglected. However, there are exceptions, among which are the works of Davis (2008), Parent (2016), and Joshua Sijuwade (2023). Davis' article indirectly brings attention to this problem by suggesting that the modal ontological argument can hardly be based on the principles of modal concretism. In Parent's work, it is observed that if the argument is interpreted through the lens of modal fictionalism, then God's existence can only be established within a fictional structure (of possible worlds). Sijuwade, on the other hand, argues that modal concretism can offer a promising reinterpretation of the modal ontological argument.

Now, although the question of which theory of modality is most suitable in the context of the aforementioned argument has not been widely examined, this does not mean that the broader problem of the compatibility between theism and contemporary theories of modality has not been raised. In this

regard, the study by Sarah Adams (2015) holds particular significance: it explores how the following perspectives can be reconciled with a theistic worldview: 1) the claim that possible worlds exist within God's mind, 2) modal concretism, and 3) the form of modal projectivism – thas it, a theory asserting that modal truths do not exist independently of our minds and reflect our subjective attitudes – as defended by Simon Blackburn (1984: ch. 5–7; 1993: 52–74).

Considering the metaphysical problems that come into play when trying to reconcile theism with possible worlds theories, various specific questions, such as God's relationship with abstract possible worlds (and other abstract entities), become relevant. The problem of the relationship between God and abstract objects is comprehensively explored in the collection edited by Paul Gould, *Beyond the Control of God? Six Views on the Problem of God and Abstract Objects* (2014), which provides a detailed presentation and critical analysis of various competing positions on the subject. Craig's works (2016b, 2017) are also of great importance in this context, as they address the difficulties of reconciling God's existence with that of abstract objects. Various works have analysed the overall compatibility of theism with modal concretism. In this area, the controversy between authors who argue that these positions are compatible (Oppy 1993; Cameron 2009; Almeida 2017a, 2017b; Collier 2021) and their critics (Sheehy 2006, 2009; Davis 2008, 2009; Vance 2016; Collier 2019) deserves to be mentioned.

Plantinga's modal ontological argument itself is also the subject of ongoing philosophical debates. Influential critiques of the argument include van Inwagen 1977, 2009, 2018; Friedman 1980; Grim 1981; Tooley 1981; Mackie 1982; Kane 1984; McGrath 1990; Forgie 1991; Sennett 1991; Chandler 1993; Oppy 1995; Harwood 1999; Rowe 2009; Sobel 2009; Chlastawa 2012; Engel 2020; Schmid 2023. The opposing view in the controversy is represented by studies aimed at strengthening the argument or defending it against criticism, involving works by Morris 1985; Vallicella 1993; Pruss 2010; Pruss and Rasmussen 2018; Rasmussen 2018; Collin 2022; and Updike 2024.

Apparently, this dissertation is relevant not only to the philosophy of religion but also to the analytic philosophy of modality. Currently, questions concerning modality, especially its metaphysical side, occupy one of the central places within metaphysical discussions as such. It is no secret that interest in the philosophical analysis of modality diminished markedly in the last century due to the influence of Willard Van Orman Quine. Quine's scepticism towards modal notions led to a broader suspicion and caution within analytic philosophy. However, it was precisely in the aftermath of this

scepticism that philosophical interest in modality surged substantially: the emergence of possible worlds semantics, particularly through the work of Saul Kripke (1959, 1963a, 1963b) and other logicians, offered a rigorous tool for understanding and analysing modal claims, making it possible to discuss necessity, possibility, and other modal notions with newfound precision. These theoretical achievements not only tackled many of Quine's objections but also opened up numerous new avenues for exploring the nature of modal concepts. Today, the study of modality is a thriving and influential area of metaphysical enquiry.[2]

While a critical stance will be taken towards possible worlds theories – particularly towards their application to the modal ontological argument – in this dissertation, it is still a contribution to the ongoing scholarly debate surrounding these theories. At the same time, the dissertation thoroughly examines the theoretical principles of modalism. Despite its status as a minority view, modalism is still acknowledged as a relevant theory of modality, as illustrated by the inclusion of dedicated chapters in notable studies such as Andrea Borghini's *A Critical Introduction to the Metaphysics of Modality* (2016) or *The Routledge Handbook of Modality* (2021), jointly edited by Otávio Bueno and Scott Shalkowski.

In the context of scholarly works by Lithuanian authors, research in analytic philosophy primarily addresses issues in logic and the philosophy of language. Significant contributions in this area include the works of Rolandas Pavilionis (1975, 1976, 1981). Romanas Plečkaitis (1965) examined questions concerning the history of logic, while the development of the discipline in Lithuania is discussed in other studies by this scholar (1962, 1963b, 2007). Plečkaitis' investigation into modal logic (1963a) is among the earliest works in this field in Lithuania. Jonas Dagys and Evaldas Nekrašas (2010) have reviewed the development of analytic philosophy in Lithuania. A substantial portion of research on analytic philosophy in Lithuania consists of studies by Dagys (2006a, 2006b, 2007, 2008a, 2008b, 2010, 2012). Among other notable contributions are the works of Mindaugas Gilaitis (2015, 2017, 2022). Dagys

[2] The (semantic) developments in modal logic thus led to a broader resurgence of metaphysical thought within the field: metaphysics became a legitimate area of research in analytic philosophy. In the words of Dionysis Christias (2018: 125), '[t]he transformation in analytic philosophy could not be greater: far from being inhibited by the logical positivists' exclusion of metaphysics as cognitively meaningless (as a result of their austere verificationist principle of significance) or by ordinary language scruples about the ways in which metaphysicians strained the use of ordinary words, the new analytic metaphysicians shamelessly began to engage in boldly metaphysical speculations.'

(2020b) has also explored the relation of early Christianity to the history of logic. The philosophy of Gottlob Frege has been examined by Dagys (2020a), as well as by Albinas A. Plėšnys and Marius Povilas Šaulauskas (2017). Dagys, Živilė Pabijutaitė, and Haroldas Giedra (2022a, 2022b) have investigated Jean Buridan's modal syllogistics. Some important aspects of Christian philosophy related to the duality of body and soul have been addressed by Jonas Čiurlionis (2016).

Both classical and modal versions of the ontological argument are discussed in Kardelis 2008. Anselm's formulation is explored in Stančienė 2007, Dumčienė 2012, and Saulius 2012. The ontological argument as given by Descartes is covered in Jankauskas 2004, while Gödel's modal adaptation is analysed in Morkūnaitė and Pabijutaitė 2024. Recent research related to contemporary modal logic and/or the analytic philosophy of modality includes Gricius 2021, 2022 and Morkūnaitė 2022, 2024. Many relevant features of the syntax of modal logic and possible worlds semantics, albeit within the temporal context, are investigated in Pabijutaitė 2021. In Gricius 2023, a Lithuanian translation of Kripke's 'Semantical Considerations on Modal Logic' is provided.

The Novelty of the Dissertation

The dissertation makes novel contributions to the research in three main respects. First, the very question it raises – namely, which framework of modality shall serve as an interpretational ground for the modal ontological argument – is relatively new and underinvestigated. Although some attention has been given to this matter in works such as Davis 2008, Parent 2016, and Sijuwade 2023, such discussions are still very few. Moreover, each of the aforementioned works touches only on the connection between the modal ontological argument and one specific theory of modality, but the broader question of how different modal frameworks might affect the argument has not yet been properly studied. By providing a detailed analysis of the three leading possible worlds theories (modal abstractionism, modal concretism, and modal fictionalism) and presenting a modalism-based alternative, this dissertation is, for the first time, systematically addressing this interpretative gap.

Second, in this dissertation, either original arguments or strengthening and further development of already existing ones across several philosophical areas are offered. Such areas include the relationship between God and abstract objects as well as the issue of compatibility of theism with modal concretism. Most significantly, though, the dissertation mounts a thorough

defence of modalism. Attempts are made to elaborate on the responses to principal objections raised against this theory. By criticising the three mentioned possible worlds theories and promoting modalism as a plausible alternative, this work strengthens the more general case for acclaiming the modalist framework as an intuitive and vigorous way of approaching modality.

Finally, and most importantly, a new theory called *theistic modalism* is developed, representing the first comprehensive attempt to integrate the theoretical backgrounds of theism and modalism.[3] The modalist thesis stating that modal truths (expressed through phrases like 'It is possible that...' and 'It is necessary that...') are self-contained and primitive (i.e., irreducible to any other truths) is connected with theistic creationism: it is asserted that God created the world in such a way that primitive modal truths hold within it. The S5 principle of modal logic, according to which what is necessary is necessarily necessary and what is possible is necessarily possible, is preserved under the premise that truths about possibility and necessity not only pertain to the world but are also essentially rooted in the intellect of a necessary being, or God. This allows for the claim that modal truths hold regardless of any contingent circumstances. Even though it is posited that God does not create modal truths and cannot alter their content, God's supremacy is maintained in the sense that it is God who instils these truths within the world and that they remain fundamentally tied to God's intellect; the principle is followed that necessary truths require a necessarily existing and perfectly rational being to apprehend them. Now, this is not to say that the proposed view does not have its predecessors. As previously mentioned, it is directly influenced, for example, by Augustine's contention that necessary truths must reside in the intellect of a perfect being (God). Nevertheless, the very idea of combining modalism with theism is novel. As noted in Borghini 2016: 75, modalism as such only began to be identified as a theory on the market with the advent of quantified modal logic. Since then, there have been no efforts to connect this theory with theistic metaphysics. Thus, in this regard, the integration of modalism with theism counts as a project articulated for the very first time within philosophical research.

[3] It shall be indicated that although a similar term – 'theistic modalist' – was already used by Graham Oppy (1993: 19), it was employed by him in a different sense. In Oppy's article, this term is not associated with the integration of theism and modalism. In Oppy's usage, it appears to describe a theist who relies on modal logic to express God's necessary existence without, however, restricting themselves to any particular theory of modality.

The Structure of the Dissertation

The dissertation is organised into three chapters, each serving a distinct purpose in substantiating the general thesis:

1. The first chapter is dedicated to explaining the very problem the dissertation addresses. To this end, key concepts and theoretical frameworks essential to this study are first clarified. This involves an exploration of the employed conception of God, the distinctions among different types of modalities, and the core principles of possible worlds semantics. Plantinga's theory of modality informed by the latter is then analysed, leading to the presentation of the modal ontological argument and a clear statement of the problem towards which the dissertation is directed.
2. The second chapter is devoted to an extensive critique of interpretations of the modal ontological argument based on possible worlds theories. This chapter examines the three major possible worlds theories: modal abstractionism, modal concretism, and modal fictionalism. For each theory, an overview of its central principles is delineated, followed by a discussion of its internal weaknesses and an evaluation of why these theories fail to convincingly support the modal ontological argument.
3. The third and last chapter introduces a modalism-based rendition of the modal ontological argument. It begins with a detailed look at the essential features of the modalist theory and counters prominent critiques. The chapter then offers a formal representation of the modal ontological argument as viewed through a modalist orientation. Ultimately, an investigation of how modalism could be combined with the essential claims of theistic metaphysics is conducted, which results in the conceptualisation of the theoretical body of theistic modalism. The general discussion concludes with a response to several anticipated objections to the proposed interpretation.

1. STATING THE PROBLEM

The primary goal of this chapter is to explicate the challenge inherent within the Plantingian modal ontological argument – the exploration and resolution of which will constitute the subsequent chapters of the dissertation. Yet, before undertaking this task, some preliminary groundwork is needed. The first part of this chapter is dedicated to the clarification of fundamental concepts appearing in the dissertation. I commence by delineating the meaning of the term 'God' and then proceed to explore different kinds of modality as well as Kripke models for modern modal logic. These considerations, in turn, will pave the path for a thorough investigation of Plantinga's theory of modality, grounded in the framework of possible worlds semantics. The examination of Plantinga's conception of key modal concepts will mark the culmination of preliminary tasks and set the stage for the exposition of the modal ontological argument and the problem that, as I will argue throughout, afflicts this line of reasoning.

1.1. Preliminaries

1.1.1. The Main Concepts

1.1.1.1. Theoretical Foundations of the Concept of God

What do philosophers mean when they talk about God? As is revealed by the history of philosophy, and the history of Western philosophy in particular, many different accounts concerning God have been brought in: some thinkers have aligned with the Christian conception of God, while others have embraced deistic, polytheistic, pantheistic, or alternative interpretations. Within the scope of this dissertation, our focus lies on the philosophical exploration of monotheism – i.e., the belief that there is one personal God responsible for the creation and sustenance of the universe. Moreover, we adhere to the traditional attributes associated with this deity in Christian doctrine[4] – that is, we take God to be an all-powerful (omnipotent), all-

[4] It might be argued that the attributes listed in this paragraph represent not only Christian God, but rather shared characteristics associated with the God of Christianity, Islam, and Judaism. Yet, while there are significant overlaps in the conception of God among the three Abrahamic religions, there are also nuanced theological differences and interpretations that set them apart. For this reason, we confine ourselves to the notion of God inherent in what we may term mainstream Christian theism – i.e., the traditional and broadly accepted understanding of God within the Christian faith.

knowing (omniscient), present everywhere (omnipresent), as well as morally perfect agent who provides guidance for human behaviour. Beyond these fundamental qualities, our perspective also acknowledges that God enjoys perfect freedom, is eternal, self-sufficient, possesses non-physical nature, is transcendent with respect to the world, and sovereign over all existing things.[5,6]

Given that the core of this dissertation is the analysis of Plantinga's modal ontological argument, we shall frequently draw upon Plantinga's understanding of divine attributes. Now, Plantinga (1974b: 215–216) describes God as 'a being that is omniscient, omnipotent, and morally perfect, and that exists and has these properties in every possible world'.[7] Omniscience, as Plantinga (1980: 6) puts it, is the property by which anything possessing it knows, for any given proposition *p*, whether *p* is true or false. The notion of God's omnipotence, in turn, roughly conveys that there exist no non-logical constraints on his power (Plantinga 1974b: 167),[8] while God's being morally perfect stems from the fact that he always acts in accordance with moral righteousness and it is not possible for him to be surpassed along those lines (Plantinga 1974a: 91). Finally, asserting that God exists in every possible world is a way to depict God's necessary existence. The concept of

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[5] An additional distinction can be drawn here between God's *aseity*, representing his uncreatedness, self-sufficiency, and independence of everything else, and God's *sovereignty*, denoting his supreme authority over all things and the dependence of all other entities upon his creative and sustaining activity (see Plantinga 1980: 1–2).

[6] Needless to say, the Christian concept of God has a rich and complex history; as is well known, it was influenced by various sources, including Hellenistic philosophy and the foundations of Jewish monotheism. Philosophers like Plato (1997 [~375 BCE], 1997 [~360 BCE]), who envisioned God as the highest and most perfect being employing eternal forms to shape the universe, Aristotle (1984 [~350 BCE]b), who saw God as the supreme being contemplating his own perfection, and Plotinus (1962 [250]), who contributed his emphasis on the intellectual unattainability of God (a notion that resonated and reverberated through the teachings of many Christian mystics), all played vital roles in fashioning the contemporary Christian notion of God and his attributes. Still, the most profound and fruitful developments of this notion unfolded during the Middle Ages, when key philosophical and theological concepts pertaining to it were articulated by such figures as Augustine, Anselm of Canterbury, and Aquinas.

[7] Cf. Richard Swinburne (2016 [1977]: 1): 'By 'theism' I understand the doctrine that there is a God in the sense of a being with most of the following properties: being a person without a body (that is, a spirit), present everywhere (that is, omnipresent), the creator of the universe, perfectly free, able to do anything (that is, omnipotent), knowing all things (that is, omniscient), perfectly good, a source of moral obligation, eternal, a necessary being, holy, and worthy of worship.'

[8] Another definition of omnipotence is 'a degree of power that can't possibly be excelled' (see Plantinga 1974a: 91).

possible worlds will be clarified later in this chapter, both in its formal structure and within the context of Plantinga's theory of modality. For now, it suffices to say that, in its most straightforward interpretation, God's necessary existence simply amounts to God's inability not to exist.

In addition to that, Plantinga (2011b: xiv) emphasises another profound aspect of Christian belief: according to him, 'God has created us in his image, which includes our being able, like God Himself, to have knowledge of ourselves and our world'. Essentially, Plantinga posits a congruence between our cognitive faculties and the external world, corresponding to the medieval notion of an *adaequatio intellectus ad rem* (an adequation of the intellect to reality). On the other hand, Plantinga diverges from traditional theistic views as championed by Augustine, Anselm, Aquinas, and their adherents by rejecting the notion of divine simplicity. Within the Christian conception of God, particularly as it evolved during the Middle Ages, there prevailed the belief that God possessed simplicity in the sense of being partless (where 'part' means primarily a metaphysical part or an ontological constituent). In other words, God's simplicity amounted to the fact that he lacked any form of complexity and composition; thus, it was thought that there was no real distinction between God and his attributes – God was held to be *identical* to each of them (and they were all identical to each other). Inasmuch as Plantinga takes the relation between individuals and their properties to be that of *exemplification*, he rejects this doctrine, additionally deeming it incompatible with the natural assumption that God possesses distinct properties. Also, for Plantinga, properties are abstract entities, while God is a concrete object, what, according to him, precludes their identification.[9]

Nonetheless, it is crucial to point out that both Plantinga and the majority of his medieval predecessors are unified by the idea that God is *the most perfect being*. The notion that God is maximally great (unsurpassable in greatness) stands as the cornerstone of a theistic tradition known as *perfect being theology*,[10] which is typically held to trace back to Anselm of Canterbury's ontological argument. Within this conception of God, the notion of *perfection* assumes a central role – i.e., God is characterised as a being that embodies all perfections or qualities to the utmost degree (e.g., omnipotence, omniscience, omnibenevolence, and necessary existence). Another facet of perfect being theology involves an attempt to decide the nature of God by

[9] For Plantinga's explicit critique of the notion of divine simplicity, see his 1980: 46–47.

[10] Yujin Nagasawa (2017: 2) uses the term 'perfect being theism' and defines it as 'a form of theism based on Anselm's concept of God'.

employing the Anselmian formula that God is the greatest possible being (see Speaks 2014). In other words, commencing from the idea that God is a being that is unsurpassable in greatness, philosophers and theologians try to deduce the precise qualities such a being might possess and which qualities are truly compatible with the notion of the greatest possible being. In this dissertation, our analysis and arguments will also rest on the idea of God as the greatest possible being, and we might periodically engage with considerations about the (in)compatibility among certain qualities and being the most perfect entity.

This constitutes the basis for the conception of God that will be employed throughout this dissertation. Some of the attributes of God that have not been fully fleshed out in this section will gain direct relevance within the context of specific arguments; then it will be time to elaborate more on them. The groundwork laid here, however, is sufficient for our present purposes, and we can proceed with the exploration of the concept of modality.

1.1.1.2. Varieties of Modality

The terms 'modal' and 'modality' can be used in quite a wide range of senses. Sometimes modality is construed narrowly to encompass solely expressions of possibility and necessity, while in other cases it is treated as including terms for epistemic modality ('to believe that', 'to know that', etc.), deontic modality ('it is obligatory to', 'it is permissible to', etc.), and other related kinds of locutions. The central distinction here is between the so-called alethic (from the Greek ἀλήθεια, meaning *truth*) modality and various types of non-alethic modalities. Broadly speaking, alethic modality is objective modality, or one that deals with *necessary and possible truth and falsity*, and it is usually characterised as modality that respects the T axiom of modal logic ($\Box p \rightarrow p$).[11]

Among the spectrum of non-alethic modalities, on the other hand, we encounter such ones as epistemic modality and deontic modality. Epistemic modalities are expressions pertaining to knowledge and belief and describing the level of certainty of knowledge that a speaker has regarding a particular proposition. Deontic modalities, in turn, deal with obligations and permissions with respect to some moral or legal system. Unlike alethic modalities, deontic modalities do not adhere to the T axiom: even if one is obliged to do p, one may choose not to. Now, under the epistemic interpretation of modalities, the implication $\Box p \rightarrow p$ remains valid (if one knows that p, then p is true), yet, epistemic modalities are not considered as a type of alethic ones, since the

[11] $\Box$ is the necessity operator, while $\rightarrow$ means implication. Another related symbol to be employed henceforth, $\Diamond$, stands for possibility.

latter are treated as independent of the epistemic subject (see Mallozzi et al. 2023).

Importantly, a parallel distinction extends to the concept of modal logic itself. Alethic modal logic is the branch of modal logic concerned with the modal operators 'it is necessary that' and 'it is possible that', whereas any modal logic dealing with modal operators other than these, such as deontic modal logic, doxastic modal logic, epistemic modal logic, and temporal modal logic, is categorised as non-alethic. Within the context of this dissertation, modality (and modal logic) is approached exclusively from an alethic perspective.

Even if we confine ourselves to the interpretation of modality that only has to do with the notions of possibility and necessity, however, there still remains room for significant distinctions. Typically, alethic modalities are themselves classified into three principal categories: it is common to distinguish between the so-called metaphysical, logical, and physical[12] modalities. Logical modalities deal with what is possible and necessary based on the principles of logic, whereas physical modalities pertain to what is possible and necessary within the laws and constraints of the physical world or a given physical system. Metaphysical modalities, in turn, are usually defined more vaguely; they are treated as modalities that concern what is possible and necessary in the broadest sense, encompassing fundamental principles about the nature of reality. Put differently, metaphysical modality is usually thought of as addressing 'what could not have been otherwise no matter what' (Burgess 2009: 46) and thus is often labelled as the 'modality of philosophical thinking *par excellence*' (Mallozzi et al. 2023).

Following the standard view of these three kinds of modality, their relationship might be visually demonstrated in the following manner (see Figure 1):[13]

[12] Other terms for physical modality include 'causal modality' and 'nomic modality'.
[13] This figure is sourced from Mallozzi et al. (2023).

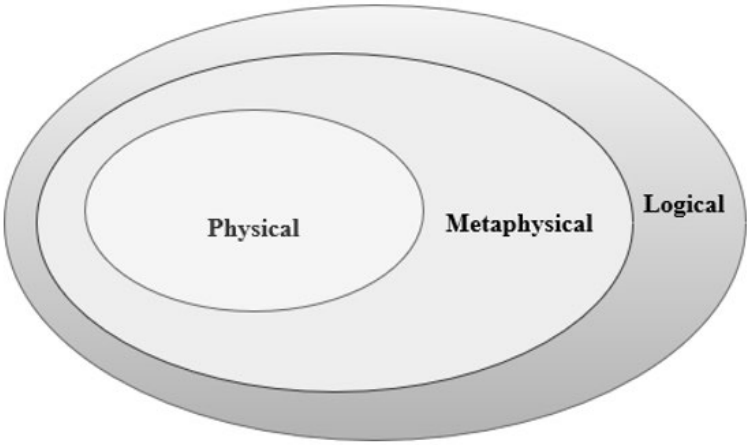

Figure 1. Nesting model for possibility.

As we can see from the model, what is physically possible is also held to be metaphysically as well as logically possible. Moreover, what is metaphysically possible is always logically possible too. However, there are things that are only metaphysically and logically, but not physically possible, and also, there are things that are only logically, but neither physically nor metaphysically possible. When considering necessity, a converse relationship holds (see Figure 2):

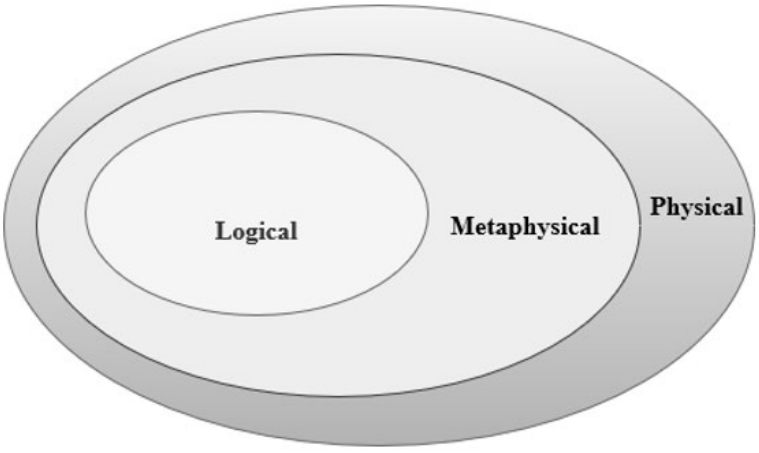

Figure 2. Nesting model for necessity.

Here, we can see that physical necessity is the widest one, which means that what is logically necessary is also metaphysically necessary and physically necessary. Furthermore, what is metaphysically necessary is also physically necessary. Nevertheless, some things are only metaphysically and physically, but not logically necessary, and there are things that are only physically, but neither logically nor metaphysically necessary.

Be that as it may, it should be noted that the distinctions just mentioned are far from universally accepted. In fact, there are philosophers and logicians who do not fully agree with a rigid distinction between metaphysical, logical, and physical modalities (furthermore, not all scholars may adopt these distinctions in the same way). For instance, some philosophers hold that metaphysical and logical modality coincide (see Chalmers 2002), while others, such as Sydney Shoemaker (1998) and Ned Hall (2021), advocate for the identity between metaphysical and physical modality. One may also argue for the integration or interconnectedness of metaphysical, logical, and physical modalities, viewing them as deeply interrelated rather than entirely distinct, or advocate for a holistic approach altogether, suggesting that compartmentalising modality into rigid categories inadmissibly oversimplifies its complexity. In summary, we can state that although the discussed distinction is widely employed and recognised, it should be kept in mind that there are views deviating from this traditional perspective.

Now, in this dissertation, we will not be concerned with physical modalities – the distinction that will remain relevant will be that between logical and metaphysical modalities. As we are about to witness, this is the distinction that is highly significant for Plantinga, although he uses slightly different terms for it. Roughly, we can say that logical modalities correspond to what is called 'narrowly logical modalities' by Plantinga, whereas metaphysical modalities are termed by him 'broadly logical modalities'.[14] A more detailed presentation of this pivotal distinction is provided in section 1.1.2.1, pertaining to the broader exploration of Plantinga's metaphysics of possible worlds. Yet, the latter cannot be understood properly without first acquainting oneself with Kripke's semantic innovations made in the twentieth century with regard to modal logic. This makes their examination our subsequent task.

[14] Cf. Brian Leftow (2012: 37): according to him, the sort of modality called by Plantinga 'broadly logical' is the one that Kripke refers to as 'metaphysical'. Leftow himself, in turn, uses the term 'absolute modality'.

1.1.1.3. Historical Development of Modal Logic. Kripke Models for Modern Modal Logic

The importance of Kripke's contribution to modal logic cannot be overstated. He was amongst those who played a leading role in the development of the now-standard formal semantics for modal logic[15] and thus spurred a seminal breakthrough in the exploration of both modal logic and the metaphysics of modality. The evolution of modal logic has a rich and complex history, and it is clear that the status of formal enquiries into modalities has varied quite heavily throughout. As articulated by John Divers (2007: 72), the first half of the twentieth century witnessed the sway of empiricist thought, notably in the form of logical positivism, which brought a sceptical stance towards metaphysics as a whole. Modality, during this period, was tolerated with the precondition that it could be fundamentally explicated in logical and linguistic terms. However, this tolerance waned later under the influence of Quine (see, e.g., Quine 1947, 1976 [1953], 1980 [1953]), who cast doubt on our modal expressions, deeming them useless, confused, and incoherent. Yet, while, as Divers puts it, the prospect of a substantial metaphysics of modality reached 'its lowest ebb' with Quine, it was exactly the time preceding the great renaissance of the philosophy of modality. The mid-twentieth century saw the advent of possible worlds semantics, which not only refuted many anti-modal suspicions but also paved the way for diverse philosophical explorations of modality. Before diving into a more detailed examination of this breakthrough, however, we shall review some fundamental milestones in the development of modal logic from its very birth.

Modal logic, a branch of formal logic dealing with modalities (possibility and necessity), has a rich history dating back to antiquity. Traditionally, its origins are traced back to Aristotle (1989 [~350 BCE], 1.13), who acknowledged the specific role of modal notions in human reasoning and laid

[15] Kripke semantics is also adapted to intuitionist logic and other non-classical logics. Importantly, non-classical logics are demarcated from what is called *classical logic*. The latter is often defined as being characterised by a triad of fundamental tenets: the law of excluded middle, the law of non-contradiction, and the principle of bivalence. Put differently, within the classical logic, 1) for any statement, either the statement or its negation is true, and there is no third option; 2) a statement cannot be both true and false simultaneously; 3) every statement has exactly one of two truth values: true or false. This classical paradigm, developed by such figures as Frege and Russell (among others), is distinguished from various non-classical logics (such as intuitionist, conditional, relevant logics, paraconsistent logics, free logics, quantum logics, fuzzy logics, etc.), which are intended either to *supplement* classical logic or to *replace* some of its foundational principles.

some foundational principles of modal logic: e.g., that the notions of necessity and possibility are interdefinable, that the necessary implies the possible, that what is of necessity is in actuality, and that what is in actuality is possible. It is also known that Aristotle (1989 [~350 BCE], 1.13 (32a18–21)) distinguished two senses of possibility: one of them, called one-sided possibility, is possibility in the sense akin to the modern conception of possibility in modal logic, while the other, also known as two-sided possibility, is what we know today as *contingency* (that is, the state of neither necessary truth nor necessary falsehood). It must not be omitted that Aristotle (1984 [~350 BCE]a, 1989 [~350 BCE]) provided a comprehensive work on modal syllogisms – structured forms of deductive reasoning incorporating at least one modalised premise.

Various theories concerning modality were also developed by the Megarians and Stoics, although, as noted by Edward Lemmon and Dana Scott (1977: 3–4), there is no evidence that any major *formal* advance on what had already been achieved by Aristotle was made by these schools of thought. Medieval thinkers, in turn, were well acquainted with ancient modal conceptions through the works of Boethius. Yet, they did not merely inherit; they also developed their own ideas significant to the field. As noted by Henrik Lagerlund (2000: 2), logic lied at the very core of medieval philosophy. As a part of trivium, logic was revered in the Middle Ages as the gateway and fundamental tool for all sciences, while modal logic was considered to be a natural extension of ordinary logic. Notably, medieval logicians discussed four modal operators: possibility, impossibility, contingency, and necessity; these were defined in relation to one other, where necessity was deemed possible but not contingent, and the impossibility held neither possibility nor contingency. Medieval modal logicians are known for employing a systematic application of the distinction between *de dicto* and *de re* modal sentences,[16] as well as for their extensive work on modal syllogistics, where eminent works such as William of Ockham's *Summa logicae* (1974, 1980, 2007 [~1323–1326]), Jean Buridan's *Tractatus de consequentiis* (2015 [~1335]), and

[16] Medieval logicians and philosophers treated *de dicto* modal propositions as ones in which modal words modify the whole sentence (*dictum*), whereas *de re* modal propositions were held to be ones in which modal words modify a part of the sentence (by expressing the mode through which the predicate belongs to the subject or thing (*res*)). E.g., 'It is possible for a man to run' can be read in two different ways: we can understand it as ascribing the possibility to the proposition 'Man runs', but we can also interpret it as meaning that 'A man has the ability to run'. The former reading embodies modal assertion *de dicto*, while the latter is a modal statement *de re*.

Pseudo-Scotus' commentary on Aristotle's *Prior Analytics* (see Pseudo-Scotus 1639 [~1290-1310])[17,18] stand out.

However, the situation changed quite dramatically following the conclusion of the Middle Ages – during the period from the sixteenth to the nineteenth centuries, modal logic witnessed relatively modest development. This is not to say that modalities as such did not appear in the works of philosophers: e.g., Descartes explored such terms as 'possible existence' and 'necessary existence' in his meditations (see Descartes 1993 [1641]), while Leibniz (1985 [1710]; also see Strickland 2014) famously entertained the idea of possible worlds and gave a special emphasis on compossibility and incompossibility among concepts. Modalities also appeared within Kant's Table of the Categories (see Kant 1929 [1781/1787]: 111–119), although there is little indication that Kant was interested in their formal properties. Despite advancements in formal logic during the nineteenth century, modal logic still did not receive a distinct spotlight at that time. For instance, Gottlob Frege's view in the *Begriffsschrift* (1967 [1879]) was that modal notions were inherently epistemic, i.e., pertaining to human knowledge; in this sense, he considered them irrelevant with respect to pure logic.[19]

Even though some early hints and anticipations of modern modal logic can be found in the writings of Charles Peirce (1960 [1870–1911]) and Hugh MacColl (1880, 1897, 1900, 1906), modal logic, as contemporarily conceived, is generally taken to begin with the work of Clarence I. Lewis, who published his pioneering article 'Implication and the Algebra of Logic' in 1912. That is, it is usually held that the real renaissance of modal logic sprung only in the twentieth century with Lewis' investigations of the paradoxes of material implication as they appear in Alfred N. Whitehead and Bertrand Russell's *Principia Mathematica* (1925–1927 [1910–1913]). Now, within Whitehead and Russell's framework (and so in classical logic[20] in general), the material conditional $p \rightarrow q$ is considered true unless the antecedent p is true and the consequent q is false. Yet, as is widely known, this particular feature brings about some counterintuitive results. For instance, Whitehead and Russell's logic includes these formulas as theorems: 1) $p \rightarrow (q \rightarrow p)$ (a true statement

[17] This work was attributed to John Duns Scotus by the editor Luke Wadding.

[18] For Aristotle's original work, refer to Aristotle 1989 [~350 BCE].

[19] As expanded by Sanford Shieh (2019: 3), Frege insisted that there was no *relativisation* of truth and falsity. That is, for him, truth was absolute: there was no such thing as *modes* of truth, and no classification of truths into actual, possible, and necessary.

[20] See fn. 15.

is implied by any statement whatever) and 2) $\sim p \rightarrow (p \rightarrow q)$[21] (a false statement implies any statement whatever) (see Whitehead and Russell 1925 [1910]: 94, 99). In other words, what these theorems say is that a true proposition is implied by any proposition, irrespective of its relevance, and likewise, a false proposition implies any proposition, regardless of its connection to the consequent. These paradoxical theorems, called paradoxes of material implication,[22] led Lewis to conclude that material implication was not sufficient to model the conditionals. More precisely, Lewis (1912, 1918) thought that, because of its counterintuitive results, material implication did not provide a proper understanding of the ordinary notion of implication and could not serve as the basis of logical deduction.

Lewis' solution, then, was to add a new connective to classical logic. This new connective, called *strict implication*, had to establish that a false antecedent could never strictly imply a true consequent. Crucially, Lewis believed that an adequate understanding of modality should be incorporated into the logical analysis of conditionals: he proposed that one proposition implied another in the strict sense of the word iff (if and only if) it was *impossible* that the first should be true and the second false, and he wrote $p \dashv q$ to express this relation between the propositions p and q. In the course of discovering the formal properties of strict implication, many modal principles came to light, while the culmination of Lewis' work with strict implication was *Symbolic Logic* (1932) – a seminal book co-authored by Lewis and Cooper H. Langford, wherein five distinct systems of modal logic, known as S1–S5,[23] were axiomatised. Among them, S4 and S5 are still widely used and relevant up to now. It is important to emphasise that although Lewis primarily formulated systems S1–S5 for strict implication, modern modal logic has more commonly associated these systems with the standard material implication; among them, S5 has emerged as the most popular. Its principal axiom is known as $\Diamond p \rightarrow \Box\Diamond p$, whereas the characteristic axiom of system S4 is $\Box p \rightarrow \Box\Box p$. Other important systems of modal logic include K, T, and B. System K results from adding the necessitation rule (stating that any theorem of logic is necessary) and the distribution axiom $(\Box(p \rightarrow q) \rightarrow (\Box p \rightarrow \Box q))$ to

[21] It should be indicated that in *Principia Mathematica*, the symbol $\supset$ is used for material implication. By contrast, we use $\rightarrow$ for material implication throughout this dissertation. $\sim$ stands for negation.

[22] There are many other paradoxes of material implication in Whitehead and Russell's system, but these two are the best known among them.

[23] Initially, Lewis considered S3 the correct system for strict implication, though later he came to prefer S2.

the foundational principles of propositional logic. System T, in turn, is characterised by the axiom $\Box p \rightarrow p$, whereas B's defining axiom is $p \rightarrow \Box\Diamond p$.

What we have been discussing so far constitutes the so-called syntactic tradition within the development of modal logic. This tradition emphasised the study of axioms, proof systems, and the deduction rules governing modal propositions, but this scrutiny, while essential, fell short of unveiling the *meaning* of modal operators. In the words of Christopher Menzel (2016a), there was no rigorous account clarifying just what it means for a sentence in the modal deductive systems of Lewis and Langford to be *true* and, consequently, no account of the semantic notions of validity and logical consequence to underwrite the corresponding deductive concepts of theoremhood and provability.[24] Within the attempts to fill this void, we find the rise of the semantic tradition, where the notable idea of possible worlds takes the central stage. It is customary to attribute the introduction of possible worlds account into modern modal logic to Rudolf Carnap (see, e.g., Bull and Segerberg 1984: 13), although the very idea of alternative ways things could have been is apparently much older. As already mentioned, Leibniz was the philosopher who actively and systematically engaged with the notion of alternative possible worlds in his investigations of modality, but to claim that he was its founder still would not be precise: the idea of possible worlds (or at least precursor concepts related to it) can be traced far back to philosophical and theological discussions in the works of, for instance, Duns Scotus and Luis de Molina (see Korte et al. 2009: 535).[25]

Still, Carnap stands as an innovator in the sense that he recognised that the syntactic advances in modal logic lacked corresponding semantic foundations, and he sought to address this issue. Carnap's (1946, 1947) idea was that we may represent possible worlds through sets of atomic sentences, called state-descriptions. In this framework, e.g., a sentence p is logically necessary in case it holds true in all (relevant) state-descriptions. Yet, Carnap's work did not have several vital concepts integral to contemporary possible worlds semantics – for instance, his framework did not include the

[24] Apparently, the absence of a well-developed semantic theory for modal logic contributed to a certain level of scepticism and hostility towards it from philosophers like Quine.

[25] Even in the work of Augustine we can find something similar to this idea. The framework of possible worlds is related essentially to the notion of synchronic alternatives in the sense that possible worlds represent different ways the world could be at the same time, i.e., synchronically. Notably, this notion – the concept of synchronic alternatives – which was lacking in the thought of ancient philosophers, surfaces in Augustine's theological conception of God as making choices between alternative histories (see Knuuttila 2019: vii).

notion of relations between states of affairs. The emergence of the full-blown possible worlds semantics as it is known today took place during the late 1950s and early 1960s, thanks to the contributions of Carew Meredith, Arthur Prior (see Meredith and Prior 1996 [1956]), Jaakko Hintikka (1957, 1961), and Saul Kripke (1959, 1963a, 1963b), among others. The upshot of their work was that modal logic was augmented with a comprehensive extensional semantic theory, which, roughly speaking, amounts to the fact that modal notions were provided with a non-modal characterisation. That is, the necessity operator became associated with the universal quantifier ∀, suggesting that $\Box p$ signifies that p is true *in all possible worlds*, whereas the possibility operator ◊ became linked with the existential quantifier ∃, indicating that $\Diamond p$ signifies that p is true *in at least one possible world*.[26] In this way, it was demonstrated that, semantically, necessity and possibility could be analysed in terms of classical quantification.

This underlying idea can be expressed more technically as follows. Within possible worlds semantics, we encounter a model (or *Kripke model*)[27] $M = \langle W, R, V \rangle$, where W is a nonempty set (the set of possible worlds), R is a binary relation on W (the accessibility relation), and V is a function from ordered pairs of sentence letters and worlds to truth-values (the valuation). In other words, a valuation function evaluates sentences as true or false at worlds, meaning that propositions are never evaluated as true or false *simpliciter* but only as true or false *at specific worlds* within the model. We can thus say that $\sim p$, for instance, is true at a world w iff p is not true at w, a conjunction $p \,\&\, q$ is true at a world w iff each conjunct (p and q) is true at w, while $p \vee q$[28] is true at a world w iff at least one of the disjuncts (p or q) is true at w, etc. $\Box p$, in turn, is true at a world w iff p is true *at every world* accessible from w, and $\Diamond p$ is true at a world w iff p is true at *at least one world* accessible from w.

Now, in Kripke models, each world is connected to other possible worlds through an accessibility relation. This relation defines which worlds are considered accessible from a given world. There are several key properties such relations can have, of which the most important include *reflexivity*, *symmetry*, and *transitivity*. An accessibility relation is said to be reflexive if

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[26] Whether we can have a fully extensional interpretation of modal notions, nonetheless, depends on whether possible worlds themselves can be non-modally defined. As we will come to see in section 1.1.2.3, this condition is not met within Plantinga's theory of modality.

[27] While, as already noted, Kripke was not the sole contributor to possible worlds semantics, his work was particularly influential and transformative, which is why the models are usually associated with his name.

[28] The symbol ∨ stands for inclusive disjunction.

every possible world is accessible from itself. Symmetry, in turn, holds if, for any two possible worlds w_1 and w_2, if w_1 can access w_2, then w_2 can access w_1. Finally, an accessibility relation is transitive if, for any chain of possible worlds – let us say w_1, w_2, and w_3 – if w_1 has access to w_2 and w_2 has access to w_3, then w_1 has access to w_3. These three relations can be represented graphically (see Figure 3):

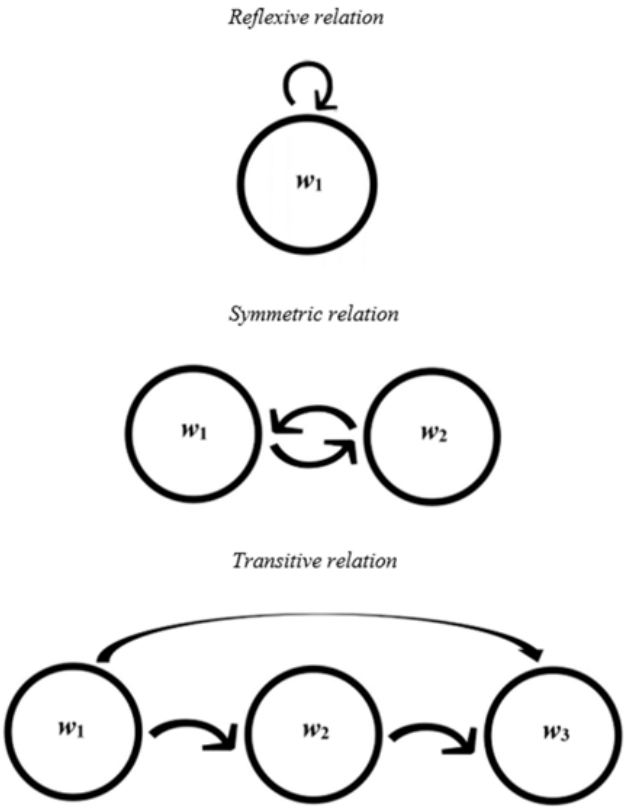

Figure 3. Reflexive, symmetric, and transitive accessibility relations.

By employing the concept of the accessibility relations among worlds, we can represent different systems of modal logic. Thus far, our exploration has been confined to their syntactic features. Yet, the systems of modal logic are also interpreted semantically in terms of the accessibility relations among worlds, where these systems have different requirements for them. For instance, we could insist that the accessibility relation be symmetric, or reflexive, or transitive, or any combination of these, and each different combination will generate a different logical system. Now, within system K,

there are no assumptions about accessibility at all (that is, accessibility relation is not even reflexive). Within system T the accessibility relation is characterised by the reflexivity property, which means that every world is considered accessible from itself. System B, in turn, is characterised by the relations of both reflexivity and symmetry. Finally, within system S4, the accessibility relation is reflexive and transitive, whereas, within S5, it is reflexive, symmetric, and transitive. It means that system S5 embodies the assumption that accessibility is *universal*: i.e., every world has access to every world.[29]

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[29] This also helps us to explain how the structural properties of the accessibility relation within different systems align with their axiomatic principles. For instance, recall that system T is characterised by the axiom $\Box p \rightarrow p$ and consider some world w in which $\Box p$ is true. Now, if $\Box p$ is true at w, then p is true at every world accessible from w; due to the fact that, by reflexivity, this includes w itself, it follows that p is true at w.

Also, we have seen that accessibility relations among worlds are not only reflexive but also symmetric within system B, and this helps us to explain why B's characteristic axiom ($p \rightarrow \Box\Diamond p$) holds. That is, if p is true in some world, then $\Box\Diamond p$ is also true in it. Why is this so? Assume that p is true in world w and consider world w_1 to which w has access. Because of symmetry, w_1 also has access to w. This means that, in w_1, $\Diamond p$ holds (for recall that $\Diamond p$ is true at some world iff p is true at at least one world accessible from it). Now, the same holds for every other world accessible from w: that is, $\Diamond p$ is true at every world accessible from w. And this is just another way to say that $\Box\Diamond p$ is true in w. By this semantic means, we have thus proved that if p is true in w, then $\Box\Diamond p$ is true in w.

Within the system S4, in turn, the accessibility relations are reflexive and transitive, which aligns with S4's characteristic axiom $\Box p \rightarrow \Box\Box p$. Again, we can elucidate this in terms of the framework of possible worlds. Suppose we have world w and that $\Box p$ is true in w. This means that p is true at every world accessible from w. Consider one such world, w_1. It means that, in w_1, p is true. Consider one more world, w_2, accessible from w_1. By transitivity, w_2 is also accessible from w, which means that p is also true in w_2. Now, this means that, in w_1, $\Box p$ is true (because p is true in all worlds accessible from w_1 – that is, w_2 and w_1 itself). Let us add one more world, w_3, accessible from w_2. Again, due to transitivity, w_3 is accessible from w, which means that p is true in w_3. This means that $\Box p$ also holds true in w_2; and, surely, this will hold for *any* possible world accessible from w. In other words, $\Box p$ is true at every world accessible from w, which is just another way to say that $\Box\Box p$ is true in w. We have thus proved that if $\Box p$ is true in w, then $\Box\Box p$ is true in w.

Finally, consider system S5 and its principal axiom $\Diamond p \rightarrow \Box\Diamond p$. Again, we can demonstrate how S5's properties of the accessibility relation between possible worlds – that is, reflexivity, symmetry, and transitivity – allow this axiom to hold. Suppose that there is world w and that $\Diamond p$ is true in w. Now, this means that p is true at at least one world accessible from w, and this can be w itself. Therefore, suppose that p is true in w. Now, consider another world, w_1, which is accessible from w. Because of symmetry, w is also accessible from w_1, which means that, in

Finally, it is important to stress that the development of modern modal logic did not stop with propositional modal logic, which has been the focus of our preceding discussion. It extended to what is known as *quantified modal logic* – a branch of logic that introduces quantifiers to reason about individuals and their modal properties. The roots of quantified modal logic are generally associated with the contributions of Carnap (1946, 1947) and Ruth Barcan Marcus (1946), as both these authors formulated modal systems combining Lewis' propositional modal logic with quantification. Yet, while Carnap and Marcus laid the central pioneering groundwork, other scholars, including Kripke, later played significant roles in shaping quantified modal logic as well.

Within the framework of quantified modal logic, a model, denoted as M, is represented as an ordered quadruple: $M = <W, D, R, V>$. As before, W is the set of possible worlds, and R is the accessibility relation specifying how worlds relate to each other. D represents the domain of individuals, while V now maps individuals from the domain to each predicate at each world. Now, it is important to state that the nature of the domain (D) can vary, and different types of domains can be considered based on the characteristics of the individuals within them. The two most commonly encountered types of domains are *constant domain*, where the set of individuals remains the same across all possible worlds, and *varying domain*, where the set of individuals can differ from one possible world to another. The distinction between constant domain semantics and varying domain semantics is deeply intertwined with a key ontological question: is it true that everything there is is actual (i.e., is it true that there are no merely possible beings), or are there also things that are not actual but merely possible? Those subscribing to the former option are called actualists, and their stance aligns with the view that each world possesses its own domain (exclusively containing the existents of that world). Conversely, those choosing the latter perspective are known as possibilists, and they advocate for a semantics with a single constant domain comprising all individuals – both actual and merely possible. Given that there

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w_1, $\Diamond p$ also holds true (because p is true at at least one world accessible from w_1 – i.e., w). Consider yet another world, w_2, to which w_1 has access. Because of transitivity, w_2 is also accessible from w, and, because of symmetry, w is accessible from w_2. This means that $\Diamond p$ holds true at w_2 as well. Now, take one more world, say, w_3, which is accessible from w_2. Again, because of transitivity, w_3 is also accessible from w, and, because of symmetry, w is accessible from w_3, which means that, at w_3, $\Diamond p$ is also true. In other words, we get that $\Diamond p$ holds true at every world accessible from w, which can be paraphrased by saying that $\Box\Diamond p$ holds true in w. By this means, we have proved that if $\Diamond p$ is true in w, $\Box\Diamond p$ is true in w.

are different perspectives on how to construe domains of quantification for possible worlds, different interpretations and systems of quantified modal have been developed in response. Here, we will not analyse them in more detail, but we will repeatedly return to the actualism-possibilism debate within the course of this dissertation.

For now, we can conclude that possible worlds semantics has played a crucial role in the development of modern modal logic and in fostering a deeper comprehension of modalities as such. Nevertheless, as alluded to earlier, these formal advancements kept pace with profound ontological enquiries that extend beyond the confines of formal logic and require a broader philosophical perspective. In the subsequent sections of this chapter, we shall explore how some of these enquiries are tackled within Plantinga's conception of modality. By effectively employing possible worlds framework, Plantinga not only created a rich and sophisticated metaphysical theory of modality but also formulated an ontological argument for the existence of God, which stands as a preeminent illustration of how fruitfully the semantic theory crafted by Kripke and others can be applied to enrich numerous metaphysical discussions.

1.1.2. Plantinga's Theory of Modality

If we allow 'possible worlds semanticists' to mean not only those primarily concerned with the formal development of possible worlds semantics but also those who effectively employ this framework to address philosophical questions and construct their arguments, then Plantinga is clearly one. The idea of possible worlds assumes a pivotal role in Plantinga's modal thinking, and one of the most prominent ways in which Plantinga has applied the semantics is precisely his modal ontological argument. Given the fact that Plantinga has employed possible worlds talk in the areas of the philosophy of religion and metaphysics, it is scarcely surprising that he is not happy with taking possible worlds semantics as a merely formal tool. Plantinga's (1974b: 125) perspective on this matter is explicitly articulated:

> A semantical system such as Kripke's can be looked at in <…> two ways. We may regard its talk of possible worlds and sets of individuals as convenient but dispensable imagery whose cash value is to be found in the insights provided into the workings of our language. And if we do look at these semantical systems in this light, then we need not be troubled by embarrassing metaphysical questions about the nature of possible worlds and the status of objects that, as we picturesquely put it,

exist only in other possible worlds. Here these questions do not arise. This attitude towards the semantics, however, is an extremely sophisticated one that does not always stop short of sophistry. Furthermore, the insights to be gained in this way are limited and somewhat elusive.

Plantinga (*ibid*.) maintains that in case we purport to explain our modal locutions through the lens of Kripke's semantic models but refuse to draw any links between the employed semantics and the metaphysical realm, then 'it requires a well-trained eye' to see what such explanations succeed to accomplish. Hence, for Plantinga, possible worlds are not just a piece of a technical device; rather, they are genuine, existent entities. Before diving into a detailed exposition of Plantinga's account of possible worlds, however, it is essential to dwell on two key distinctions: 1) the differentiation between narrowly logical modality and broadly logical modality, and 2) the distinction between *de dicto* modality and *de re* modality. As we shall see, a proper understanding of these notions is indispensable for a thorough grasp of the Plantingian metaphysics of possible worlds.

1.1.2.1. Narrowly Logical Modalities vs. Broadly Logical Modalities

One of the central tenets in Plantinga's theory of modality revolves around the distinction between the so-called broadly logical necessity and narrowly logical necessity. Plantinga does not equip us with precise definitions of these concepts. Instead, he relies on examples that illustrate just what such locutions may refer to. Now, our initial task is to distinguish necessary propositions from contingent ones.[30] Plantinga's examples of necessary propositions include '5 + 7 = 12' and 'If all men are mortal and Socrates is a man, then Socrates is mortal', whereas a contingent proposition is a proposition like 'The average annual rainfall in Los Angeles is about 12 inches'. Next, we shall ask what distinguishes propositions that are necessary in a *broadly logical* sense from those necessary in a *narrowly logical* sense. As Plantinga explains, truths of propositional logic and first order quantification theory are necessary in a narrowly logical sense. By contrast, broadly logical necessity encompasses truths of set theory, arithmetic and mathematics, as well as truths such as 'No one is taller than himself', 'Red is a colour', or 'No numbers are human

[30] For Plantinga (1974b: 1), necessity, truth, and related properties are properties of propositions, which are non-linguistic entities expressed by but distinct from sentences. Plantinga states that his conception of propositions is similar to Moore's idea of proposition, Frege's of *Gedanke* as well as Bolzano's of *Satz*.

beings'. Broadly logical necessity, as Plantinga (*ibid*.: 2) puts it, is wider than that captured in first order logic. In other words, whatever is narrowly-logically necessary is also broadly-logically necessary, but not vice versa: e.g., it is not only narrowly-logically, but also broadly-logically necessary that 'If all men are mortal and Socrates is a man, then Socrates is mortal', but '5 + 7 = 12' is *not* narrowly-logically necessary.

Armed with this information, we can also tell what it means for something to be possible in narrowly logical sense and broadly logical sense. A proposition possible in a narrowly logical sense is a proposition whose negation is not necessary in a narrowly logical sense, whereas a proposition possible in a broadly logical sense is a proposition whose negation is not necessary in a broadly logical sense. Narrowly logical possibility is wider than broadly logical possibility, which means that whatever is broadly-logically possible is also narrowly-logically possible, but not vice versa: e.g., it is not only broadly-logically, but also narrowly-logically possible for me to become a dentist, but it is *not* broadly-logically possible that Pope Francis is a prime number.[31]

In summary, we can say that broadly logical modalities deal with necessity and possibility in a more general sense and are not contingent on specific formal systems. Narrowly logical modalities, by contrast, are tied to modalities within specific logical systems and their inherent rules and axioms. In his subsequent exploration of the metaphysics of modality, Plantinga is particularly interested in modalities of the first kind.

1.1.2.2. *De Dicto* Modalities vs. *De Re* Modalities

In addition to delineating two sorts of logical modalities, Plantinga embraces the long-standing distinction between modality *de dicto* and modality *de re*. The former one is modality attributed to a proposition, whereas the latter one deals with the attribution of modal properties to objects or individuals. For instance, 'Necessarily nine is composite' is an assertion of modality *de dicto*, because necessity is attributed to the proposition ('Nine is composite'). 'Nine is necessarily composite', on the other hand, is an example of a *de re* modal statement since what it says is that the number 9 possesses the property of being necessarily (or essentially) composite (Plantinga 1974b: 9). In other

[31] Incidentally, Plantinga (1974a: 16) contends that sometimes it is a matter of philosophical controversy whether a certain proposition is broadly-logically possible. E.g., there is a disagreement with respect to whether it is possible for a person never to be conscious during their entire existence, or whether it is possible for a (human) person to exist disembodied.

words, the first type of modality concerns the modality of what is said (*dictum*), whereas the second type of modality is that of the thing (*res*). Syntactically, the *de dicto* and *de re* distinction aligns with that of scope. That is, in a *de dicto* expression, a quantifier falls within the scope of the modal operator (e.g., $\Box(\exists x)(Fx)$ (necessarily, some x is such that it is F)), while in a *de re* expression, it is the other way round (e.g., $(\exists x)(\Box Fx)$ (some x is such that it is necessarily F)).

At the heart of *de re* modal locutions, i.e., in claims that a certain object has a specific property necessarily or essentially, resides the fundamental notion that the object in question 'could not conceivably have lacked the property in question' and that 'under no possible circumstances could that object have failed to possess that property'[32] (*ibid*.: 11).

Now, the landscape of philosophical discourse reveals that essentialism – the doctrine that objects have essential properties – has often been veiled in vagueness and viewed with suspicion. Notably, Quine stood as a stern critic of what he termed 'Aristotelian essentialism'. Within his well-known objection to *de re* modality, Quine (2013 [1960]: 182–183) claims that it is difficult to make sense of an 'objective', description-independent dichotomy between necessary and contingent properties. For instance, while we can affirm that mathematicians are necessarily rational and not necessarily two-legged, and that cyclists are necessarily two-legged and not necessarily rational, quandaries arise when we consider individuals embodying both being a mathematician and being a cyclist. Quine's (*ibid*.) complaint is that 'insofar as we are talking referentially of an object, with no special bias toward a background grouping of mathematicians as against cyclists or vice versa, there is no semblance of sense in rating some of his attributes as necessary and others as contingent'. In other words, things do not possess properties necessarily in themselves (i.e., not relative to a particular description), and this is simply to say that we can only make (some) sense of *de dicto*, but not *de re* type of modality.

A comparable criticism of the concept of *de re* modality was articulated by William Kneale (1962: 630): 'It is clear that there can be no ordinary properties of which it is proper to say that they belong to any individuals with absolute necessity regardless of the way in which those individuals are

[32] In this and subsequent sections addressing Plantinga's modal metaphysics, 'could' and related expressions stand for broadly logical modalities.

selected for attention.'[33] For example, Kneale (*ibid*.: 629) states that while the number twelve is necessarily composite, it is certainly not the case that the number of the apostles is necessarily composite. Now, why does Kneale take that the number of apostles is not necessarily composite? According to Plantinga (1974b: 20), it is because he seems to think of sentences structured as '*x* has *F* essentially' as short for or a stylistic variation of the corresponding sentences of the form 'The proposition '*x* has *F*' is necessarily true'. But then this perspective, championed by both Quine and Kneale, seems to inherently presuppose a stance diametrically opposed to the essentialist agenda. As Plantinga (*ibid*.: 21) puts it, it is 'at best uncharitable as an account of what the essentialist means by his characteristic assertions'.

Be that as it may, Plantinga acknowledges that Quine's and Kneale's anti-essentialist sentiment continues to reverberate within contemporary philosophical discourse. Recognising this enduring resistance to the notion of *de re* modality, Plantinga (1974b: 29–32)[34] endeavours to elucidate *de re* assertions in terms of their *de dicto* counterparts. In this pursuit, Plantinga presents what he terms the 'kernel function' – i.e., a function that allows to formulate a *de dicto* assertion from a *de re* modal attribution. Under the assumption that an object is baptised if it has a proper name, the kernel function is defined as follows:

> For any object *x* and property *P*, if *x* and *P* are baptized, then K(*x*, *P*) is the proposition expressed by the result of replacing '*x*' and '*P*' in '*x* has the complement of *P*' by proper names of *x* and *P*; otherwise K(*x*, *P*) is the proposition that *would be* expressed by the result of the indicated replacement if *x* and *P* were baptized. (Plantinga 1974b: 32)

As can be seen from this definition, Plantinga's account relies crucially on proper names. For Plantinga, these function as demonstratives rather than expressions of characteristics of a given object;[35] proper names are such

[33] Nonetheless, an exception arises concerning what are known as categorical properties, such as being a natural number, and truistic properties, such as being prime or not prime. These properties belong necessarily to all individuals within a specific category, regardless of how these individuals are singled out for consideration (Kneale 1962: 630).

[34] Also see Plantinga's earlier work from 1969.

[35] It is vital to take into account that Plantinga rejects the Frege-Russell perspective according to which proper names function as abbreviations for definite descriptions (i.e., noun phrases in which the speaker refers to a particular object or group of objects in a unique and specific way) and treats proper names as demonstratives

names as ‘Socrates’, ‘Jim Whittaker’, and ‘Kareem Abdul-Jabbar’ (but *not* such items as ‘the teacher of Plato’, ‘the first American to climb Everest’, and ‘the premier centre of professional basketball’). Correspondingly, proper names of properties include instances like ‘masculinity’, ‘being composite’, or ‘being more than seven feet tall’, and are contrasted with ‘Jabbar’s most striking property’ or ‘David’s most endearing property’.

Let us look at an example of how *de re* modal statements can be translated into *de dicto* ones using this method. According to the definition of the kernel function provided by Plantinga, ‘Socrates is essentially snub-nosed’ is true just in case Socrates is snub-nosed and K(Socrates, snub-nosedness) is the proposition expressed by the result of replacing ‘*x*’ by a proper name of Socrates and ‘*P*’ by a proper name of the property of being snub-nosed in the sentence ‘*x* has the complement of *P*’. Assuming that ‘Socrates’ is a proper name of Socrates and that ‘snub-nosedness’ is a proper name of the property of being snub-nosed, K(Socrates, snub-nosedness) is expressed by ‘Socrates has the complement of snub-nosedness’. Therefore, ‘Socrates is essentially snub-nosed’ is true in case Socrates is snub-nosed and the proposition ‘Socrates has the complement of snub-nosedness’ is necessarily false. It is important to note that the falsity of the latter statement is to be understood as a *de dicto* assertion. In this manner, then, we achieve a *de dicto* explanation of the initial *de re* statement ‘Socrates is essentially snub-nosed’.[36]

It is crucial to bear in mind, however, that this procedure, allowing to explain *de re* modalities in terms of *de dicto* ones, is only aimed at those feeling sceptical towards the core tenets of essentialism. As previously noted, Plantinga remains unfazed in rationalising *de re* modality. According to him, there is no evident reason to perceive *de re* modal statements as inherently more enigmatic than *de dicto* modal propositions, and the kernel function in no way substantiates the claim that *de dicto* modality is somehow more basic or fundamental than modality *de re* (Plantinga 1969: 248, 256–257).

Having acquainted ourselves with Plantinga’s notion of broadly logical modalities and the distinction between *de dicto* and *de re* modal assertions, we should note that both these facets of Plantinga’s thought fully unfold only within the expansive framework of possible worlds. As we shall discover,

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instead. As we will see shortly, this is precisely what allows Plantinga to deal with the so-called problem of transworld identity (the problem of identifying one particular object or individual in distinct possible worlds).

[36] For some concerns and criticisms regarding Plantinga’s conception of the kernel function, refer to Camp 1971, Tichy 1972, Carter 1976, Haack 1976, and Oberdan 1980. Plantinga’s attempts to address certain objections can be found in his 1974b: 32–43.

Plantinga adeptly employs the idea of broadly logical modalities in conceptualising the very idea of worlds, and he provides ways to analyse *de dicto* and *de re* modal statements within the domain of possible worlds semantics. Plantinga's account of possible worlds, thus, is exactly where we now turn.

1.1.2.3. Possible Worlds

The semantic theory of possible worlds, on its own, does not answer the philosophical question concerning the nature of such worlds. Are they merely theoretical constructs, or do they enjoy genuine existence? If the latter holds, do they manifest as concrete entities, or are they abstract objects of some sort? What does it mean for something to exist in a possible world? As previously emphasised, Plantinga asserts that possible worlds semantics transcends mere formalism. He advocates for a sincere acceptance of its implications, affirming the real existence of possible worlds. What exact ontological status does Plantinga attribute to these worlds, then?

Plantinga identifies possible worlds with maximal states of affairs and thus takes them to be of abstract nature.[37] States of affairs are *ways things could have been*; in English, it is common to express them by employing gerund clauses like 'Yellow being Anne's favourite colour', 'There being unicorns', or '9 + 1 being equal to 10'. Now, some states of affairs *obtain* (are actual), while others do not (e.g., '9 + 1 being equal to 10' obtains, and 'There being unicorns' does not). Nevertheless, even states of affairs that do not happen to obtain might be possible ('There being unicorns' perhaps being one of them).

[37] Regarding the distinction between abstractness and concreteness in the context of Plantinga's thought, it is useful to look at this passage by Divers (2007: 80–81): 'While the putative distinction between abstract and concrete entities is problematic, and there is no consensus on the criteria of demarcation of the cases, Plantinga takes his worlds, other nonmaximal states of affairs, propositions and properties to be abstract rather than concrete *relative to every salient criterion of demarcation of the abstract*.' As elucidated by Divers, Plantinga holds that the existence of abstract entities, in contrast to that of concrete objects, is necessary rather than contingent. Furthermore, Divers posits that Plantinga 'entertains seriously the idea that properties and propositions, at least, are abstract in virtue of being entities (ideas) that exist in the mind of God'. This last point will bear crucial relevance in our exploration of Plantinga's pursuit to reconcile his theory of modality with the basic tenets of theism (see section 2.1.4.1). For a more thorough exploration of the dichotomy between abstract and concrete entities, refer to section 2.1.1.

Two significant aspects merit our attention here. Firstly, within Plantinga's framework, a possible world is a state of affairs that is possible precisely in the broadly logical sense. Secondly, to qualify as a possible world, a state of affairs must be *total* – that is, it must encompass all facts and circumstances constituting that particular world. In Plantinga's terminology, this means that it has to be *maximal* or *complete*; specifically, a state of affairs, denoted as *S*, achieves completeness when, for any other state of affairs *S'*, *S* either includes *S'* or precludes it (*S* includes *S'* if it is not possible (in the broadly logical sense) that *S* obtain and *S'* fail to obtain (i.e., the conjunctive state of affairs *S but not S'* is impossible), and *S* precludes *S'* if it is not possible that both of them obtain). Incidentally, the actual world is one of the possible worlds and is distinguished by the attribute of actually obtaining. In other words, the actual world can be simply described as 'the way things actually are' (Plantinga 1976: 139).

It is pivotal to observe that, in contrast to David Lewis' account of possible worlds (an exploration of which we shall undertake subsequently), Plantinga's abstractionist treatment of worlds precludes their being identified with concrete objects and prevents the whole modal discourse from being analysed reductively. That is because, as we have seen, Plantinga incorporates modal terms within the very definition of a possible world – a maximal and *possibly* obtaining state of affairs. Plantinga (1987: 212) elucidates his departure from the view that possible worlds can be 'constructed' from sets of concrete entities in the following way:

> Like propositions, possible worlds have that intentional property: a possible world is such that things are thus and so *according* to it; a possible world *represents* things as being a certain way. But no concrete object or set theoretic construction does a thing like that. So if all there are are concrete individuals and set-theoretic constructions on them, then there are no possible worlds.

Hence, contrary to Lewisian endeavours that seek reduction by defining modal discourse through non-modal language, Plantinga postulates possible worlds as inherently abstract entities, refusing to provide any sort of non-modal definition of them. Formally, it means that within this framework, the truth-conditions for modal propositions cannot be spelled out without re-introducing modal operators, and, as Menzel (2016a) aptly highlights, the extensionality of possible worlds semantics is relinquished. Now, this marks a crucial point: possible world semantics can accommodate both reductionist and non-reductionist interpretations of modality, and the reductionist

approach is tenable only if possible worlds can be defined without invoking modal concepts. As has just been explained, this is the route that Plantinga deliberately eschews.

When explaining modality *de dicto* in terms of possible worlds, Plantinga (1974b: 46, 55; 1976: 145) aligns with the canonical conception in holding that propositions are true or false *in* possible worlds. That is, a proposition is necessarily true if true in every possible world, and a proposition is possibly true if true in at least one possible world. To say that *p* is true in a world *W*[38] is to say that if *W* had been actual, *p* would have been true. In other words, the phrase 'truth in *W*' (for specific *W*) signifies a property that a proposition has if it is not possible that *W* obtains and *p* fails to be true. It is within this context that we encounter the concept of a *book*: the set of propositions true in a given world *W* is the *book* on *W*. Like worlds, books exhibit a maximality property: given any proposition *p* and book *B*, either *B* contains *p* or *B* contains ~*p* (the denial of *p*).

For the most part, however, possible worlds machinery serves as a powerful tool to explore modality *de re*. Plantinga (*ibid*.: 46–62) elucidates it by bringing together the ideas of individuals *existing* and *having properties* in worlds. Now, the claim that objects exist in possible worlds, as noted by Michael Loux (2006 [1998]: 179), might seem to imply that worlds are akin to colossal canisters containing objects, but this is not the view that Plantinga shares. Instead, he provides an account of existence in worlds that is consistent with his view of possible worlds as abstract entities. For him, to say that an object *x* exists in a world *W* is simply to say that if *W* had been actual, *x* would have existed (put differently, *x* exists in *W* if it is impossible that *W* obtains and *x* fails to exist).[39] Accordingly, to say that Socrates has the property of being snubnosed in *W* means that had *W* been actual, Socrates would have had the property of being snubnosed (or, in other words, the state of affairs *W's being actual and Socrates' not being snubnosed* is impossible).

Next, every object has some of its properties essentially and has other properties accidentally or contingently. An object *x* has a property *P* essentially iff *x* has *P* in every world in which *x* exists (thus, *x* has *P* accidentally iff *x* has *P* in the actual world and there is a world in which *x*

[38] It should be noted that a common convention in modal logic and possible worlds semantics is to use '*w*' and '*W*' to denote specific worlds and the set of possible worlds, respectively; this is the notation we employed in section 1.1.1.3. Here, however, '*W*' is used to denote a particular world, as this is how Plantinga presents his theory.

[39] Here, the notion of existence *simpliciter* is basic, and existence-in-*W* is explained in terms of it (Plantinga 1974b: 46–47).

exists but lacks *P*). Some properties are *trivially essential* – these are properties that every object possesses in every world in which it exists (e.g., being self-identical, being coloured if red, being something or other). Under the assumption that existence is a property, it also is, following Plantinga, a trivially essential property, for it is obvious that every object exists in every world in which it exists.[40] Nevertheless, there are also properties that are possessed essentially by objects and that are not *trivially* essential. For instance, being an integer, being a number, and being an abundant number are properties that the number 12 has essentially and that are not trivially essential.

Plantinga (*ibid*.: 62–65) also acknowledges the existence of a distinctive class of properties called *world-indexed* properties; these are properties expressible by a predicate of the form *p-in-W*. For instance, given that in the actual world α, Socrates has the property of being snubnosed, Socrates instantiates the property of *being-snubnosed-in-α*. It is noteworthy that although being snubnosed is an accidental property of Socrates, he bears *being-snubnosed-in-α* in *every* world in which he exists, and thus *being-snubnosed-in-α* is an essential property of Socrates (apparently, the same holds for all of a thing's world-indexed properties – they are all essential to it). This also means that, for each world *W*, Socrates has doubly indexed property of *being-(snubnosed-in-α)-in-W*, and it appears that the potential for the generation of properties through such 'iteration' is boundless (Divers 2007: 80).

In addition to world-indexed properties, a pivotal component of the Plantingian modal metaphysics is his notion of essence (also referred to as *haecceity* or *thisness*). We have previously observed Plantinga's differentiation between an individual's essential and accidental properties. However, he delves deeper, positing the existence of *essences*, representing the unique natures of individuals. Plantinga defines essence as a property such that the entity possesses it essentially, and necessarily, nothing other than the entity has it. To illustrate, a property *E* is an essence of Socrates if Socrates has *E* essentially, and nothing different from Socrates has *E* in any possible world – this makes *E* a property that is both essential and necessarily unique to Socrates.

It is important to note that such a conception leaves room for unexemplified essences. As Plantinga (1976: 155) explains, contrary to the

[40] Plantinga (1974b: 61) underscores a certain distinction here. While everything has existence essentially, only a select few – properties, propositions, numbers, perhaps also God – possess *necessary existence*. This is the property an object has if it exists in every possible world.

contingent existence of Socrates himself, his essence is not a contingent being; properties, like propositions and possible worlds, exist necessarily. Therefore, if Socrates had not existed, his essence would have remained unexemplified but not non-existent. *Socrateity*, an essence of Socrates, thus does not have essentially the property of being exemplified by Socrates – it is not exemplified in worlds where he does not exist. Eventually, Plantinga insists that every object has many individual essences. This stems from Plantinga's notion of world-indexed properties: suppose *W* is a possible world in which Socrates has property *P*, and that Socrates is the only individual in *W* that exemplifies *P*. It means that, beyond being essential to Socrates (as evidenced by all world-indexed properties), *being-P-in-W* is also necessarily unique to Socrates. Consequently, *being-P-in-W* counts as an individual essence of Socrates.

At this point, however, a significant concern emerges. If we uphold that Socrates exists and has properties in different possible worlds, then we can ask what exactly allows us to *identify* Socrates across these distinct worlds. In other words, how do we discern Socrates from other individuals existing in those worlds? If we fail to furnish the criteria for the transworld identification of individuals, it appears scarcely plausible to even understand claims about someone having properties in distinct possible worlds, for we cannot be certain about which exact individual we are talking. Plantinga (1974b: 93) puts the problem in the following manner:

> Let us suppose again that Socrates exists in some world *W* distinct from this one – a world in which, let us say, he fought in the battle of Marathon. In *W*, of course, he may also lack other properties he has in this world – perhaps in *W* he eschewed philosophy, corrupted no youth, and thus escaped the wrath of the Athenians. <…> But then we must ask ourselves how we could possibly *identify* Socrates in that world. How could we *pick him out*? How could we *locate* him there? How could we possibly tell which of the many things contained in *W* is *Socrates*? If we try to employ the properties we use to identify him in *this* world, our efforts may well end in dismal failure – perhaps in that world it is Xenophon or maybe even Trasymachus who is Plato's mentor and exhibits the splendidly singleminded passion for truth and justice that characterizes Socrates in this. But if we cannot identify him in *W*, so the argument continues, then we do not really understand the assertion that he exists here. <…> In order to make sense of such talk, we must have a *criterion* or *principle* that enables us to identify Socrates from world to world.

Perhaps one may glimpse from the tone of Plantinga's writing here that he is somewhat sceptical of the very problem at hand. Indeed, we might posit that Plantinga opts to dismiss the problem of transworld identity rather than solve it. This is because, as Plantinga takes it, the problem itself is fallaciously framed: when philosophers enquire into how we can recognise Socrates across different possible worlds, what they appear to mean is that we first have to find a possible world *W* in which there exists some individual *x* and then somehow establish that *x* is identical to Socrates. Such formulation of the problem, as Plantinga puts it, seems to arise from a picture-like thinking, wherein we envisage ourselves somehow 'peering – through a Jules Verne-o-scope, perhaps – into another world' (*ibid*.: 94). Nevertheless, this becomes absurd in the context of Plantinga's theory of modality, for, as previously elucidated, Plantinga takes worlds to be abstract (and therefore nonspatial) entities. They are not islands or planets to be explored through telescopic means; they enjoy abstract nature, which has nothing to do with the possibility of being empirically observed.

Regarding the problem of transworld identity, Plantinga therefore concurs with Kripke in maintaining that we merely stipulate that Socrates *himself* exists and has specific properties in a world *W*. Naturally, in such a case, questions about identity criteria do not even arise. It is not like we *first* observe multiple worlds and *then* try to find Socrates in them; it is exactly the other way round: we *first* think of Socrates and *then* specify some world *W* as involving his existence. This idea is linked closely with that of proper names: in section 1.1.2.2, we saw that Plantinga perceives them as demonstratives rather than expressions of an object's characteristics. Given that a proper name is anchored to an individual, any subsequent uses of that name function to pick out this same individual in any possible world. Consequently, this renders any contingent characteristics that may have been used in specifying the individual by definite description irrelevant (see Norton 1980: 176).[41,42]

There is, however, yet another profound question central to the metaphysics of modality. Consider a person whose existence is possible but who is distinct from every individual who exists, has ever existed, or will ever exist. Is it the case that there really *is* such a person? In other words, are there things that are *merely possible*? Plantinga's (1974b: ch. 7 and 8; 1976)

[41] As explained further by Bryan Norton (1980: 176), this does not preclude the possibility for individuals to learn the use of a name through a description. Yet, such a method of learning is derivative of some prior ostensive baptism.

[42] It should be clear from what has already been said that Plantinga dismisses the thesis championed by David Lewis that individuals are world-bound, i.e., exist in only one possible world. A thorough exposition of Lewis' theory is available in section 2.2.2.

response to this enquiry is negative: everything that exists does so actually – existence *simpliciter* is identical to actual existence. However, this stance seems to confront a challenge with respect to worlds: namely, what are we to make of possible worlds that are non-actual, then? How can such worlds be said to exist if we reject the idea that there are merely possible objects? At this point, the distinction between two different senses of actuality becomes crucial.[43] For those rejecting mere possibilia, many possible worlds are not actual in the sense of *failing to obtain*; nonetheless, they all actually exist in the sense that existence as such equals actual existence. In this regard, Plantinga again opposes David Lewis, a possibilist, who posits that actual existence is *not* existence *simpliciter* and that there exist possible but non-actual objects.

It is also to be noted that alongside embracing actualism, or the belief that all existence is actual existence, Plantinga (1983: 4) espouses what is called *serious actualism*: the view that nothing possesses properties in a world in which it does not exist. In other words, this is the position that an object must exist in a world in order to exemplify properties there.[44] Nevertheless, as noticed by Menzel (2024), whether or not to adopt serious actualism is for the most part a domestic dispute *among* actualists (this remark does not mean that the fact that Plantinga embraces serious actualism is somewhat unimportant – as we shall see, this particular facet of Plantinga's theory holds immense relevance in the context of his modal ontological argument).

When considering the viewpoint of an actualist as such, however, another serious challenge emerges. The Kripke semantics, at its surface, embodies a possibilist semantics, since we can identify within it a set of all possible objects, actual and non-actual. This raises a fundamental question for actualists: how should they interpret the domains of possible worlds? In other words, if they maintain the belief that for each world W, there exists a set $\psi(W)$ that contains just those objects that exist in W, confusion emerges, since, seen from the actualist perspective, the domain of any possible world W is a subset of $\psi(\alpha)$. But, of course, actualist do not want to deny that there *could have been* an object distinct from anything that exists actually (that is, exists in α). Hence the dilemma: the actualist must hold that $\psi(W)$ is a subset of $\psi(\alpha)$, *despite the fact* that W includes the existence of an object not existing in α.

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[43] Cf. Hoffman 2002: 67.

[44] Serious actualism is also known as property actualism (Fine 1985), the (modal) existence requirement (Yagisawa 2005; Caplan 2007), and the being constraint (Williamson 2013: §4.1).

Plantinga's (1976) remedy to this predicament lies in his notion of essences. Recall that, as per Plantinga's framework, Socrates is a contingent being, while his essence enjoys necessary existence – that is, exists in every possible world. How does this help the actualist to deal with the statement that there could have been an object distinct from each object that actually exists? Plantinga's answer is as follows: 1) such a statement is true iff there is a world where 'There is an object that does not exist in α' is true; 2) 'There is an object that does not exist in α' is true in a world *W* iff there is an essence that is exemplified in *W* but not in α. In other words, 'There could have been an object distinct from each object that actually exists' is true iff there is at least one essence that is exemplified in some world but not exemplified in fact. Plantinga's solution, therefore, is that we can speak of an object that does not actually exist by referring to its essence. In such a way, as Menzel (2024) puts it, Plantinga can *represent* the possibilist's non-actual worlds and their merely possible inhabitants while at the same time avoiding any commitments to possibilism, for recall once again: Plantinga does not state that there exists a possible but non-actual *individual* – rather, he simply claims that there exists an *essence* of such an individual and that it is exemplified in some possible world distinct from the one that happens to obtain.[45]

One final word about Plantinga's theory of modality. When thinking about possibility and necessity in terms of possible worlds, we can ask whether there is such a thing as *relative possibility*. That is, is it the case that what is possible changes from world to world? Or, as Plantinga (1974b: 54) puts it, 'are there states of affairs that in *this* world have the property of obtaining in some possible world or other, but in *other* worlds lack that property'? Plantinga's answer is that we can simply 'see' that there are no such states of affairs: according to him, if a state of affairs *S* is possible, then it is *necessarily possible* – i.e., possible with respect to every possible world. From this, it follows that 1) every possible world is possible with respect to every possible world, 2) any state of affairs possible with respect to at least one possible world is possible with respect to every possible world, and 3) every world possible with respect to at least one world is possible with respect to every world.[46]

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[45] It is for this reason that, in the words of Karen Bennett (2006), essences serve for Plantinga as 'proxies' for possible but non-actual objects.

[46] In this way, Plantinga commits himself to the view that the correct system of modal logic must be at least as strong as S5. For recall that, within S5, every world has access to every world, which, in terms of relative possibility, means that every world is possible relative to every world.

Now, we could probably dive even more deeply into Plantinga's account of possible worlds, essences and related notions; perhaps we could also explore the contours of relevant criticisms and objections to it. Yet, we have already covered enough to conclude that this marks the end of our primal exploration of the Plantingian approach, and we shall abstain from delving into its critique until the next chapter. For now, suffice it to say that while Plantinga's abstractionist stance may not align with everyone's philosophical tastes – a sentiment echoed by Menzel (1990: 365), branding it as 'unduly baroque' – it is undoubtedly one of the most fully developed theories of possible worlds, offering a rich and detailed understanding of modal reality. Besides, the Plantingian metaphysics of modality is deeply intertwined with his broader work in analytic philosophy, particularly in epistemology and the philosophy of religion. It is the latter that shall next claim our focus: having unravelled the principal facets of Plantinga's treatment of possible worlds, we are now ready to meet his renowned modal ontological argument.

1.2. The Modal Ontological Argument

In his *God, Freedom, and Evil* (1974a) and *The Nature of Necessity* (1974b), Plantinga proposed what he called a 'victorious' or 'triumphant' version of the ontological argument.[47] Its presentation succeeds a detailed discussion and critique of earlier statements of the argument as given by Anselm of Canterbury, Norman Malcolm, and Charles Hartshorne.[48] According to

[47] As alluded to in the introductory part of this dissertation, the distinctive feature of ontological arguments is that they are meant to establish the existence of God in terms of pure logic (see Fitting 2002: 133). In other words, the idea behind ontological proofs is that we do not need to explore the world in order to come to know that God exists – we only need to apply correct principles of reasoning.

Now, while it is commonly held that the first ontological argument was formulated by Anselm of Canterbury, anticipations of it can be traced back to antiquity, specifically, to the concept of a perfect spherical being attributed by some scholars to Parmenides, and the viewpoint ascribed to Xenophanes that God possesses a spherical nature. These early ideas convey the notion that only a perfect, often symbolised as spherical, God can exist. By establishing a connection between perfection and necessity, such notions can be regarded as early precursors to subsequent attempts at constructing ontological arguments grounded in the concepts of perfection and necessary existence.

[48] Remarkably, an influential modal ontological argument for the existence of God has also been provided by Kurt Gödel (1995 [~1941]). The argument, formalised in higher-order modal logic, has as its conclusion that there exists a God-like being, or a being that possesses all positive properties. This version of the ontological proof is typically taken to be a descendant of that of Gottfried Leibniz (1989a

Plantinga, all previous versions contain some fatal flaws, therefore, it is imperative to seek a novel and more successful formulation.

That having been said, Plantinga states that no philosopher to date has presented a definitively conclusive and universally compelling refutation of the ontological argument. It means that Plantinga is in no way convinced by Kant's assertion that existence is not a (real) predicate and that no existential propositions are necessary (refer to Kant 1929 [1781/1787]: 500–507). According to Plantinga (1974b: 196–197), Kant never clearly delineated a sense of 'is a predicate' such that it is evident both that existence is truly not a predicate and that Anselm's argument requires it to be so. Moreover, Anselm's argument is intended precisely to show that at least one existential proposition *is* necessary.[49] In spite of this, however, Plantinga has his own reasons not to treat Anselm's argument as a successful piece of reasoning. Let us first recall the latter in its entirety:

> Therefore, Lord, you who grant understanding to faith, grant that, insofar as you know it is useful for me, I may understand that you exist as we believe you exist, and that you are what we believe you to be. Now we believe that you are something than which nothing greater can be thought. So can it be that no such nature exists, since "The fool has said in his heart, 'There is no God'"?[50] But when this same fool hears me say

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[1676], 1989b [1686]) in the sense that both proofs share the same two-part structure: prove that God's existence is necessary if possible, and prove that God's existence is possible (cf. Wolfgang Lenzen (2017: 86), who claims that 'according to Leibniz, the traditional proof establishes the truth of the *conditional* statement 'If God is possible, then God exists'. But since the possibility, i.e. the self-consistency, of an arbitrary concept *C* may not generally be taken for granted, a *complete* demonstration requires in addition a proof of the *antecedent* 'God is possible'' (emphasis in the original)).

Nevertheless, let it be indicated that modal ontological arguments and Gödelian-type arguments are sometimes specified as two different kinds of ontological argument (see, e.g., Oppy et al. 2023). Andrzej Biłat (2021: 2728, fn. 1) states that the term 'modal ontological argument' is generally used in the philosophical literature to refer to zero-order and first-order arguments rooted in the writings of Hartshorne, Malcolm, and Plantinga, and these arguments are to be distinguished from Gödelian-type proofs formulated within second or higher-order modal theories. On the other hand, Biłat admits that the term 'modal ontological argument' could be used in the broader sense of 'ontological argument using modal concepts', and in such a case, Gödelian-type arguments also fit in.

[49] See Plantinga 1968: ch. 2 for a more exhaustive picture of Plantinga's critique of Kant's remarks on the ontological argument.

[50] Psalm 14:1 (13:1), 53:1 (52:1). The citations adhere to the New Revised Standard Version of the Bible, with references in parentheses referring to the Latin Vulgate.

> "something than which nothing greater can be thought," he surely understands what he hears; and what he understands exists in his understanding,[51] even if he does not understand that it exists [in reality]. For it is one thing for an object to exist in the understanding and quite another to understand that the object exists [in reality]. When a painter, for example, thinks out in advance what he is going to paint, he has it in his understanding, but he does not yet understand that it exists, since he has not yet painted it. But once he has painted it, he both has it in his understanding and understands that it exists because he has now painted it. So even the fool must admit that something than which nothing greater can be thought exists at least in his understanding, since he understands this when he hears it, and whatever is understood exists in the understanding. And surely that than which a greater cannot be thought cannot exist only in the understanding. For if it exists only in the understanding, it can be thought to exist in reality as well, which is greater. So if that than which a greater cannot be thought exists only in the understanding, then the very thing than which a greater cannot be thought is something than which a greater can be thought. But that is clearly impossible. Therefore, there is no doubt that something than which a greater cannot be thought exists both in the understanding and in reality. (Anselm of Canterbury 2007 [1077–1078]: 81–82)[52]

In accordance with the established convention, Plantinga (1974a: 87–88) frames Anselm's line of reasoning as a *reductio ad absurdum* argument. In other words, Plantinga treats Anselm's argument as an endeavour to derive an absurdity from the proposition that there is no God (where the term 'God' is used as an abbreviation for Anselm's phrase 'the being than which nothing greater can be thought'). Herein lies a restatement of Anselm's reasoning as provided by Plantinga:

(1) God exists in the understanding but not in reality.
(2) Existence in reality is greater than existence in the understanding alone (premise).
(3) God's existence in reality is conceivable (premise).
(4) If God did exist in reality, then He would be greater than He is (from (1) and (2)).

[51] As specified by Thomas Williams (the translator), 'understanding' here stands for the Latin *intellectus*.
[52] This passage constitutes ch. 2 of Anselm's *Proslogion*.

(5) It is conceivable that there is a being greater than God is ((3) and (4)).

(6) It is conceivable that there be a being greater than the being than which nothing greater can be thought ((5) by the definition of 'God').

But, surely, (6) is contradictory. Thus,

(7) It is false that God exists in the understanding but not in reality.

Now, Plantinga (*ibid*.: 98–99) states that the most perplexing aspect of Anselm's reasoning is its second premise, asserting that existence in reality is greater than existence in the understanding alone. Plantinga aims to interpret this averral of Anselm in terms of the framework of possible worlds: according to Plantinga's understanding, Anselm may imply that for any being *x* and worlds *W* and *W'*, if *x* exists in *W* but not in *W'*, then *x*'s greatness in *W* exceeds *x*'s greatness in *W'*. A more modest interpretation could propose that if a being *x* does not exist in a world *W* (and there is a world in which *x* does exist), then *there is at least one world* in which the greatness of *x* exceeds the greatness of *x* in *W*. For instance, let us consider the scenario where Pope Francis does not exist in a particular world, denoted as *W*. Anselm's proposition then implies that there is at least one possible world where Pope Francis possesses a degree of greatness exceeding the degree of greatness he has in *W*.

By relying on these insights, Plantinga (*ibid*.: 99–104) offers yet another restatement of Anselm's argument:

(8) God does not exist in the actual world.

(9) For any being *x* and world *W*, if *x* does not exist in *W*, then there is a world *W'* such that the greatness of *x* in *W'* exceeds the greatness of *x* in *W* (the new version of premise (2)).

(10) There is a possible world in which God exists (premise (3) restated in terms of possible worlds).

(11) If God does not exist in the actual world, then there is a world *W'* such that the greatness of God in *W'* exceeds the greatness of God in the actual world (from (9)).

(12) So there is a world *W'* such that the greatness of God in *W'* exceeds the greatness of God in the actual world ((8) and (11)).

(13) 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 ((12)).

(14) Hence it's possible that there be a being greater than God is ((13)).

(15) So it's possible that there be a being greater than the being than which it's not possible that there be a greater ((14), replacing 'God' by what it abbreviates).

But surely

(16) It's not possible that there be a being greater than the being than which it's not possible that there be a greater.

Thus, proposition (8), with the help of premises (9) and (10) appears to imply (15), which, according to (16), is necessarily false. Consequently, we are meant to ascertain the falsehood of (8), concluding that the actual world contains a being than which it is not possible that there be a greater – i.e., that God exists.

At this point, Plantinga offers two observations. Firstly, he raises a critical question regarding (9). Apparently, this premise is about beings and worlds. Yet, what do quantifiers 'for any being' and 'for any world' range over? Plantinga claims that if they range over possible worlds and *actually existing* beings, then the inference to (11) requires an additional premise – specifically, that God is an actually existing being. Nonetheless, this very proposition is intended to serve as the conclusion of the argument, thus rendering it unsuitable as a premise. Perhaps, then, the quantifiers range not only over actually existing beings, but also over *possible beings* – i.e., beings that may not in fact exist but *could* exist. However, recall that Plantinga rejects the thesis that there are merely possible beings. Assuming that there are such beings, in Plantinga's opinion, entangles us in a range of 'knotty' issues: what sorts of things are merely possible beings? Do they possess definable properties? How are we to think of them, and what is their status? What compelling reasons do we have to postulate the existence of such beings at all?

Nevertheless, the problem at hand might not be as perturbing as it might first appear. As hinted by Plantinga, it could in fact be circumvented by translating ostensible talk about merely possible objects into talk about properties and the worlds in which they are either instantiated or not.[53] Still, Plantinga posits another, as he terms it, 'fatal' observation concerning Anselm's argument. As previously stated, Anselm speaks of an unsurpassably great being – that is, a being whose greatness is not excelled by any being in any world. Put differently, this being possesses a degree of greatness so profound that no other being in any world surpasses it. But then the question arises: *where* does this being have that degree of greatness? In the words of Plantinga, (16) allows for two different interpretations. On the one hand, it could mean 'it's not possible that there be a being whose greatness surpasses that enjoyed by the unsurpassably great being *in the worlds where its*

[53] We have already seen that this is exactly the strategy that Plantinga employs when dealing with the statement that there could have been an object distinct from anything that actually exists.

greatness is at a maximum'. On the other hand, yet, it could be read as 'it's not possible that there be a being whose greatness surpasses that enjoyed by the unsurpassably great being *in the actual world*'.

Now, here lies the conundrum: suppose we interpret (16) in the first way. Then, as Plantinga maintains, (16) simply does not contradict (15). For (15) does not say that there is a possible being whose greatness exceeds that enjoyed by the greatest possible being *in a world where the latter's greatness is at a maximum*. Rather, it posits only that there is a possible being whose greatness exceeds that enjoyed by the greatest possible being *in the actual world* (where, for all we know, its greatness is *not* at a maximum). Therefore, if we interpret (16) in the first way offered, the *reductio* argument fails.

What if we read (16) in the second way? If we opt for this, then (16) really does contradict (15), allowing the argument to hold its ground. Yet, the problem, according to Plantinga, is that we simply lack compelling justification for this particular interpretation. For what we know is that among the possible beings, there is one whose greatness *in some world or other* is absolutely maximal. From this fact alone, however, it does not follow that this being possesses that degree of greatness *in the actual world*. Therefore, Plantinga concludes that, under either interpretation, Anselm's argument falls short of its mark.[54]

Still, there are many other versions of the ontological argument. While in the eighteenth and nineteenth centuries, due to the huge influence of Kant's criticisms, it might have seemed that the ontological argument had been officially proclaimed a failure, the middle of the twentieth century witnessed a new wave of its revival. Here, significant contributions were made by Professors Malcolm and Hartshorne, who presented contemporary adaptations of the argument. These philosophers contended that Anselm's *Proslogion* contained two distinct versions of the ontological argument, and that a comprehensive grasp of Anselm's reasoning necessitated consideration of both. As articulated by Hartshorne (1965: 11), this stands as a pivotal oversight perpetuated by many philosophers:

> Of those who claim to demonstrate that the argument is a mere sophistry, the majority appear to have read the first page or so (Chapter II), or at least a paraphrase of it in some history, but one would be hard put to it in most cases to furnish evidence that they had read more. <…> Does the reader not see a difference which is more than rhetorical between (1) 'that

[54] Plantinga notes that his criticism of Anselm's ontological argument closely aligns with the analysis put forth by David Lewis (1970).

> which exists in reality as well as in the mind is greater than that which exists in the mind alone', and (2) 'that whose nonexistence cannot be conceived is greater than that whose nonexistence can be conceived'? This is the point of difference between the reasoning of Chapter II and that of Chapter III.

Malcolm (1960: 44), in turn, wrote that 'Anselm's ontological proof of *Proslogion* [Chapter] 2 is fallacious because it rests on the false doctrine that existence is a perfection'. In other words, both Malcolm and Hartshorne maintain to have detected the second ontological argument in *Proslogion* – i.e., the argument grounded in the belief that *necessary existence* (rather than existence *simpliciter*) is a perfection or a great-making property (as noted by Plantinga (1974b: 212), this means that necessary existence is one of the qualities that must be considered in comparing a pair of beings with respect to their greatness). Thus, Malcolm (1960: 49) states:

> What Anselm has proved is that the notion of contingent existence or of contingent nonexistence cannot have any application to God. His existence must either be logically necessary or logically impossible. The only intelligible way of rejecting Anselm's claim that God's existence is necessary is to maintain that the concept of God, as a being a greater than which cannot be conceived, is self-contradictory or nonsensical. Supposing that this is false, Anselm is right to deduce God's necessary existence from his characterization of Him as a being a greater than which cannot be conceived.

Just as before, Plantinga aims to represent this idea in terms of possible worlds semantics. In Plantinga's (1974b: 212–213) words, the idea that the maximum degree of greatness includes necessary existence translates into the language of possible worlds as the idea that a possible being has the maximum degree of greatness in a given world only if it exists in that world and furthermore exists in every other world as well. Accordingly, Plantinga states Malcolm-Hartshorne's version of the ontological argument[55] as follows:

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[55] Despite the fact that Plantinga amalgamates Malcolm's and Hartshorne's presentations of the ontological argument, for the sake of precision, it should be noted that their approaches exhibit subtle differences. For instance, in contrast to Malcolm, Hartshorne (1962: 50–51) presents a *formalised* version of Anselm's argument. Hartshorne there employs what he calls 'Becker's postulate': the principle that $\sim\Box p \rightarrow \Box\sim\Box p$ (a variant of S5's $\Diamond p \rightarrow \Box\Diamond p$, stating that modal status

(17) There is a world *W* in which there exists a being with maximal greatness.

(18) A being has maximal greatness in a world only if it exists in every world.

Therefore, *W* includes the existence of a being with maximal greatness who exists in every world. This means that it is impossible in *W* that such a being does not exist. But what is impossible does not vary from world to world; hence,

(19) There is a being with maximal greatness in the actual world.

What this argument shows is that if it is even *possible* for God (so conceived) to exist, then it is true, and even necessarily true, that he does exist. Nevertheless, Plantinga announces that this version of the argument fails too. For, according to him, just because a being is maximally great in some world *W*, it does not follow that this being is maximally great in *every* world in which it exists. More importantly, even if we can claim that a being which is maximally great in *W* exists in our world, it does not mean that this being is *maximally great in our world*. In other words, Plantinga asserts that all we have shown so far is that this being might have the maximum degree of greatness in some world *W* while being 'pretty insignificant' in the actual world. However, for Plantinga, it is crucial to establish that there is a being that *actually* enjoys maximal greatness. Plantinga's own formulation of the ontological argument is thus aimed at remedying this flaw.

Plantinga begins by distinguishing between a being's excellence and its greatness. According to Plantinga (1974b: 214), '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'. This means, in turn, that the limiting degree of greatness (i.e., maximal greatness) would be enjoyed in a given world *W* only by a being who has maximal excellence in *W* and in every other possible world as well. Also, given the fact that, for Plantinga, a being has no properties (and *a fortiori* no excellent-making properties) in a world in which it does not exist, it turns out that neither existence nor necessary existence

is always necessary). Furthermore, it is noteworthy that for a fuller comprehension of Hartshorne's interpretation of the ontological argument, it shall be considered in the context of his development of process theology (an account seeking to explain the divine in terms of the notions of change and becoming and thereby departing from classical theism, which typically portrays God as unchanging and immutable) (see Hartshorne 1941, 1944, 1953, 1967a, 1967b, 1984).

function as perfections or great-making properties in his argument but rather as *necessary conditions* for perfection.[56]

By relying on the premise that an entity possessing maximal greatness is possibly exemplified, Plantinga aims to show that such a being actually exists. Here is Plantinga's (*ibid*.: 214–216) semantic proof:

(20) The property *has maximal greatness* entails[57] the property *has maximal excellence in every possible world*.

(21) *Maximal excellence* entails *omniscience*, *omnipotence*, and *moral perfection*.

(22) *Maximal greatness* is possibly exemplified.

Now, for any property *P*, if *P* is possibly exemplified, then there is a world *W* and an essence *E* such that *E* is exemplified in *W*, and *E* entails *has P in W*. Therefore

(23) There is a world *W** and an essence *E** such that *E** is exemplified in *W** and *E** entails *has maximal greatness in W**.

If *W** had been actual, *E** would have been exemplified by an object that had maximal greatness and hence (by (20)) had maximal excellence in every possible world. That is, if *W** had been actual, the proposition

(24) For any object *x*, if *x* exemplifies *E**, then *x* exemplifies the property *has maximal excellence in every possible world*

would have been necessarily true. But what is necessarily true does not vary from world to world. Hence (24) is simply necessary.[58] So

(25) *E** entails the property *has maximal excellence in every possible world*.

Since a being has a property in a world *W* only if it exists in that world, *E** entails the property *exist in every possible world*. Hence, if *W** had been actual, *E** would have been exemplified by something that existed and exemplified it in every possible world. Thus

(26) If *W** had been actual, it would have been impossible that *E** fail to be exemplified.

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[56] As pointed out by John Wingard (1993: 50), this fact 'should remove at least some of the uneasiness which many feel about treating *existence* as a property, and especially as a great-making property'.

[57] A property *P* entails a property *Q* if there is no world in which there exists an object *x* that has *P* but lacks *Q*.

[58] The principle that if something is possibly necessarily true, then it is necessarily true ($\Diamond\Box p \rightarrow \Box p$) follows as a corollary of S5's characteristic axiom, which states that if something is possibly the case, then it is necessarily possibly the case ($\Diamond p \rightarrow \Box\Diamond p$).

Again, what is impossible does not vary from world to world. Hence, it is *in fact* impossible that *E** fail to be exemplified. Therefore, *E** is exemplified. In other words,

(27) There exists a being that has maximal excellence in every world.

That is, there actually exists a being that is omniscient, omnipotent, and morally perfect; it exists and has these properties in every possible world. This being is God.

Besides that, Plantinga offers a somewhat simpler version of the same argument. Based on the assumption that *unsurpassable greatness* is equivalent to *maximal excellence in every possible world*, the argument goes like this:

(28) There is a possible world in which unsurpassable greatness is exemplified.

(29) The proposition *a thing has unsurpassable greatness iff it has maximal excellence in every possible world* is necessarily true.

(30) The proposition *whatever has maximal excellence is omnipotent, omniscient, and morally perfect* is necessarily true.

Now, we might say that *P* is a universal property iff *P* is instantiated in *every* world or in *no* world. Clearly, the property *possesses unsurpassable greatness* is universal in this sense.[59] From (28) and (29), it follows that

(31) *Possesses unsurpassable greatness* is instantiated in every world.

But if so, it is instantiated in the actual world as well. Therefore, there actually exists a being who is omnipotent, omniscient, and morally perfect and who exists and has these properties in every world.[60]

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[59] Relying once again on the principle that what is necessary or impossible does not vary from world to world, it becomes apparent that the property of possessing unsurpassable greatness (having maximal excellence in every possible world) cannot be instantiated in some worlds while not in others.

[60] Naturally, there are even simpler articulations of Plantinga's modal ontological argument as proposed by other authors. For instance, Edward Lowe (2013 [2007]: 398–399) has advanced the following rendition:

(1) God is, by definition, a maximally great being and thus a being whose existence is necessary rather than merely contingent.

(2) God, so defined, *could* exist; in other words, he *does* exist in *some* possible world.

(3) Suppose that *w* is a possible world in which God, so defined, exists: then it is true in *w*, at least, that God exists there and, being God, exists there as a *necessary* being.

(4) But a necessary being is one which, by definition, exists in *every* possible world if it exists in *any* possible world.

(5) Hence, the God who exists as a necessary being in *w* is a being that exists in *every* possible world, including *this*, the actual world.

(6) Therefore, God exists in the actual world; he actually exists.

As (29) and (30) are true by definition, the crux of the matter revolves around the truth or falsity of (28). In fact, many consider this to be the Achilles heel of the argument, for it is not clear what evidence we (can) have to affirm this proposition. Plantinga (*ibid*.: 220) himself claims that there is nothing irrational in accepting it, thereby implying that it is not irrational to accept the argument's conclusion either.[61] While acknowledging that, in many cases, those open the possibility of a maximally great being are already swayed towards the truth of theism, Plantinga thinks that it not *need* be so: i.e., someone could find this premise reasonable *without* presupposing that God actually exists.[62]

There are, of course, other issues related to Plantinga's version of the ontological argument, and it is legitimate to say that the question of its tenability is far from settled. Here, however, we will not enter the ongoing debate about whether the argument is sound or persuasive, and we will delay the analysis of its main criticisms until the last chapter of this dissertation. For the present, we shall shift our focus to yet another and somewhat neglected problem related to Plantinga's line of reasoning: as I will try to show forthwith, this problem, although practically overlooked, holds profound significance when evaluating the argument's 'victory' in the broadest sense of the word.

1.3. The Problem with the Modal Ontological Argument

The majority of discussions surrounding the Plantingian modal ontological argument have been devoted to the question of its soundness (i.e., whether the conclusion follows necessarily from the premises and the latter are true). This issue has garnered considerable scholarly attention, with notable contributions from van Inwagen 1977; Tooley 1981; McGrath 1990; Forgie 1991; Sennett 1991; Rowe 2009; Pruss 2010; Rasmussen 2018; Engel 2020; Goldschmidt 2020; and Erasmus 2022. The central aim of these works is to investigate whether there are sufficient grounds to admit the so-called *possibility premise*

[61] Assuming that the argument is formally valid (i.e., the conclusion follows necessarily from the premises). If we follow Plantinga in maintaining that the correct modal logic for what he terms broadly logical modalities must be at least as strong as S5 (i.e., that all worlds are accessible from each other), the argument indeed enjoys validity.

[62] Interestingly, Plantinga has also defended the view that the belief in God can be properly basic and rational *even in the absence* of strict deductive proofs. Still, this does not mean that, according to him, there are no good theistic arguments or that they are futile (refer to Plantinga 2007: 209 for his exploration of various purposes such arguments serve).

(the premise stating that the existence of a maximally great being is possible) and whether this can be done in a non-circular manner.

Yet, there is another problem relevant in this context, and, unlike the question of the soundness of the modal ontological argument, this problem has received limited attention within the scholarly community thus far. Assuming that the argument is sound and that God really exists, a crucial question arises: what is the relationship between God's existence and the modal principles Plantinga advocates? Is the modal reality *implied* by the Plantingian modal ontological argument compatible with the basic tenets of theism itself? In other words, *in case* the argument is sound and God really exists, there should not be any conflict between the existence of God and the modal principles used in the formulation of the very argument. Therefore, a lingering question here is that of *which theory of modality* should be adopted in the context of this argument. As already mentioned, there has been almost no debate about this problem, save for the exceptions of Davis 2008 and Parent 2016.[63]

We have already gleaned that Plantinga's own theory of modality is anchored within the possible worlds framework, wherein worlds are conceived as abstract states of affairs. This is thus a form of the so-called modal abstractionism – the view that possible worlds are abstract, i.e., immaterial and non-spatiotemporal objects representing the ways the world could be.[64,65] If we embrace this particular conception of modality, it follows that, *in case* the modal ontological argument is sound and a maximally great being indeed exists, this being must coexist in some manner with the array of abstract possible worlds (for recall that Plantinga takes possible worlds semantics seriously and holds that it is ontologically committing). However, can we convincingly demonstrate the feasibility of such a coexistence? Is the

[63] A recent work by Sijuwade (2023) shall also be mentioned here. Also see fn. 140.

[64] Other prominent proponents of modal abstractionism include Adams 1974, Stalnaker 1976, Kripke 1980, Chisholm 1981, and Pollock 1984. A comprehensive exploration of modal abstractionism is undertaken in section 2.1.2.

[65] The view that possible worlds are some sort of abstract objects is famously called by David Lewis (1986: 136) *ersatz modal realism*. Ersatz modal realism posits that concrete possible worlds can be replaced (the term *ersatz* comes from the German word for substitute or replacement) by abstract entities such as sets, properties, linguistic constructs, and the like. The key motivation behind ersatz modal realism is to avoid what some philosophers see as the metaphysical extravagance of Lewis' own modal realism, which postulates a plurality of concrete worlds existing in the very same sense as our world does. In other words, ersatz modal realism aims to provide a more moderate account of modality while still accommodating our modal intuitions (it is for this reason that this view is also sometimes called *moderate modal realism*).

endeavour to reconcile God's existence with a multiplicity of abstract worlds truly viable?

Even though Plantinga has not addressed the question precisely in the context of his modal ontological argument, this is not to say that he has not taken up the issue of the relationship between theism and modal abstractionism. In fact, Plantinga has been deeply engaged in the question of the relationship between God and abstract objects, dedicating an entire body of work (see his 1980) to explore whether the existence of possible worlds, along with other abstract entities, poses no threat to the existence of a sovereign God. The considerations put forth by Plantinga in this regard, nonetheless, are far from conclusive, and many pressing issues have remained unanswered. Moreover, it is important to emphasise that one is not bound to adhere strictly to Plantingian thought; alternative theories of modality can be chosen to interpret the modal ontological argument. One can, for instance, try to ground this argument in modal concretism (i.e., Lewisian modal realism) to investigate the potential reconciliation of this account with theistic metaphysics, or opt for modal fictionalism, wherein possible worlds are treated as non-existing entities merely serving as a convenient fiction.

In any case, however, in order not to make the modal ontological argument circular, it is essential to adopt an account of modality that remains free from inherent theistic assumptions.[66] Therefore, it is crucial to indicate that the crux of our enquiry is *conditional* in nature: how can (if at all) the chosen framework of modality be reconciled with theism *if* we suppose that the modal ontological argument is sound and God really exists? Put differently, I suggest that while the interpretation of modality employed in the context of the modal ontological argument should not itself be theistic, it would be a bonus to provide an explanation of how this interpretation is in principle *compatible* with theism (after all, this is required in case God does indeed exist). Therefore, our forthcoming investigation will sidestep the question of the soundness of the modal ontological argument, focusing instead on how (if at all) various accounts of modality can be rendered theism-friendly *under the assumption* that the argument is sound and a maximally great being truly exists.

The exploration of this issue constitutes the main objective of this dissertation. We will first assess the feasibility of interpreting the modal ontological argument through the prism of modal abstractionism. Operating under the assumption that the modal ontological argument is sound, we will

[66] Consequently, distinctively theistic accounts of modality (such as those proposed by, e.g., Alexander Pruss (2002, 2011) and Brian Leftow (2012, 2022)) prove unsuitable in the present context.

investigate whether there are ways to make the ontological framework of modal abstractionism consistent with the basic tenets of theism itself. Yet, we will see that there exist compelling arguments showing that the abstractionist account is ultimately at odds with theistic metaphysics. We will then proceed with the analysis of a potential reconciliation of theism with modal concretism, and it will again emerge that, fundamentally, modal concretism is not in line with theistic thought. Regarding modal fictionalism, we will find that this theory poses another challenge for modal ontological arguers. That is, it will be demonstrated that it is difficult to derive the actual (i.e., real) existence of God in case we choose to interpret the modal ontological argument in light of this theoretical perspective.

Naturally, the modal ontological argument cannot be viewed as successful if the very modal framework in which the argument is grounded is, in any way, in conflict with the chief principles of theism as such. This underscores the necessity of seeking an optimal theory for interpreting this argument. Such a theory should not only enable the derivation of the conclusion asserting the existence of a maximally great being but also possess metaphysical compatibility with the broader theistic worldview. The main objective for the subsequent chapter of this dissertation is to offer an extensive case for the position that none of the leading possible worlds theories – be it modal abstractionism, modal concretism, or modal fictionalism – adequately meets these criteria.

2. PITFALLS OF INTERPRETATIONS OF THE MODAL ONTOLOGICAL ARGUMENT BASED ON POSSIBLE WORLDS THEORIES

'[M]any of us are so used to the idea of possible worlds that we employ the idea without much perception of its hidden, theological dangers.'
(Robson 2011: 481)

The purpose of this chapter is to present evidence that interpretations of the modal ontological argument based on possible worlds semantics encounter serious difficulties. More precisely, I will argue that the three prominent possible worlds theories – modal abstractionism, modal concretism, and modal fictionalism – fall short of effectively framing this argument. The chapter is structured as follows: it consists of three main parts, each dedicated to the analysis of interpretations of the modal ontological argument within a specific possible worlds theory. At the outset of each part, I introduce the respective possible worlds theory and outline the main issues the theory faces. Afterwards, I provide arguments backing the claim that this theory lacks the resources to accommodate the modal ontological argument. I shall begin the analysis by tackling modal abstractionism.

2.1. Critique of Interpretations of the Modal Ontological Argument Based on Modal Abstractionism

The subsequent sections of this chapter are dedicated to supporting the thesis that modal abstractionism does not offer a suitable framework for interpreting the modal ontological argument. Before diving into the discussion, however, an acquaintance with modal abstractionism as such is needed. Accordingly, I shall commence by addressing the metaphysics of abstractness, including the exploration of the crucial distinction between abstract and concrete objects. Subsequently, I will move to the examination of the fundamental principles underlying the abstractionist conception of possible worlds and its main variants. Following this, I will discuss three notable challenges besetting modal abstractionism as such: the maximality paradox, the challenge of elucidation of abstract entities, and the potential limitations of the indispensability argument when applied in the context of abstract objects. Finally, I will conduct a comprehensive analysis of the pitfalls that emerge when modal abstractionism is employed to accommodate the modal ontological argument.

2.1.1. The Metaphysics of Abstractness

In contemporary philosophy, the distinction between abstract and concrete objects is pervasive – and yet, while there exists a consensus regarding the classification of certain paradigm cases, there is no standard account among philosophers on how to draw the precise line between the abstract and the concrete (Falguera et al. 2022). Entities like numbers, properties, and propositions are commonly recognised as abstract, whereas objects such as tables, trees, or cats are viewed as concrete ones. Nonetheless, when it comes to discerning exact criteria for classifying an object as abstract or as concrete, it not always proves to be an easy task. Furthermore, there is a certain cloud of peculiarity surrounding the status of abstract entities in particular. As these are commonly treated as immaterial and non-spatiotemporal objects, a question arises of how we can have epistemic access to such entities.[67] Moreover, what criteria define the identity of these objects? And what reasons do we have to postulate their existence at all?

These are, however, questions of a distinctively broad nature, and we do not aim to tackle them within this dissertation. We shall, instead, stick to some fundamental principles characterising abstract entities, which should help us build up a basic understanding of the metaphysics of abstractness and pave our way to a more thorough comprehension of the abstractionist approach towards possible worlds.

When philosophers talk about abstract objects in contrast with concrete entities, what they usually have in mind is that abstracta, unlike concreta, lack spatiotemporal properties and relations. For example, it is thought that numbers lack shapes and do not undergo change, what justifies their characterisation as entities failing to exist in space and time (Lowe 1995: 515).[68] Another commonly recognised trait of abstract entities is their lack of

[67] This issue is fundamentally rooted in what is known as Benacerraf's problem. As argued by Paul Benacerraf in his 1973, mathematical objects lack causal effects on our sensory experiences and so it seems that we cannot acquire knowledge about them. Although primarily relevant within the context of the philosophy of mathematics, Benacerraf's concern is typically held to be applicable to abstract entities more generally.

[68] Significantly, while numbers have often been conceptualised as tied to physical shapes or spatial arrangements – a view that dates back to early mathematical theorists like the Greeks and continues in various forms throughout the history of mathematics – the distinction Lowe emphasises is ontological. That is, Lowe's point is that, ontologically speaking, numbers are abstract objects, and their ontological status as abstracta remains unaffected by their (historical) applications. For example, the number 2 does not exist as a physical object that can be touched

causal powers. That is, unlike, e.g., a stone, which can crash a window, or a cat, which can chase a mouse, properties, numbers, or similar entities can make nothing happen (i.e., they cannot enter causal relations). Additionally, abstract objects are generally perceived as immaterial and non-sensible, as it is impossible, for instance, to touch the number 3 or hear the property of whiteness. Importantly, as well, abstract entities are standardly taken to be non-mental, i.e., existing independently of the mind – the idea tracing back to Frege's (1950 [1884]) insistence that such entities as numbers are neither material things nor ideas in the mind. Lastly, it should be mentioned that it is common among philosophers to treat abstract entities as enjoying necessary existence, because it would seem rather odd to think that, e.g., the number 3, while actually existing, could have in principle *failed* to exist.[69]

Another aspect worth mentioning is that the debate about the ontological status of abstract objects is typically framed within the dichotomy of *platonism*, asserting the existence of abstract entities, and *nominalism*, denying the existence of abstracta (or accepting the existence of entities traditionally held abstract but claiming that they are concrete objects).[70] Yet,

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or seen, even if it represents pairs of objects or quantities in the physical world. Similarly, as Lowe (1995: 515), puts it, a 'square' number is not itself 'square shaped'.

[69] Be that as it may, it is crucial to acknowledge that the attributes ascribed to abstracta in this discussion may be sometimes considered problematic and vary quite substantially depending on the specific type of entity under consideration. Thus, it shall again be noted that this is only a broad outline, and it should not be construed as a universally applicable characterisation of abstractness.

[70] As highlighted by Gonzalo Rodriguez-Pereyra (2019), there are two distinct senses of the term 'nominalism': on the one hand, it can mean the rejection of abstract objects, while, on the other hand, it can imply the rejection of *universals*. This latter sense finds it roots in the medieval problem of universals, centred around the question of whether universals exist beyond particular objects and, if so, what their nature is (although it should be noted that this historical problem itself can be traced back to ancient philosophy, notably to Plato's theory of *ideas* (or *forms*)). Now, although there are clear commonalities among universals and abstract objects (e.g., they are normally held to be immaterial), these concepts are not synonymous. 'Abstract objects' is a broad term encompassing entities that exist outside of space-time, including universals. Universals, on the other hand, are a specific *type* of abstract object; they are properties or qualities that multiple particular entities can share (such as the colour red or the concept of beauty). Consequently, the debate regarding the status of universals is not strictly synonymous with the debate concerning the status of abstract objects, and it must be emphasised that, within this dissertation, we are primarily focused on the latter one. Accordingly, despite the term 'platonism' having significant historical ties to the philosophy of Plato, it is crucial to recognise that contemporary platonists, advocating for the existence of

there are other possible positions as well, such as *conceptualism* (also known as *psychologism* or *mentalism*), stating that numbers, properties, and similar entities are mental objects (and thereby rejecting the previously mentioned notion that they are mind-independent), *immanent realism*, claiming that these objects exist in the physical world, or *fictionalism*, regarding abstract objects as useful fictions devoid of objective existence.

Now, in our exploration, we have already identified certain objects that are traditionally regarded as enjoying abstract nature (i.e., numbers, properties, and propositions). Still, such lists are usually more extensive. Philosophers commonly incorporate a diverse range of objects within the realm of abstract entities, and among these, possible worlds often find a prominent place. This means that possible worlds are often attributed with all or at least some of the aforementioned features associated with abstracta, such as being immaterial, non-spatial, and causally inefficacious. We have already seen that Plantinga treats possible worlds as abstract states of affairs, while alternative perspectives may consider them as sets of sentences or propositions. As alluded to earlier, the philosophical stance stating that there are such things as possible worlds and that they are of abstract nature (thus standing in direct opposition to David Lewis' view that regards them as concrete) takes the name of *modal abstractionism*. The subsequent section of this chapter is aimed at providing a thorough analysis and exposition of this approach.

2.1.2. Modal Abstractionism

When describing possible worlds, modal abstractionists often appeal to such ontological categories as states of affairs, sets of abstract propositions, or specific properties. Notably, these perspectives share the view that, along with exhibiting abstract nature, such objects embody a certain *totality*: for instance, as demonstrated within Plantinga's theory, possible worlds are conceived as *maximal* (*complete*) possible states of affairs (meaning that a state of affairs *S* is considered maximal when, for any other state of affairs *S'*, *S* either includes *S'* or precludes it). Recall also that, according to Plantinga's framework,

abstract objects, need not adhere to any specific doctrines of Plato; the term, within the present context, is reserved only to the narrow sense pertaining to abstracta. Therefore, it should be kept in mind that, within the scope of this dissertation, the terms 'platonism' and 'nominalism' are employed exclusively to denote stances accepting and rejecting the existence of abstract entities respectively, and they carry no direct connections with the doctrines of Plato or the medieval problem of universals.

everything that exists does so actually (that is, actual existence coincides with existence as such), meaning that there is no such thing as merely possible existence. Even though only one world is actual in the sense of *obtaining*,[71] all worlds exist actually in the sense that they are all placed within what we call the actual world, or a totality of all there is. In other words, no world *transcends* the giant realm encompassing all things called the actual world, and, thus, there are no worlds (and no other objects) that are possible but not actual. In this way, the abstractionist construal of possible worlds implies a sort of pre-eminence of the actual over the possible (see Wahl 1987: 429).

Another abstractionist theory of possible worlds has been advanced by Robert Adams, who takes possible worlds to be maximally consistent sets of propositions. In other words, Adams (1974: 225) defines them as sets of propositions that are maximal in the sense of containing, for every proposition p, either p or $\sim p$, and that are consistent in the sense of being such that it is possible for all of their members to be true together. Yet, Adams leaves the treatment of propositions themselves somewhat open-ended within his account. He suggests that the nature or propositions can be addressed in various ways, and, thus, as articulated by Robert Stalnaker (1976: 71), '[l]ittle is said about them except that they are to be thought of as language independent abstract objects, presumably the potential objects of speech acts and propositional attitudes'. The overarching goal, nevertheless, is to identify possible worlds with familiar entities for which we have some prior and independent reasons to believe, and, in this sense, propositions emerge as a suitable option (see Melia 2003: 126–127). For instance, it is common to postulate the existence of propositions as something expressed by synonymous sentences and bearing truth-values. In other words, given the integral role propositions play in our philosophical thinking, it seems both warranted and conceptually sound to make sets of propositions do the work that possible worlds are meant to do.

Stalnaker himself, on the other hand, has proposed to regard possible worlds as a special kind of properties (see Stalnaker 2003: 27–28, 2012: 8–14). According to him, possible worlds are ways the world can be, and they are total (maximal) properties of the world. For instance, the world factually exemplifies a complex property composed of all its instantiated properties,

[71] In other words, only one world is the way *things in fact are*. By contrast, a world in which there are talking donkeys is not actual in that it does not represent how things factually stand (although it is still *actual* in the sense that it exists – and everything that exists is, according to the modal abstractionist, actual). For the modal concretist, on the other hand, there is only one sense of actuality (see section 2.2.1).

such as *containing the Atlantic Ocean*, *containing horses*, or *containing human beings*. However, the world could be different and instantiate properties like *containing unicorns* (even though they are not *in fact* instantiated). Therefore, we can imagine a total property of the world consisting of many such properties, including the property of *containing unicorns* – such a total uninstantiated property is then nothing other than a possible world. Again, just like Plantinga, who holds that only one possible world obtains, Stalnaker takes that exactly one of such total properties is instantiated – the way the world actually is. Nonetheless, all possible worlds are actual in the sense that they exist as actual entities; in other words, all these uninstantiated properties exist in the actual world. Similar to propositions, properties also appear to be familiar and relatively unproblematic entities, commonly postulated independently of considerations related to the metaphysics of modality. By conceiving possible worlds as properties that the world might have had, Stalnaker thus aligns with the shared objective among modal abstractionists – namely, to build possible worlds out of what could be characterised as a 'safe and sane ontology' (see Melia 2003: 126).

Meanwhile Kripke (1980: 15–20) is very explicit about his rejection of the concretist treatment of possible worlds, stating that the construal of possible worlds 'as something like distant planets, like our own surroundings but somehow existing in a different dimension' is a misuse of the concept. According to Kripke, the very terminology here is misleading, as possible worlds tend to be associated with something like space bodies. Thus, Kripke insists on a more accurate understanding, characterising possible worlds as total ways the world might have been (or, alternatively, states or histories of the entire world). This is again an abstractionist approach, where possible worlds are taken seriously (i.e., not merely as a formal device) without, however, buying into the idea of their existence as giant, concrete universes. Other perspectives aligning with abstractionism have been presented by Roderick Chisholm (see his 1981: 129–131) and John Pollock (1984: 52–61), who both portray possible worlds as maximal consistent states of affairs.[72]

[72] That is, Chisholm (1981: 129) states that where *W* is a world, 'for every state of affairs *p*, either *W* logically implies *p* or *W* logically implies the negation of *p*; and there is no state of affairs *q* such that *W* logically implies both *q* and the negation of *q*'. Additionally, it is to be noted that Chisholm chooses to speak of 'worlds' rather than 'possible worlds' since, according to him, the expression 'possible worlds' could misleadingly imply the existence of entities 'somehow lying between being and non-being'.

Turning to Pollock's position, it is crucial to observe that he rejects actualism (see Pollock 1984: 84–91) and in this sense deviates from the standard view we

Now, inasmuch as modal abstractionists take possible worlds to be abstract objects, it is obvious that individuals cannot be said to exist *in* such worlds in a literal sense. Rather, modal abstractionists posit existence within a world as a specific instance of the inclusion relation, where 'Individual *a* exists in possible world *w*' is defined as '*w* includes *a*'s existing' (Menzel 2016a). Accordingly, within the modal abstractionist perspective, it is tenable that one and the same individual might exist in many distinct worlds. As expounded in section 1.1.2.3, modal abstractionists such as Plantinga and Kripke dismiss the problem of transworld identity, contending that the identification of an individual across different possible worlds is simply stipulated. In other words, they maintain that it is not that we can somehow observe distinct possible worlds and search for a particular individual in them; rather, it is the other way round: we first think of some individual or object and then characterise a particular world as including its existence.

When exploring Plantinga's theory of modality, we have also seen how abstractionists (concurrently adhering to actualism) can deal with representing the possibility of there existing individuals that do not in fact exist. To illustrate this more perspicuously, consider that, e.g., George W. Bush might have had a son. There seems to exists an existential proposition – namely, the proposition that there exists a person who is Bush's son – that is possibly true. Additionally, it appears plausible to think that propositions about particular individuals require the existence of those individuals (in this case, the existence of Bush's son). However, under the actualist's picture, there is simply no way to say that such an individual as Bush's son exists, because, for the actualist, existence *simpliciter* coincides with *actual existence*.[73]

Now, as previously explained, Plantinga addresses this challenge by invoking the concept of essences – properties that may exist even when they are uninstantiated. In other words, Plantinga contends that the existence of an object distinct from each actually existing object can be accounted for by positing at least one essence that is exemplified in some world but that is not factually exemplified. Regarding the aforementioned example, we could thus assert that there is some world in which the essence of Bush's son is exemplified, even though it is unexemplified in the actual world. Consequently, there is no need to postulate the existence of mere possibilia (objects that exist only possibly): within Plantinga's theory, the truth-

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have been discussing (i.e., the view where abstractionism and actualism go hand in hand). It shall thus be noted that although many abstractionists are in fact actualists, principally modal abstractionism is not incompatible with the postulation of possibilia (this point is particularly stressed in Melia 2008).

[73] This example is taken from Stalnaker 2011: 111.

conditions of modal discourse are expressed solely in terms of actually existing entities, and, at least on the face of it, a commitment to possibilism is successfully avoided.

Nonetheless, other actualists, such as Adams (1981), refrain from offering any surrogates for merely possible individuals at all. Under such accounts, there exists nothing assuming the role of mere possibilia, and the existence of singular propositions which refer to non-existent individuals is simply not allowed. As articulated by Stalnaker (2011: 112–113), this stance necessitates giving up the assumption that for every generic existential possibility (such as the one that Bush had a son), there exists a specific possibility (i.e., one in which a singular proposition of the form '*x* is a son of Bush' is true). In other words, it is held that if Bush really had had a son, there would have existed singular propositions about this individual, but since Bush did not in fact have a son, it is held that such propositions simply do not exist.[74]

One last aspect requiring attention in the consideration of modal abstractionism is that its proponents abstain from presenting a reductive analysis of modality (i.e., an analysis that seeks to express or explain modal discourse in terms of a more fundamental, non-modal language or framework[75]). As already pointed out, possible world semantics can accommodate both reductionist and non-reductionist construals of modality, and the viability of a reductionist perspective hinges on the feasibility of defining possible worlds themselves without invoking modal terms. Apparently, this condition remains unmet within abstractionist theories, since possible worlds are defined in terms of modal concepts here. For instance, possible worlds are treated as sets of propositions such that it is *possible* for all their member to be true, or as properties that are *possibly* instantiated, or as states of affairs that *possibly* obtain. As long as explicitly modal vocabulary is reintroduced in the definition or explanation of possible worlds, a completely reductive account of modality within such theoretical frameworks remains unavailable.

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[74] Yet another way to deal with the question of how to represent the possible existence of non-actual things is to claim that everything that exists does so necessarily, and so there could not have existed anything other than what actually exists. Note, however, that while, under this framework, all individuals are actually existing necessary beings, not all individuals are *necessarily concrete*. This strategy is developed in the works of Linsky and Zalta (1996) and Williamson (1998, 2000, 2013).

[75] Put differently, the goal of reductionists of modality is to provide an account of modal concepts and truths without explicitly relying on modal terms, thereby offering a more foundational understanding of necessity, possibility, and related modal notions.

Yet, it should be emphasised that the abstractionist's project does not include the endeavour to reduce modal talk into non-modal one. To clarify, modal abstractionists neither assert nor pursue a reductive agenda; rather, they simply accept that, eventually, possibility and necessity must remain unanalysed. Their primary aim is to understand modality in terms of *modally defined* worlds, and the main reason for that is eloquently illuminated by Kripke:

> I do not think of 'possible worlds' as providing a *reductive* analysis in any philosophically significant sense, that is, as uncovering the ultimate nature, from either an epistemological or a metaphysical point of view, of modal operators, propositions, etc., or as 'explicating' them. In the actual development of our thought, judgments involving directly expressed modal locutions ('it might have been the case that') certainly come earlier. The notion of a 'possible world', though it has its roots in various ordinary ideas of ways the world might have been, comes at a much greater, and subsequent, level of abstraction. In practice, no one who cannot understand the idea of possibility is likely to understand that of a 'possible world' either. Philosophically, we by no means need assume that one type of discourse is 'prior to' the other, independently of the purposes at hand. (Kripke 1980: 19, fn. 18; emphasis in the original)

The pivotal point here, obviously, is the *priority* of modal discourse over possible worlds talk. As explained by Kripke, there is a certain assumption that our modal talk as such comes prior to possible worlds framework and that the latter cannot be appropriately grasped without grasping the former. Hence, as elucidated by Menzel (2016a), while the reductionist seeks to understand modality in terms of worlds, the abstractionist, on the contrary, aspires to understand worlds in terms of modality. According to the modal abstractionist, we begin with primitive modal notions and only *later* discover their substantive connection with the notion of possible worlds. Thus, the latter, according the modal abstractionist, cannot be construed without relying on primitive modality; at the fundamental level, it persists as indispensable and impervious to a (complete)[76] reductive analysis.

[76] I write 'complete' because it can be said that *some sort* of reduction of modality is still carried out within the abstractionist framework. In other words, it can be treated as a *partly* reductive stance in the sense that modal concepts and statements are still subject to semantic analysis in terms of quantification over possible worlds (with modality reintroduced solely in characterising the latter). In Chapter 3, we

To conclude, then, it can be said that what has been discussed within this section constitutes the core principles of the modal abstractionist's programme. While it is evident that, alongside modal concretism, modal abstractionism stands out as the most extensively developed and debated position within the philosophy of modality, owing to its pervasiveness, it has also faced a substantial array of criticisms. In the upcoming sections, we shall offer a concise overview of the main objections to the modal abstractionist's vision, and after that, we will dive into an in-depth examination of the numerous challenges that arise when modal abstractionism is employed to interpret the modal ontological argument.

2.1.3. Problems with Modal Abstractionism

2.1.3.1. The Maximality Paradox

Perhaps the most serious charge levelled against various versions of modal abstractionism is that they succumb to set-theoretical paradoxes. There is a whole family of paradoxes of this kind, yet it is sufficient here to touch upon the most general formulation of the problem.

Recall that, within the abstractionist framework, it is common to define possible worlds as entities that are both consistent and maximal. That is, it is typically asserted that a possible world must be both free from contradictions and total in the sense of encompassing all the details of how things might be. However, it has been observed by many that such a characterisation of possible worlds leads to the so-called maximality paradox. Let us take Adams' conception of possible worlds as an example. According to this view, possible worlds are maximal and consistent sets of propositions. Now, the paradox surfaces when we attempt to determine the cardinality of such sets. Consider one such set S and its power set $P(S)$, comprising all subsets of S. To each element of $P(S)$, there corresponds a certain proposition – e.g., the proposition that a given element is a set. However, by Cantor's power set theorem, which is a fundamental principle in standard set theory, we know that the power set of any set, either finite or infinite, has a greater cardinality than the original set itself. Consequently, we get that there is a consistent set of propositions that has a greater cardinality than S, which was initially supposed to be a *maximal* consistent set – a contradiction.

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will explore modalism, which states that not even a partial reduction of modality is feasible and that modal concepts and truths are absolutely primitive.

An analogous and, perhaps, more intuitive result emerges when considering the actual world as the maximally consistent set of true propositions. Suppose there is a set T of all truths (true propositions): $T = \{t_1, t_2, t_3, \ldots\}$. Also, consider the elements of its power set $P(T)$, containing all subsets of T: ø, $\{t_1\}$, $\{t_2\}$, $\{t_3\}$, $\{t_1, t_2\}$, $\{t_1, t_3\}$, $\{t_1, t_2, t_3\}$, etc. To each element of this power set, there will be a unique truth – for example, the truth that that element contains a particular truth (say, t_1) as a member or that it does not (e.g., $t_1 \in \{t_1\}$, $t_1 \in \{t_1, t_2\}$, $t_1 \notin \{t_2, t_3\}$, etc.). Therefore, there will be at least as many truths as there are elements of the power set $P(T)$. Now, again, by Cantor's theorem, we know that the power set of any set, either finite or infinite, has greater cardinality than the original set itself. Thus, it follows that there are more truths than there are truths in the set T that was originally held to contain *all* truths, which is absurd. The initial assumption that there is a set of all truths is therefore wrong – there simply cannot be such a thing. Given that there cannot be a set of all truths, the actual world then cannot be the set of all truths either.[77]

Notably, paradoxes of this type afflict not only Adams' conception but also every construal of possible worlds where these are treated as set-like totalities.[78] As indicated by Nicola Ciprotti (2011: 117–118), a potential avenue to address the maximality paradox could involve considering possible worlds not as sets but as proper classes, thereby preventing them from being members of a more inclusive collection. Yet, as Ciprotti puts it, such a solution would not be without its challenges, as it appears to undermine a fundamental tenet of possible worlds semantics – namely, that a set W of possible worlds should be both mathematically well defined and manageable.

On the other hand, it is worth noting that Cantorian paradoxes extend well beyond abstractionist theories of possible worlds – they emerge wherever

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[77] The argument against the possibility of a set of all truths has been effectively articulated by Patrick Grim (see his 1984, 1986). An analogous line of reasoning has also been used by Grim to show that there cannot be an omniscient being (conceived as one that is supposed to know the set of all true propositions). Grim's Cantorian argument against omniscience is laid out in his 1988, 1990, 1991, 2000, 2007, 2013; for some responses and further discussion, consult Bringsjord 1989; Mar 1993; Plantinga and Grim 1993; Simmons 1993; Abbruzzese 1997; Beall 2000; Wainwright 2010; Lembke 2012; Oppy 2014a; Szatkowski 2015; McCraw 2016; and Cotnoir 2018.

Comprehensive presentations of set-theoretical paradoxes impacting modal abstractionism are available in Davies 1981; Bringsjord 1985; Menzel 1986, 2012; Jubien 1988; Kaplan 1995; and Divers 2002. For Adams' own concern regarding the paradoxical nature of modal abstractionism, one may refer to his 1974: 229.

[78] E.g., explanations of why the Cantorian paradox arises from Plantinga's theory of possible worlds can be found in Chihara 1998: 126–127 and Menzel 2016a.

there is an attempt to employ an unrestricted conception of set-like totalities, because a foundational principle of set theory is the absence of a universal set consisting of all sets (see Usó-Doménech et al. 2019). Perhaps those willing to mitigate the impact of such paradoxes more generally could appeal to the fact that there is still much that we do not understand about the foundations of set theory, which in turn speaks for the possibility that it might still greatly evolve in the future. For example, Graham Oppy (2014a: 240–241) states that 'it is not *inconceivable* that we might come to have good *mathematical* reasons for modifying those parts of Cantorian set theory that are required to underwrite 'Cantor's power set theorem'' (emphasis in the original). As long as set theory is not a finished theory and disputes among mathematicians persist, there seems to remain a possibility that it might still go through substantial revisions, and so there equally remains a possibility that the abstractionist interpretation of possible worlds might eventually be 'rescued' from the aforementioned paradox in ways that have not been unveiled by set theoreticians thus far.

These are, however, only preliminary considerations, and they do not constitute anything like a well-formed solution to the maximality paradox. It can be concluded that, given the current status of set theory, the paradox remains basically unresolved.

2.1.3.2. Primitive Abstract Entities

As has been noticed by Joseph Melia (2008: 136), there may be no ontological free lunch: despite not committing themselves to the existence of the vast plurality of concrete entities that play the role of possible worlds (as modal concretists do), modal abstractionists have to invoke such entities as unreduced propositions, states of affairs, or properties. Yet, some philosophers exhibit a degree of scepticism towards such objects and purport to either abstain from postulating their existence at all or identify abstract entities with some sort of concrete objects instead. Recall from section 2.1.1 that there is a lingering cloud of suspicion shrouding the status of abstract objects. What are the exact conditions of their identity? Can we coherently and comprehensively define abstract entities? And how can we come to have knowledge about them, given that they exist outside the realm of empirical observation?

Clearly, the mere existence of such questions by no means proves that the postulation of abstracta is untenable. However, it underscores the substantial task that modal abstractionists face in providing a thorough elucidation of the nature of possible worlds (along with other abstracta, if they postulate any), especially when engaging with those inherently sceptical of

such seemingly 'ghostly' entities. For example, we have seen that Adams does not provide a comprehensive account on the nature of propositions – a gap also apparent in other abstractionist theories. The precise characteristics of entities like propositions or states of affairs remain elusive, despite the fact that such notions cry out for rigorous analysis and ontological definition (see Melia 2008: 148).

Given the incapacity of abstract objects to participate in causal or spatiotemporal relations with the concrete world, there also emerges the so-called semantic argument against the existence of abstract entities – i.e., it remains unclear how we can meaningfully refer to or talk about them. Paul Benacerraf (1973) famously argued that if mathematical objects are fundamentally abstract, then our capacity to refer to or acquire knowledge about such objects is compromised, given that we lack causal interactions with them.[79,80] Considering that causal inefficacy is commonly attributed to various abstract entities beyond mathematics, it can be said that Benacerraf's argument extends its implications far beyond the realm of mathematical objects.

There are obviously some routes available here – namely, to deny that reference requires causal contact or to challenge the non-causality characteristic of abstract objects as such. In any case, a consensus among philosophers is discernible: the enigma surrounding our ability to refer to abstract entities should not yield to obscurity. In other words, the persistent desire within philosophical discourse is to unravel, rather than embrace, the mysterious nature of abstracta, although thus far this has proven to be a formidable challenge.

2.1.3.3. Are Worlds Really Indispensable?

Another objection to modal abstractionism, closely related to the one just discussed, stems from the question of what reasons we have to postulate the existence of abstract possible worlds at all. Here, the modal abstractionist

[79] Also see fn. 67.

[80] A contemporary exploration into the issue of reference to abstract (mathematical) entities has been extensively articulated by Øystein Linnebo. Roughly, Linnebo has posited that reference to abstract objects is constituted by more basic facts that do not themselves involve such objects (a proposal known as a form of metasemantic reductionism). For more on Linnebo's account, consult his 2005, 2009, 2012, and, notably, the monograph published in 2018.

might want to appeal to the so-called indispensability argument:[81] i.e., they can claim that assuming the existence of such entities is indispensable to our most robust semantic theories governing modal languages, and that this in turn indicates the truth of said assumption.[82]

However, Margot Strohminger and Jugani Yli-Vakkuri (2018: 310) have highlighted that the postulation of entities behaving like possible worlds is not essential for the optimal semantics of the metaphysical modal language. The established use of possible worlds semantics is primarily attributed to Kripke's completeness proofs for various systems of modal logic; yet, coexisting with possible worlds semantics is algebraic semantics for modal languages. Significantly, Strohminger and Yli-Vakkuri (*ibid*.) assert that whatever can be accomplished by possible worlds semantics can also be achieved within an algebraic semantics framework, where sentences are interpreted by states of affairs constituting a Boolean algebra without atoms (akin to possible worlds). Notably, the converse does not hold, as the algebraic approach stands as a more general than the possible worlds framework. Thus, one can argue that despite its status as the conventional semantic approach, the possible worlds framework is not the sole option available for framing the semantics of modal language, and in this regard, it does not qualify as indispensable.

Are there any other compelling reasons to believe in the existence of abstract possible worlds? As has been argued by Charles Chihara (1998: 121), identifying such reasons is undoubtedly challenging. As he claims, 'in the case of mathematical entities – such things as numbers and sets – I can at least see a *prima facie* case for thinking that there are such things. After all, we do talk in mathematics as if there were such things. But possible worlds, in Plantinga's sense, have no such initial plausibility'. Inasmuch as there are alternative ways to frame our modal discourse, it can be argued that modal abstractionists should furnish some cogent reasons for postulating the

[81] The indispensability argument is frequently utilised within the philosophy of mathematics and the philosophy of science. Within this context, it addresses the question of the existence of mathematical entities and the role they play in our understanding of the natural world. Traditionally linked with the works of Quine (1980 [1948], 1980 [1951], 1981) and Hilary Putnam (1979 [1971], 1979), this argument has undergone further development by other philosophers and stands as a subject of fruitful investigation in contemporary research (see, e.g., Paseau and Baker 2023).

[82] Evidently, a parallel line of reasoning can emerge in support of the existence of concrete possible worlds as well. As we shall see in section 2.2.1, David Lewis indeed relies on a kindred type of argumentation when advocating for the existence of his concrete worlds.

existence of such entities as abstract possible worlds. In other words, the illumination of the exact nature of such objects should be accompanied by a clear rationale justifying our commitment to this abstractionist ontology. Given that this commitment does not readily arise from considerations regarding indispensability, it certainly poses a demanding task.

2.1.4. Problems with Modal Abstractionism in the Context of the Modal Ontological Argument

Having explored the core principles of modal abstractionism and the main challenges this perspective faces, we are now poised to dive into the examination of the pitfalls arising when modal abstractionism is chosen as a framework for interpreting the modal ontological argument. Considering that Plantinga's modal ontological argument was originally formulated exactly in terms of modal abstractionism, the contention that an abstractionist interpretation of this argument is problematic might sound strange, however. If Plantinga managed to construct this line of reasoning assuming modal abstractionism, does it not suggest that the latter offers a fitting groundwork for this argument?

Indeed, Plantinga's argument is framed in terms of the abstractionist construal of possible worlds and, under the assumption of modal logic S5, maintains formal validity – i.e., the conclusion necessarily follows from the premises within this logical framework (see fn. 58–59, 61 of this dissertation). Yet, this fact does not preclude the existence of metaphysical hurdles inherent in the abstractionist rendition of the argument. Recall from section 1.3 that if we assume the modal ontological argument to be not only valid but also sound, we should be able to explicate the relationship between God and the modal principles underpinning the formulation of this very argument. In other words, we should be able to demonstrate that there is no inherent conflict between the existence of God, on the one hand, and – in the case of adopting modal abstractionism – the existence of a plurality of abstract possible worlds, on the other hand.

Now, the question of how to reconcile God's existence with abstract possible worlds is part of a broader enquiry regarding God's relationship with abstract entities as such – a question that has occupied a significant portion of considerations pertaining to the philosophy of religion. Undoubtedly, the coexistence of God and abstract objects poses a significant challenge. For traditionally, God is conceived as an independently existing being upon whom everything depends and who possesses supreme authority over all things. However, the existence of abstract objects – such as properties, propositions,

numbers, sets, and possible worlds – which are considered necessary existents, suggests their independent existence beyond God's control. Philosophers have suggested three main strategies to address this tension: 1) positing that abstract entities are thoughts within God's mind (and thus are not something external and independent of him), 2) asserting that abstract objects were created by God, and 3) acknowledging the independent existence of abstracta while simultaneously maintaining that this does not constitute an inherent problem for theistic commitments.

The next three sections are devoted to investigating each of these approaches. As the analysis will reveal, there are compelling grounds not to be swayed by any of them, which in turn means that 1) the problem of God and abstract objects is likely to persist, and that 2) interpretations of the modal ontological argument that assume the existence of abstract possible worlds remain utterly unsatisfying.

2.1.4.1. Possible Worlds as God's Thoughts

One strategy employed in attempting to reconcile God's existence with the existence of abstract possible worlds involves asserting that these worlds are thoughts within God's mind – a route taken by Plantinga (1982, 2011a, 2011b, 2013) himself. Surely, this approach extends beyond possible worlds to encompass various other abstract objects as well. For instance, Plantinga (1982: 70) contends that even though God's believing a certain proposition does not make that proposition true, propositions *exist* because God thinks or conceives them. It is noteworthy that, according to Plantinga, this idea does not compromise the necessary existence of abstract objects: God is a necessary being and he has the property of thinking just the thoughts he does think *essentially*.

The view that abstract entities are identical to God's mental states finds its roots within the longstanding tradition of Christian thought. Plantinga (1992: 309) himself appeals to the Augustinian tradition where abstract objects are located in the divine mind;[83] as is well known, Leibniz similarly posited that possible worlds were not external to God but rather within the mind of God.[84,85]

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[83] Although it should be pointed out that, in contrast to Augustine, Plantinga departs from the view that God is simple, rejecting the idea that each abstract object is identical to God and, consequently, with each other (also see section 1.1.1.1).

[84] This view of Leibniz is sourced from Strickland 2014: 24.

[85] While Leibniz held that modality is grounded in God's intellect, he did not share Descartes' (2000 [1630]: 28–30) perspective that it also depends on God's volition.

Plantinga thinks that this perspective, called by some divine psychologism (Craig 2016a; Fried 2016),[86] offers significant advantages. For example, he states that divine psychologism provides a means to reconcile two compelling intuitions – namely, that abstract objects exist independently from human beings and that they nevertheless cannot exist apart from some sort of mental activity. Plantinga (2011a: 29–30) puts it as follows:

> Here there are two natural thoughts, two attractive intuitions. First, it seems right to think of numbers, sets, and the rest of the Platonic pantheon as independent of human thinkers. If there had been no people, the proposition *there are no people* would have existed and been true. If there had been no people, the world of mathematics – numbers, sets, functions, the lot – would still have existed. But there is a second attractive intuition here: most people who have thought about the question think it incredible that these abstract objects should just exist, just be there, whether or not they are thought of by anyone, more broadly, whether or not they are the object of any kind of mental or intellectual activity. <…> But of course if it is human thinkers that are at issue, then there are far too many abstract objects. There are far too many real numbers for each to have been thought of by some human being. The same goes for propositions; there are at least as many propositions as there are real numbers. <…> On the other hand, if abstract objects were divine thoughts, where would be no problem here. So perhaps the most natural way to think about abstract objects, including numbers, is as divine thoughts.[87]

The first intuition mentioned by Plantinga explicitly opposes the claim mentioned in section 2.1.1 – specifically, that abstract objects are generally

[86] This view is also referred to as divine conceptualism (Craig 2016b), theistic mentalism (Davidson 2023), and divine idealism (Adams 2015).

[87] Cf. Robert Adams (1983: 751): 'To many of us both of the following views seem extremely plausible. (1) Possibilities and necessary truths are discovered, not made, by our thought. They would still be there if none of us humans ever thought of them. (2) Possibilities and necessary truths cannot be there except insofar as they, or the ideas involved in them, are thought by some mind. The first of these views seems to require Platonism; the second is a repudiation of it. Yet they can both be held together if we suppose that there is a non-human mind that eternally and necessarily exists and thinks all the possibilities and necessary truths. Such is the mind of God, according to Augustinian theism. I would not claim that such theism provides the only conceivable way of combining these two theses; but it does provide one way, and I think the most attractive.'

treated as non-mental, i.e., as existing independently of the mind. Plantinga (2011a: 30) suggests that adherents of this position in the history of philosophy have been remarkably few, perhaps none besides Plato and Frege (if they indeed held such a view). Plantinga's argument here is that, given that there have been very few of those thinking that abstracta can exist independently of intellectual activity, the opposite intuition emerges as dominant – that is, Plantinga maintains that the majority of people would agree that abstract entities must have a mental basis for their existence. Further, inasmuch as it seems implausible to hold that such entities can be dependent on human thinkers, it is tempting to think abstracta must be fundamentally grounded by God. Unlike the human mind, God's mind is infinite, and if we place abstracta in the latter, we can potentially reconcile the two aforementioned intuitions.[88]

Importantly, Plantinga (2011b: 291) also argues that such a view provides an effective resolution to Benacerraf's problem – the challenge of explaining how we can attain knowledge of abstract objects given their causal inefficacy:

> According to classical versions of theism, sets, numbers and the like, as I argued above, are best conceived as divine thoughts. But then they stand to God in the relation in which a thought stands to a thinker. This is presumably a *productive* relation: the thinker produces his thoughts. It is therefore also a causal relation. If so, then numbers and other abstract objects also stand in a causal relation to us. For we too stand in a causal relation to God; but then anything else that stands in a causal relation to God stands in a causal relation to us. Therefore numbers and sets stand in a causal relation to us, and the problem about our knowing these things disappears.[89]

A position akin to Plantinga's – that is, the identification of abstract objects with divine mental states – has also found support by Greg Welty. Having termed his account as *theistic conceptual realism*, Welty (2014b: 81–89) has been arguing that abstract entities are necessarily dependent on God in virtue

[88] More precisely, Plantinga (2011b: 290) claims that, for example, many sets are such that no human being could possibly think all their members together – e.g., the set of real numbers. Such a cognitive task requires an infinite mind, akin to that of God. These and related considerations support Plantinga's position that the conceptual basis of mathematics aligns more cohesively with theism than with naturalism.

[89] Inasmuch as Plantinga holds that God *produces* his thoughts, this stance cannot be clearly differentiated from the so-called theistic activism, which states that abstract objects are products of God's intellectual activity (the position to be explored in the subsequent section).

of being uncreated divine ideas[90] both distinct from and dependent on God. According to Welty, abstract objects such as propositions and possible worlds exhibit the characteristic of intentionality – i.e., they *represent* the world as being a certain way, and because thoughts also possess an intentional nature, they serve as 'natural candidates' for performing the philosophical functions of propositions or possible worlds. However, echoing Plantinga's stance, Welty contends that this function cannot be carried out by *human* thoughts; rather, it becomes feasible only through divine ones. A divine mind can have enough thoughts for all the truths and possibilities and also, by being a necessarily existing mind, can account for the necessary existence of abstract objects. Additionally, Welty asserts that this framework ensures the objectivity of abstract objects, as they are deemed independent of any human cognitive activity. Lastly, by identifying abstract objects with divine thoughts, Welty can also offer a simpler ontology in the sense of postulating just one category of intentional entities.

At first sight, it thus may seem that divine psychologism can reconcile the theistic worldview with the metaphysics of possible worlds and preserve God's sovereignty (i.e., his supreme authority over all entities distinct from himself) in a quite cohesive and natural manner. Moreover, recall that the abstractionist construal of possible worlds usually goes hand in hand with actualism, and divine psychologism appears to fit nicely with this view as well: since God actually exists, his thoughts exist actually as well, and, consequently, the truth-conditions for modal truths are fulfilled by a part of the actual world (see Adams 2015: 53).

On the other hand, an acute reader can readily spot a somewhat paradoxical aspect of divine psychologism, which emerges when one asks whether possible worlds, propositions, and other abstract objects maintain their abstract nature under this view. Put differently, if these objects are equated with God's thoughts, and God and hence his thoughts are in turn concrete entities, does not it follow that possible worlds, propositions, etc. become concrete as well? As has been argued by Craig (2016b: 77, fn. 14), Welty's claim that abstract objects exist as ideas in the mind of God is actually misleading and that a more accurate formulation would be that God's thoughts simply assume the roles typically attributed to various abstract objects. Meanwhile Welty (2014b: 94–95, fn. 2) himself clarified this perspective by asserting that he adheres to a purely functionalist account of 'abstract objects'. That is, he maintains that his argument does not hinge in any substantial way

[90] Welty employs the terms 'divine thoughts' and 'divine ideas' interchangeably in this context, and I likewise adopt this usage.

on the term 'abstract objects' and that he merely needs to refer to objects that are traditionally classified within this category, such as 'propositions' and 'possible worlds'. If divine ideas are considered concrete, then Welty's position is that 'abstract objects functionally speaking are concrete objects ontologically speaking'. In other words, there are, strictly speaking, no abstract objects under this view – only concrete mental events that play the roles ascribed to abstract objects. Paradoxically, then, modal abstractionism, when conjoined with divine psychologism, seems to collapse into anti-realism with respect to abstract possible worlds.

Plenty of other worries arise in connection with divine psychologism, both when examining this stance on its own and when considering God's relation to possible worlds specifically. First, let us scrutinise the motivations for divine psychologism as expounded by Plantinga. One of them stems from the observation that identifying abstracta with God's thoughts helps us tackle Benacerraf's problem – that is, if abstracta are considered God's thoughts and the latter participate in causal relations, it might suggest a resolution to challenges in our knowledge of such objects. But is it really the case? In fact, it appears that it is not sufficient to claim that abstract objects, under the framework of divine psychologism, can enter causal relations. For if abstract entities are divine ideas, an additional account of how we can interact with the divine mind becomes necessary. God is traditionally held to be transcendent, and there are certain attributes associated with it, such as God's existence outside space-time.[91] Yet, given that we are spatiotemporal beings, how exactly can we establish contact with God and his thoughts?

Regarding the other motivation given by Plantinga – i.e., that divine psychologism allows us to retain both the intuition that the existence of abstract objects is human-independent and the intuition that they still must be mind-dependent – seems even less compelling. Appealing to intuitions tends to sound unconvincing as their very nature is inherently subjective. For instance, Tyron Goldschmidt (2018: 71–72) confesses that he simply does not share the second intuition mentioned by Plantinga. While some may be attracted to the idea that abstract entities must depend on some sort of

[91] Although it must be noted that this attribute of God remains a matter of debate. For example, the classical Christian interpretation tracing back to Aquinas conceives God's eternity in terms of timelessness (in the sense of God existing outside time), but there also exists an opposing viewpoint, advocated, e.g., by Swinburne (see his 2004 [1979], 2016 [1977]), that God's eternity is best seen as temporal. According to Swinburne, God's existence is temporally everlasting, meaning that God exists in every moment of time. Process theology, developed by Hartshorne and others, also portrays God as at least in some respects temporal (see fn. 55).

intellectual activity, it remains far from clear that this aligns with the views of the majority. As Greg Fried (2016: 181) puts it when discussing mathematical objects, for those who find it intuitively compelling that such objects are ontologically independent of *any* mind, divine psychologism actually runs *counter* to their intuitions.

Significantly, Fried has also put forth an even more substantial challenge to divine psychologism. His argument, outlined in detail (Fried 2016: 179–181), revolves around the observation that divine psychologism leads to the implausible view that entities such as propositions are identical to God's *relation* to those entities. To illustrate, consider a mathematical proposition that P. According to divine psychologism, this proposition (the proposition that P) is God's thought. Now, Fried contends that it is natural to treat thoughts as propositional attitudes; if we do so, we get that the proposition that P is God's thought that ___. A crucial question then arises: God's thought that *what*? That is, how should we fill the gap? As Fried suggests, the proposition that comes to mind is P itself. Hence, we get that the proposition that P is God's thought that P. Next, Fried states that if we ascribe to the standard view that propositional attitudes amount to a relation between a subject (a person who holds the attitude) and a proposition, the result we gain is this: the proposition that P is God's relation R to the proposition that P. Yet, according to Fried, this is implausible – is unclear how an entity (e.g., a proposition) and God's relation to that entity can be identical.

Fried (*ibid*.: 181) has also advanced a parallel line of reasoning when applied to mathematical objects[92] (at least *prima facie*, I do not see any obstacles to using this argument concerning possible worlds and other abstract entities): if the object O is God's thought about O, then the object O is God's relation R to the object O – again an apparently implausible consequence.

Craig (2016b: 91) is reasoning somewhat alike:

> God's thought of the number 2 is about 2. But then His thought is not 2, but something distinct from 2. 2 is what He is thinking about. But He is not thinking about his thought; He is thinking about 2. Therefore, His thought cannot be 2.

Once again, the same reasoning can be extended to other abstract objects, including possible worlds. If God's thought about a possible world *w* is about *w*, then it seems that his thought must be inherently *distinct* from *w* because, generally, when we assert that *x* is about *y*, what we seem to imply is that *x* is

[92] Fried draws a distinction between propositions and objects here.

a distinct entity from *y*.[93] Thus, upon closer examination, the divine psychologist's claim that abstract objects *just are* divine thoughts simply appears difficult to make sense of.

A further concern related to divine psychologism is that it seems to lack an explanation for why God could not have had different thoughts than the ones he actually possesses. For if abstract entities are treated as necessarily existing and identified with ideas in God's mind, it follows that, under this account, God is compelled to possess precisely these thoughts, i.e., the ones he presently holds (as already mentioned, Plantinga explicitly endorses the view that God has the property of thinking just the thoughts he does think essentially). However, it is not at all clear why this should be the case. This sort of objection has been articulated by Oppy (2014b: 105): 'If there is no independent reality to which divine thoughts must conform, why is it the case that God could not have different thoughts (providing for different propositions and possible worlds)?' As I understand this objection, it demands a sort of *theological* explanation for why God should be deemed to necessarily possess the precise thoughts he has. In other words, there arises a need for an explanation as to why, from a theological perspective, God should be regarded as a being for whom it is impossible to have different thoughts than the ones he presently thinks. And here, the divine psychologist remains silent.[94]

There exist, additionally, distinct worries specifically linked to the divine psychologist's treatment of possible worlds. Apparently, there are many possible worlds, differing among themselves regarding their content – some worlds contain unicorns, while in others such creatures as mermaids or purple cows find their place. Yet, there are also 'less innocent' worlds, such as those where rampant acts of violence or horrendous pandemics thrive. Such worlds seem perfectly possible, and so they, according to the divine psychologist's

[93] While not arguing against divine psychologism in this respect, Sarah Adams (2015: 54) similarly speaks of divine psychologism as the view under which possible worlds are divine thoughts having these worlds *as their subject*.

[94] This is not to say that it would be preferable to posit that God *could have had* different thoughts than the ones he currently possesses, for such a view would be problematic in the context of possible worlds: seemingly, it would preclude modal logic S5, which is employed in the formulation of the very modal ontological argument (see fn. 58–59, 61). If the divine psychologist allowed that God could have had different thoughts than the ones presently held, it would mean that what is possible could in principle not be possible, and so would undermine the S5 principle, according to which modal facts are non-contingent. Instead of suggesting this, therefore, I simply suggest that the divine psychologist should provide a theological elucidation for *why* it is impossible for God to enjoy thoughts distinct from those he currently possesses.

understanding, are conceived as residing in God's mind as his thoughts. However, as has been argued by Mark I. T. Robson (2011), the idea that God contemplates such horrific thoughts poses a profound challenge to God's perfect beauty. Robson contends that if we adhere to the idea that possible worlds are God's thoughts, this proves to be theologically challenging because, given that God's thoughts are his parts and some of these thoughts (namely, those representing depraved and terrible possibilities) are inherently ugly, God fails to be utterly and completely beautiful. Moreover, this is not some accidental feature of God but a necessary characteristic because, again, possible worlds are construed as necessary entities and, by extension, as necessary thoughts of God. According to Robson, then, the proposition that God encompasses within himself these compromising thoughts poses a significant challenge to the divine aesthetics.[95]

The last problem for divine psychologism I would like to address is as follows. If we interpret modal statements through the lens of possible worlds talk and construe these worlds as thoughts within the divine mind, then there is a poignant query brought by Oppy (2014: 105): what are we to make of modal claims about God himself? Does God's necessary omnipotence, for example, substantively depend upon his thinking that he is necessarily omnipotent? What is more, this seems to prompt another crucial question – namely, how to interpret God's necessity itself. For Plantinga (1974a: 39, 112), God's being necessary amounts to God's existence in every possible world. However, if we treat possible worlds as divine thoughts, does this mean that God's necessity lies in the fact that each of these thoughts is such that it involves God himself? Needless to say, such a notion of divine necessity appears rather bizarre.

For all the reasons discussed, it becomes evident that divine psychologism grapples with significant challenges, both in isolation and particularly when exploring the relationship between God and possible worlds. This, in turn, gives rise to serious doubts about whether those who are simultaneously subscribing to modal abstractionism and divine psychologism could provide a tenable framework for interpreting the modal ontological argument. Yet, this does not necessarily mean that modal abstractionism as such is doomed to fail in this context, because there are alternative accounts aspiring to reconcile theistic metaphysics with the existence of an array of

[95] Cf. Craig's considerations in his 2016b: 85–89. Craig is arguing that it is difficult to provide a substantiation for the idea that God is perpetually contemplating the non-denumerable infinity of malevolent, trivial or silly propositions and states of affairs that there are.

abstract possible worlds. One such alternative is constituted by the view that God is the *creator* of abstract entities, and it is to this perspective that our attention will now be directed.

2.1.4.2. Possible Worlds as God's Creative Product

A possible strategy overtaken by those seeking to establish a harmonious relationship between God and abstract objects is holding that the latter are products of God's creative power. In other words, this perspective suggests that God's creative competence is not limited to the concrete realm alone but extends to *all* things, including properties, propositions, numbers, possible worlds, and more. We can identify two general strands within this view, often termed *absolute creationism*: one posits that abstract entities are products of God's mental creation and so exist within God's mind, while the other states that God creates abstract objects and that these entities exist within concrete things (the latter view often being termed as Aristotelian version of absolute creationism (see, e.g., Craig 2017: 129–132)).

The claim that abstract objects were brought into existence by God and find their place within the concrete world has been championed by Hugh McCann. According to McCann, God created abstract entities by creating the concrete world and various things that exist in it, and so abstract entities enjoy no existence independent of concrete entities that exemplify them: 'For example, to create cats is to create *felinity*, which includes *being a mammal*. Hence the truth that all cats are mammals is grounded in the nature God creates in creating cats.' In the same way, God creates even logical and mathematical truths:

> The most obvious example is the principle of non-contradiction, which can apply to the world only if it is grounded in concrete reality. And of course it is. This is because to create the nature of any finite entity is to specify not just what the thing is, but also by implication what it is not. Cats are not dogs, nor are they anything else that isn't a cat, and a corresponding point can be made for every nature God creates, whether it be a substance kind like *felinity* or an accidental property like *red* or *killing Lincoln*. The result is that simply by being what they are, all things succeed in *not* being what they are not, and it is in this reality that the law of non-contradiction is founded. An argument of this same general sort could, I think, be given for any principle of logic and mathematics. (McCann 2012: 202)

As hinted, the same foundational principle applies to modal truths (such as 'Necessarily, all cats are mammals') as well, although McCann is quick to underscore that he does not adopt Descartes' view that, if absolute creationism is correct, then necessary truths might have been otherwise. For McCann, it is a mistake to even think that we can meaningfully speak of modalities *prior* to God's creative act. For example, it does not make sense to ask whether truths like 'Necessarily, all cats are mammals' or 'Necessarily, all triangles have three sides' could have failed to be true because prior to creation there is simply no *felinity* and *triangularity* to be spoken of, and consequently, there can be no modal facts concerning them. Therefore, even though God created *felinity* by creating cats and *triangularity* by creating triangles, it does not make sense to say that *felinity* or *triangularity* could (not) have been other than they are, because there are simply no modal truths about them *beyond* the creation (*ibid*.: 209–212).

It appears, nonetheless, that the more popular version of absolute creationism remains the view that abstract entities were created by God and that abstracta exist independently of the concrete world. An influential stance of this nature has been developed by Thomas Morris and Christopher Menzel in their seminal paper 'Absolute Creation' (1986). Here, Morris and Menzel advocate the view that God creates abstract objects through his intellectual activity. Similar to divine psychologists, Morris and Menzel thus tie the existence of abstracta to God's mind; however, what distinguishes Morris and Menzel's position is the emphasis on the fact that the relationship between God and abstracta is one of *creation* (it is because of this accentuation on God's active involvement that Morris and Menzel's position is called *theistic activism*). For Morris and Menzel, there are two types of creation: mental creation, by which God produces such things as properties, propositions, and possible worlds, and physical creation, through which objects like cats or horses are made. Within the mental creation, properties and relations are identified with divine concepts, propositions are construed as divine thoughts, whereas numbers, sets, and possible worlds are explicated in terms of properties and relations.

Notwithstanding their view that God is the ultimate delimiter and creator of abstract objects, Morris and Menzel also strive to circumvent the well-known pitfalls of Descartes' voluntarism, wherein God has the authority to alter or annihilate abstract entities and the truths associated with them. Similarly to McCann, Morris and Menzel posit that questions such as whether it is within God's power to render logical and mathematical truths false or whether there could have been different possible worlds than the ones that presently exist are themselves malformed. We cannot meaningfully engage in

considerations of whether God could have refrained from creating possible worlds and other abstract objects or fashioned them differently, since, as Morris and Menzel (1986: 357) put it, '[t]here is no Archimedean point outside the actual conceiving activity of God from which we could judge it to be possible that God conceive a framework different from the one which in fact, and of necessity, gives us all possibility and all necessity'.[96] Incidentally, I must confess that I see a specific problem in this assertion by Morris and Menzel, but let me postpone the discussion of it for now.

To summarise, accounts like those put forth by McCann, Morris, and Menzel provide a literal interpretation of religious texts proclaiming God as the creator of everything. In other words, absolute creationism removes the necessity to exempt abstract objects from the purview of divine creation – everything is placed under the realm of God's creative order. Literally every facet of existence, be it concrete or abstract, depends upon God, and there is a clear explanation for *why* this is so: because of God's creative activity. Is absolute creationism then a viable option for those willing to reconcile the existence of possible worlds and other abstract objects with the core tenets of theistic metaphysics?

Let us start with the solution provided by McCann. According to him, possible worlds and other abstracta are dependent on God in the sense that God created them all along with creating the concrete world. Prior to this creative act, there is no existing information or model to which God's creation must conform; rather, God creates with absolute spontaneity, without any preceding deliberation (McCann 2012: 201). Also, we have seen that, according to McCann, it does not make sense to ask whether God could have created abstract entities differently than he did – that is because prior to creation, there are no such entities and so no modal facts concerning them. Moreover, if there were certain modal facts about them prior to creation, this would mean that God's absolute sovereignty over abstracta would be unfulfilled, since God would be restricted in what he could create (*ibid*.: 211). It is equally meaningless to speculate whether God might have refrained from creating abstracta at all – questions like this are not even askable because, again, God is not constrained by any sort of modal framework. God *just creates*, and this is all we can say about it.[97]

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[96] Additionally, it is important to note that, according to Morris and Menzel, the creation of abstracta should not be viewed as a temporary event – God's mental creation occurs both necessarily and eternally.

[97] The only modal principles that exist are those found *within* the concrete world (exemplified by truths like 'Necessarily, all cats are mammals' or 'Necessarily, all

But, certainly, this appears problematic. For we then simply have no means to express the idea that abstract entities, including possible worlds, exist necessarily. The most we can say is that they have been created by God – and that is it. We can neither ascribe contingent nor necessary existence to them, because the very rationale for expressing such statements is abolished within McCann's theory. Note that the same applies to concrete things as well, including the world as a whole. As articulated by William Vallicella (2014: 157), McCann's perspective implies that God's creation of the world is neither necessary nor contingent – it 'just is'.[98] Now, this, as Vallicella puts it, entails the collapse of modal distinctions as such. We simply can no longer uphold the distinction between contingent and necessary existence: things just *are*, and there is no sense in speaking about the (im)possibility of their non-existence. Concurrently, we cannot maintain such ordinary modal truths as the one that the concrete world as such exists only contingently or that it could have been different than it in fact is.

What seems even worse is that the same outcome applies to God himself. That is, it appears that, under such an account, we are unable to express God's necessity either, since God is also not subject to any modal distinctions. For McCann, God does not enjoy necessary existence – he *just is*, i.e., transcending any modal categorisations (see McCann 212: 235).[99] Neither we can say that God enjoyed a libertarian freedom with regard to creation in the sense of having had an option whether to create or not (because, again, there are no modalities constraining God's creative act). Other significant theological statements are equally rendered meaningless. For instance, as noted by Vallicella (2014: 161), we cannot express that God exists *a se* (that is, self-sufficiently and independently of anything else), since aseity is a modal notion, which implies the possibility that God exists without the world. Similarly, we cannot say that God is the best *explanation* of the existence of

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triangles have three sides'). Beyond this, there are no modalities whatsoever. As McCann (2012: 212) puts it, 'in creating triangles, cats, killings, and whitenesses, God creates the universals *felinity*, *triangularity*, *killing*, and *white*, and in so doing puts in place the only modal realities that pertain to such natures. <…> Beyond this, there is nothing more to be said, because it is only in what God does as creator that the very possibilities themselves find their reality'.

[98] McCann (*ibid*.: 233) writes: '[T]he world is as it is, <…> the creator of heaven and earth has made it so. Beyond this we can say nothing, for beyond this there is nothing be said.'

[99] McCann (*ibid*.: 235) argues that while God does not possess *de re* necessity, he can still be said to enjoy *de dicto* necessary existence. Even if this is tenable, it is still problematic because God's *de re* necessity remains unaccounted for.

the world, as the world needs an explanation only if it can be said to be contingent.

As we have seen, Morris and Menzel's view seems similar to McCann's in this regard. Recall their statement: 'There is no Archimedean point outside the actual conceiving activity of God from which we could judge it to be possible that God conceive a framework different from the one which in fact, and of necessity, gives us all possibility and all necessity.' It appears, then, that they also hold that it does not make sense to speak of any modalities beyond those created by God. Yet, as I have alluded to, I find that this particular assertion by Morris and Menzel faces a substantial challenge. Now, they claim that we lack the means to conceive of any modal framework constraining God's (mental) creation; therefore, according to them, it is meaningless to ask whether God could have created a different framework of possible worlds (or any other abstracta). God *simply creates*, and beyond this fact, there is no modal reality, no possible scenario in which the act of creation could have developed differently.

Simultaneously, though, Morris and Menzel claim that God's creative act is *necessary*. And that seems problematic to me. If there is no modal framework beyond God's creation, how can one state that creation is necessary? In other words, if there is no 'Archimedean point' outside what God in fact creates, i.e., the point that could reveal that it is possible for God to create things differently, then it seems that there is equally no way to tell that it is *not* possible for God to create differently (i.e., that creation is necessary). Consequently, it seems to me that the logical conclusion that Morris and Menzel should draw is akin to that of McCann – that is, that God's creation is neither necessary nor contingent. If there are no modalities constraining creation itself, then it neither *could* nor *could not* have been different. But should Morris and Menzel contend that creation is necessary, it implies that *there is* an 'Archimedean point' outside of what God in fact creates – the point that allows one to determine that God *could not* have created the framework of reality differently than he did.

I thus find the very essence of Morris and Menzel's version of absolute creationism contradictory. To resolve this contradiction, they face the choice of either following McCann's account or dismissing the stance that there is no 'Archimedean point' outside what God factually creates and embracing the notion of necessary creation. However, neither option appears promising. We have already witnessed the problematic nature of McCann's account; therefore, if Morris and Menzel were to follow the same path, they would encounter similar issues to those McCann does. If, on the other hand, they are meant to uphold the notion of necessary creation, then I must highlight that

the notion raises significant concerns (if it is not unintelligible at all). Most importantly, creation as such implies freedom, which is incompatible with necessity. This has been indicated by Craig (2016b: 58):

> If, on the other hand, we expand the meaning of 'creation' so as to comprise eternal, ontological dependence as well as temporal origin of existence, then we subvert God's freedom with respect to creation. For in orthodox Christian thought, creation is understood to be a freely willed act of God. <…> Absolute creationism, however, robs God of His freedom with respect to creating. God is free with respect to the creation of the realm of concrete objects alone. The vast majority of beings flow from Him with an inexorable necessity independent of His will.[100]

Morris and Menzel's view not only seems to limit God's freedom with respect to creation but also leans towards anti-realism with regard to abstracta themselves. For recall that, for Morris and Menzel, the creation of abstract entities is mental, and abstract entities are equated with divine concepts and thoughts. Yet, what it means is that their view eventually lapses into divine psychologism (see Craig 2016b: 55–56) and confronts the very same problem the latter does: as argued in the previous section, this view seems to 'sell' the very existence of abstract objects, because they are identified with divine ideas, which are typically held to be concrete.

The final objection to absolute creationism that I would like to touch upon is considered by many to be fatal since, according to it, absolute creationism seems to be simply incoherent. The gist of the objection is that God cannot create *absolutely everything*, for he must already possess properties in order to create something. Put differently, for God to create a property, he must already have, e.g., the property of *being able to create a property*, but then it follows that at least one property remains uncreated by him. At the same time, however, it seems that *being able to create a property* must be logically posterior to God's creating it, since insofar as it is a property, it must (according to absolute creationism) fall under God's creative competence.[101] Famously labelled *the bootstrapping problem*, the objection thus reveals that

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[100] A comprehensive critique of the concept of necessary creation will be carried out in section 2.2.4.2 within this dissertation. There, I will criticise the idea that God necessarily creates *concrete* reality; yet, I believe that the same arguments could equally apply to God's creation of abstracta.

[101] This statement of the problem is due to Bergmann and Brower 2006: 366. More discussions on this sort of objection to absolute creationism can be found in Leftow 1990a; Davison 1991; Davidson 1999; Menzel 2016b; and Craig 2018.

absolute creationism is embroiled in a vicious circularity, and it appears that neither Morris and Menzel's view nor McCann's view can escape it.[102]

Now, a possible way out of this challenge is embracing the doctrine of divine simplicity, claiming that God lacks distinctive properties altogether. According to this perspective, God is taken to be identical to his properties, and all his properties are considered identical to each other. For example, God is omnipotent not by exemplifying the property of omnipotence, but by *being* omnipotence himself. God is not a composition of properties; rather, he is a simple being, indistinguishable from each of his attributes and his nature as a whole. Nevertheless, many reject the notion of divine simplicity on the simple ground that if properties are treated as abstract objects, the doctrine implies that God, being identical to his properties, is himself an abstract object – an outcome which is absurd and unwelcome for many theists.[103] An alternative route for absolute creationists is to disavow the idea that God creates *all* abstracta and exclude God's own properties from the scope of his creative competence. Needless to say, though, this seems like an apparently *ad hoc* manoeuvre, motivated precisely by the attempt to sidestep the bootstrapping objection.

There is still another, and, in my view, a more powerful step the absolute creationist could take. Namely, they could say that *being able to create a property*, for instance, is not a genuine property. After all, one might contend that not all predicates designate properties; indeed, Menzel (2016b: 59–60) chooses just this path, arguing that being able to create a property is not a true property God is meant to exemplify. However, even if we concede this point, there appear to be certain properties – such as *being powerful* – that seem to be genuine ones (see Craig 2018: 454) and required for God in the act of creation. Now, as Craig (2016b: 65) points out, it might be suggested in

[102] McCann (2012: 215–216) acknowledges that the bootstrapping problem indeed badgers Morris and Menzel's account. However, it seems to me that McCann's own account does not evade the problem either. For McCann simply states that God creates his own nature through an absolutely spontaneous and non-predetermined will. In McCann's words (*ibid*.: 232), God's 'nature falls under his own sovereignty. For even though his nature is essential to God, it is "up to him" in the sense that there is nothing that makes it what it is beyond the very existence of voluntariness that constitutes it'. Yet, it is not evident how this is supposed to help with the bootstrapping worries. As noted by Johann Platzer (2019: 367, fn. 20), it still appears that, in order to freely and spontaneously will, the divine will must already possess the (essential) property of being able to will anything. Thus, the bootstrapping problem remains.

[103] For an exhaustive criticism of the doctrine of divine simplicity, refer to Craig 2017: 145–147.

response to this that God does not have to *exemplify* the property of being powerful when he creates – that is, he can be said to be powerful *without exemplifying this property*. Yet, this still sounds problematic. Does this apply to all God's characteristics, then? In other words, is God omnipotent, omnibenevolent, omniscient, and so on, without exemplifying these properties when he creates? If so, why should he even create them at all? And if this does not apply to all of God's properties but only to some, why is that the case? As long as no clear answer to such questions is provided, absolute creationism simply does not appear to be a promising option for theists.

It thus seems that the challenges outlined in this section cast significant doubt on whether absolute creationism can provide a suitable framework for modal abstractionists willing to reconcile the existence of God with the existence of abstract possible worlds (along with other abstract entities). As we have witnessed, this view not only appears to be incoherent in itself but also poses significant (theological) challenges. In the next section, we shall explore yet another alternative for modal abstractionists wishing to make the framework of abstract possible worlds theism-friendly. Unlike divine psychologists and absolute creationists, adherents of this view do not seek to ground the existence of abstract objects in God – they claim that possible worlds, as well as other abstracta, exist independently of God and that this does not compromise the foundations of theistic metaphysics.

2.1.4.3. Possible Worlds as Independently Existing Entities

Even if we concede that both divine psychologism and absolute creationism fail, those wishing to interpret the modal ontological argument in terms of modal abstractionism might still retain some optimism. In other words, they might posit that they can offer a theologically adequate explanation for the relationship between God and abstract possible worlds without identifying these worlds with God's thoughts or taking them to be God's creations. Instead, they might suggest that abstract possible worlds (alongside other abstracta) exist *independently* of God and that this position is not inconsistent with the cornerstone principles of the theistic worldview.

Perhaps the most famous account of this sort has been presented by Peter van Inwagen (2009). He asserts that upon contemplation, it becomes evident that abstract objects cannot be dependent on God in the sense of being his creations. This is because creation is a causal relation – a relation into which abstract objects cannot enter. Additionally, van Inwagen provides arguments against the stance that abstract entities are identical to God's thoughts. Similar to Fried (see section 2.1.4.1), he posits that, since thoughts are propositional

attitudes (i.e., 'thinkings *that*'), it is not clear what thoughts (whether in God's mind or anyone else's) could be identified with, say, numbers, qualities, or relations. Van Inwagen thus takes abstract objects to be uncreated entities existing alongside God and being independent of him.

However, this raises questions regarding the interpretation of religious texts proclaiming God as the creator of *all* things. In response, van Inwagen advocates for interpreting the quantifier 'all' as implicitly restricted in such contexts. He suggests that, for instance, the Nicene Creed's declaration of God as the creator of all visible and invisible things tacitly confines its domain to objects capable of entering causal relations. For van Inwagen, this is a reasonable interpretation: inasmuch as abstract entities lack causal efficacy, they are obviously immune to creation by any agent, including God. Consequently, there seems to exist no inherent conflict between theistic metaphysics and the existence of abstract entities.

Nicholas Wolterstorff similarly argues that there are at least some abstract objects that exist independently of God (and so that a strictly literal interpretation of religious documents is unjustified):

> Consider the fact that propositions have the property of *being either true or false*. This property is not a property of God. But it is presupposed by the biblical writers that not all exemplifications of this property were brought into existence by God, and thus that it was not brought into existence by God. For the propositions 'God exists' and 'God is able to create' exemplify *being true or false* wholly apart from any creative activity on God's part; in fact, creative ability on his part presupposes that these propositions are true, and thus presupposes that there exists such a property as *being either true or false*. (Wolterstorff 1970: 292)

In other words, God cannot be the creator of properties such as *being either true or false* because his creative ability *presupposes* the existence of such properties. And as far as it is unlikely that the biblical authors had abstract objects in mind when making their claims about creation, the exclusion of abstract objects from God's creative capacity (and his control in general) should not be too much worrisome to theists.

Arguments supporting the view that abstract objects (should they indeed exist) do not undermine God's sovereignty or aseity have also been provided by Scott Shalkowski (2014). First, it is crucial to observe that Shalkowski explicitly leans to nominalism regarding abstract objects, positing that the justification for positing the existence of such entities is insufficient. On the other hand, he states that *if* there are such things as abstract objects, they do

not pose a threat to the theistic worldview. Shalkowski here directs our attention to the fact that abstract objects exist necessarily and delineate the fundamental structure of reality; moreover, abstracta could not change or have been otherwise than they are. But necessity, as Shalkowski (2014: 151) points out, is 'the ultimate stopping place':

> The moral is that it is a mistake to think that there are deeper explanations for necessities. It is similarly mistaken to think that the limits of possibility are akin to chains that bind anyone, even God. If it is not possible for things to be or have been otherwise; there is *nothing* God could have done otherwise. If there was no thing God could have done otherwise because no-one could have done otherwise, how is it any failing on any divine attribute that God is unable to do it?

Analogous considerations apply to God's independence:

> It makes no sense to worry that God might be inappropriately limited by the existence and character of abstracta, if there were something on the other side of the limit, but there is nothing metaphysical that is like a fence that prohibits God from exploring some territory. There is nothing on the other side of the fence. (Shalkowski 2014: 152)

Reflections of this sort, according to Shalkowski, lead to the dissolution of the theological problem concerning the relationship between God and abstract objects. Simply put, there is no problem in the sense that God is somehow constrained by the existence of abstracta – he is not, because no one could be. The existence and nature of abstract entities belong to the realm of necessity, which escapes any explanatory frameworks. Speculation on how God might be deemed 'responsible' for the existence of abstracta proves futile, as their very necessity precludes such considerations. Necessity is not something that *binds* or *limits*. It neither binds nor liberates; it just stands here – unchangeable and inescapable. If the existence of numbers makes it impossible (even for God) to make 13 from 7 and 5, it is not a problem for theism. Similarly, if the existence of possible worlds means that even God is unable to change what is possible, it again does not constitute any type of theological challenge. That is because no explanation, no account – whether theistic or otherwise – of abstract entities is even possible; and so any expectation of theological accounts on how God maintains sovereignty over these objects proves simply unwarranted.

What are we to make of these arguments? Can we, drawing upon the perspectives of van Inwagen, Wolterstorff, and Shalkowski, establish that the independent existence of abstract objects is not menacing to theistic metaphysics? In my assessment, it is implausible to think so.

I would like to begin with Shalkowski's argumentation. According to Shalkowski, the existence of abstract objects does not threaten theism because, being necessarily existing entities and necessarily possessing the character they do, abstracta evade any explanation, and so they neither need to nor can be accounted for in any way whatsoever, including a theistic one. Yet, it appears that Shalkowski here is simply restating the problem rather than solving it. In other words, the very necessity and inexplicability of abstracta is what causes the challenge for theistic metaphysics. If there are such things as abstract objects, what it means is that there are other things aside from God that enjoy necessary existence and are autonomous of any dependence, including on God; but, according to theism, all things distinct from God must ultimately depend on him – hence the problem. Moreover, it is noteworthy that Shalkowski's arguments seem to obscure the distinction between necessity as such and *objects* exhibiting necessity. The difference is crucial, as the problem of God and abstract objects arises precisely when it is assumed that there are separate *entities* existing independently of God.

Welty (2014a: 160) has similarly observed that Shalkowski's position begets the conflict rather than dissolves it. That is because if there are necessary abstract objects and there is no deeper explanation for their existence, this, according to Welty, provides a reason for the theist to reject platonism altogether. Consider possible worlds. If there truly exists a plurality of abstract possible worlds, which are independent of God and function as the ultimate truthmakers for modal truths, then they, not God, bear the responsibility for the deepest – i.e., the necessary – layer of reality, which surely conflicts with God's sovereignty and aseity. Craig (2014b: 162) is likewise arguing that, under such a picture, God is simply not maximally great, for a maximally great being would serve as the sufficient reason or ground of being for *all* entities beyond itself. If the existence of abstract objects implies that God exists because he exemplifies certain independently existing properties, then God does not exist *a se*. Certainly, the same goes for possible worlds: if there are independently existing possible worlds and God's own necessary existence is explained in terms of his existence in each of these worlds, then God is made dependent on them in the most robust sense possible. Not only does God cease to be the sole necessary being, but his own

necessity becomes contingent upon something else. Needless to say, this constitutes a complex theological challenge.[104]

Van Inwagen's and Wolterstorff's appeals to religious documents, attempting to discern the intended quantification – whether restricted or unrestricted – do not appear to properly tackle the problem either. Notwithstanding the fact that considerations like these remain only speculative, it seems to remain the case that even if restricted quantification is implied in religious texts (suggesting that God is only meant to be the creator of concrete things), it does not follow in any way from it that the existence of abstracta does not pose a challenge to the theistic worldview. Creative dependence is not the only way in which abstracta can be dependent on God: if absolute creationism fails, theists must find other ways to show that the existence of abstracta can truly be made theism-friendly.

Perhaps, yet, one can, in the spirit of van Inwagen, claim that the very notion of abstract objects precludes their engagement in causal relations and likely renders them unyielding to external dependencies altogether. That is, one can argue that the concept of *dependent abstract entities* is a *contradictio in adjecto*, since the very essence of abstracta rules out their being dependent or grounded in any being distinct from themselves. Naturally, the easiest way out of this sort of contradiction is to either reject platonism (asserting the existence of abstract objects)[105] or reject theism. In the present context, however, neither of these alternatives works, for we are dealing with the question of how modal abstractionism – the postulation of the existence of abstract possible worlds – could be reconciled with theistic metaphysics. In other words, we are dealing with a position committed to *both* platonism and theism, and so rejection of either is simply not an option. Nor can we merely leave the situation as it is, allowing abstracta to float freely and independently of God, for, as we have just seen, no argument attempting to dissolve the fundamental problem of God and abstract objects is truly convincing.

What is required, thus, is a demonstration that there is *no* contradiction in abstracta being grounded in God, a demonstration that this dependence can be successfully accounted for. Unfortunately, as we have witnessed, neither

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[104] The existence of abstract objects also introduces a potential difficulty with respect to the doctrine of creation *ex nihilo*, which asserts that God created the universe out of nothing. That is, the necessary coexistence of abstract objects alongside God suggests that the creation of the concrete reality did not occur from a state of absolute nothingness (refer to Leftow 1990b: 584 for a corresponding observation).

[105] Some authors (see, e.g., Craig 2011, 2012) posit that orthodox Christians can endorse nominalism as a plausible alternative to platonism.

divine psychologism nor absolute creationism – at least in their current shapes – do not appear to be promising stances.

We are therefore now in a position to conclude that all the strategies employed to resolve the God and abstract objects problem – whether by considering abstracta as God's thoughts, viewing them as products of divine creation, or proposing their independent existence alongside God – have failed to offer a substantial solution. As demonstrated, each approach encounters formidable challenges, which in turn reinforces scepticism with regard to interpretations of the modal ontological argument grounded in modal abstractionism. Recall that in case this argument is run assuming the existence of abstract possible worlds, an explanation is needed on how God's existence could be reconciled with the existence of such entities. After exploring the three main ways to harmonise God's existence with that of possible worlds and other abstract objects, we have arrived at the conclusion that none of these methods yields fruitful results.[106] Consequently, we are meant to conclude that interpreting the modal ontological argument through the lens of the abstractionist construal of possible world proves unpromising either.

Despite Plantinga's adherence to modal abstractionism and his formulation of the modal ontological argument within this framework, our examination reveals that this in itself does not ensure the argument's overall success. For even though such formulation yields a formally valid argument, it leaves a significant metaphysical question unanswered: how do we reconcile God's existence, assuming the argument's soundness, with the modal principles the argument implies? In other words, are we able to demonstrate that the existence of an array of abstract entities known as possible worlds does not jeopardise theistic metaphysics? The analysis carried out in the preceding sections confirms that we are, as a matter of fact, far from such a demonstration. What it says is this: attempts to interpret the modal ontological argument in terms of modal abstractionism remain fundamentally unconvincing.

2.2. Critique of Interpretations of the Modal Ontological Argument Based on Modal Concretism

I will now turn to the question of whether the modal ontological argument could find support within the framework of modal concretism, or the thesis that possible worlds are real, concrete entities. As with modal abstractionism,

[106] We will revisit the problem of God and abstract objects in the third chapter of this dissertation.

my goal is to show that concretist interpretations of the modal ontological argument are ultimately futile. Before presenting arguments supporting this claim, however, it is crucial to present the core tenets of the concretist viewpoint. I shall commence by outlining the fundamental aspects of modal concretism both in its general form and its treatment of *de re* modality specifically. Following this exposition, I will address three primary challenges plaguing this theory: the charge of irrelevance, the moral objection, and the paradox arising from the unrestricted principle of recombination (to be discussed shortly). Upon completing these examinations, I will undertake the discussion on why the concretist account fails to offer a suitable foundation for interpreting the modal ontological argument.

2.2.1. Modal Concretism

In contrast to modal abstractionism, wherein possible worlds are treated as some sort of abstract entities, modal concretism construes these worlds as concrete objects, which exist in the very same sense as the world we call 'ours' does. Put differently, other possible worlds are to be understood as concrete spatiotemporal objects, with their denizens being as 'real' or concrete as we ourselves are.[107,108] The foundational tenets of modal concretism are outlined by David Lewis in the following way:

> Are there other worlds that are other ways [that a world might be]? I say there are. I advocate a thesis of plurality of worlds, or *modal realism*, which holds that our world is but one world among many. There are countless other worlds, other very inclusive things. <…> The worlds are something like remote planets; except that most of them are much bigger than mere planets, and they are not remote. Neither are they nearby. They are not at any spatial distance whatever from here. They are not far in the past or future, nor for that matter near; they are not at any temporal distance whatever from now. They are isolated: there are no

[107] Given that both the originator and most preeminent proponent of modal concretism is David Lewis, we shall use 'modal concretism' and '(Lewisian) modal realism' interchangeably.

[108] Lewisian modal realism is also sometimes termed *genuine modal realism* or *extreme modal realism*. This sense of 'modal realism' is not to be confused with another sense this expression can take – i.e., realism about modality as such (which is, roughly, the view that there are irreducibly modal truths or facts). As Lewis takes worlds but not modalities to be irreducibly real, his view would rather be categorised as *modal antirealism* in this latter sense. However, for the purposes of this dissertation, we will adhere to the former sense of 'modal realism'.

> spatiotemporal relations at all between things that belong to different worlds. Nor does anything that happens at one world cause anything to happen at another. Nor do they overlap; they have no parts in common, with the exception, perhaps, of immanent universals exercising their characteristic privilege of repeated occurrence. (Lewis 1986: 2)

Several points within this passage warrant our consideration. First, it is to be noted that the Lewisian perspective stands in direct and explicit opposition to Kripke's view, according to which possible worlds are nothing like remote planets. On the contrary, Lewis wholeheartedly endorses just this stance, contending that other worlds are exactly what we naturally imagine them to be – spatiotemporal objects very akin to planets, although they are normally much bigger and contain huge surroundings, encompassing numerous planets and other spatiotemporally related entities. Another key attribute deserving attention is that Lewisian worlds are causally and spatiotemporally isolated from each other. This means that occurrences in one world cannot affect events in another, and events and entities in one possible world do not share the same space-time with those in another. Furthermore, each world hosts unique inhabitants, and there is no possibility for one and the same individual to reside in more than one world – a facet of concretism to which we shall return in section 2.2.2.

Within the Lewisian framework, the assertion that 'absolutely *every* way that a world could possibly be is a way that some world *is*' (Lewis 1986: 2; emphasis in the original) captures the core tenet. Consider, for example, the possibility of there existing flying pigs. Now, if this is indeed a genuine possibility, then, according to Lewis' theory, there is an entire world where *there are* such entities as flying pigs – and what is essential here is that they are as real and tangible as their non-flying counterparts familiar to us. Naturally, the same principle extends to a myriad of other possibilities: whether we are considering flying pigs, talking donkeys, literate wombats, or other possible scenarios, Lewis' theory posits the existence of entire worlds populated by such entities. Unsurprisingly, Lewis subscribes to the standard view where the following biconditionals hold: 1) $\Box p$ is true iff p is true in all possible worlds, 2) $\Diamond p$ is true iff p is true in at least one possible world. Surprisingly (to many), however, Lewis maintains that instead of being abstract ways things might have been, worlds and their residents are concrete, flesh-and-blood entities with no difference in kind from the actual world and its constituents.

Notwithstanding the potential surprise such an approach might elicit, there is a clear rationale behind it. For recall that the abstractionist approach

is not without its problems – as has been noted, abstract entities appear rather strange and mysterious to some philosophers. Therefore, the fact that Lewis does not postulate the existence of abstract possible worlds stands as a clear advantage for such philosophical taste. What Lewis posits is the existence of concrete reality, already familiar and, unlike the abstract realm, not mysterious at all; what he adds is just that there is *more* of this concrete reality – that is, instead of there being just one concrete world, there exists a whole plurality of them.

However, what exactly does it mean to say that Lewisian worlds are *concrete*? Lewis (1986: 81–86) provides at least four ways to differentiate between concrete and abstract entities. First, he states that one may rely on some paradigmatic examples: e.g., objects such as donkeys and protons are commonly regarded as concrete, whereas things like numbers are treated as abstract. Second, Lewis states that the demarcation between concrete and abstract entities might align with distinctions between individuals and sets, particulars and universals,[109] or particular individuals and everything else. Third, according to Lewis, it can be contended that, unlike concrete objects, abstract entities lack spatiotemporal locations, do not engage in causal interactions, and are never indiscernible from one another. Finally, Lewis maintains that it possible to hold that abstract entities are abstractions from concrete entities.[110] While acknowledging that there are certain challenges associated with each of the aforementioned criteria, Lewis asserts that, under a charitable interpretation, his worlds can be classified as concrete under all of them.[111]

Another prominent feature of modal concretism is that, unlike accounts put forth by modal abstractionists, it takes a (purportedly) reductive stance towards modality. In Lewis' framework, not only can the truth-conditions for modal statements be expressed in terms of worlds and their parts, but worlds themselves can be defined entirely non-modally – specifically, as maximal mereological sums of spatiotemporally connected things (see Lewis 1986, section §1.6). Unlike characterisations of possible worlds provided by modal

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[109] Though such a perspective would diverge from contemporary usage, wherein the term 'abstract objects' is usually held to be broader than that of 'universals' (see fn. 70).

[110] As Lewis points out, while historically and etymologically accurate, this interpretation of abstracta is by no means dominant in contemporary philosophy.

[111] On the other hand, it should be noted that even though many constituents of these worlds (such as puddles and stars) can be unproblematically regarded as concrete, worlds still include some parts (such as universals or tropes, given that they are non-spatiotemporal parts of ordinary particulars) that fall under the category of the abstract.

abstractionists, such a definition is free from modal concepts (for this reason, the term '*possible* worlds', when used within the Lewisian theory, serves merely as a label and should be approached with caution), and thus modal discourse can be reduced to an entirely non-modal basis.[112]

Lewis contends that this feature of his modal realism – namely, its capacity to deliver a reductive analysis of modal notions – is the crucial benefit of his account and that it proves it superior over abstractionist theories relying on primitive modality (see Lewis 1986: 136–191). In other words, Lewis claims that his theory, which quantifies over real, concrete worlds, can actually provide an *explanatory* account of modal expressions, and he posits that the very serviceability of the hypothesis positing a plurality of concrete worlds provides grounds to consider it true (*ibid*.: 3).

Here, Lewis presents a sort of argument from theoretical utility and employs an analogy with set theory to illustrate his main point. According to Lewis, David Hilbert was right to call the set-theoretical universe a paradise for mathematicians because talk of sets provides a unified framework for expressing various mathematical concepts (by reducing them to the language of first-order logic with identity and the membership relation). In a similar vein, modal realism facilitates a comprehensive unification and explanation of a wide array of philosophical notions: Lewis states that it not only furnishes a non-modal analysis of modal concepts but also offers a way to explain a series of phenomena – including properties, propositions, causation, supervenience, and counterfactuals – in terms of sets of worlds (*ibid*.: 5–69). Therefore, Lewis thinks that, akin to set theory in mathematics, modal concretism – with its fruitfulness and serviceability – can be rationally accepted based on its theoretical gains.[113]

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[112] Although the question of whether Lewis truly succeeds in realising his reductive ambitions is not entirely undisputed. Some doubts about this have been expressed in Lycan 1988, 1991; Shalkowski 1994; Divers and Melia 2002; Cameron 2007. The arguments provided by Divers and Melia were criticised in Paseau 2006, with a corresponding reply available in Divers and Melia 2006. For a rejoinder to Cameron's work, refer to Daly 2008.

[113] Many have observed that, notwithstanding the theoretical benefits mentioned by Lewis, modal realism comes at great ontological cost by postulating an extensive array of concrete worlds. Put differently, modal realism seems to disregard the principle of parsimony, asserting that entities should not be multiplied beyond necessity. In response, Lewis argues that while his theory might indeed violate quantitative parsimony due to the multitude of entities in its ontology, the crucial consideration is qualitative parsimony, which pertains to the number of distinct *kinds* of entities posited by a theory. According to Lewis, his theory is merely quantitatively, not qualitatively, unparsimonious: it requires only the postulation

Now, the recognition that other worlds are as concrete and real as our own and that all worlds exist in the very same manner reveals yet another facet of Lewis' modal realism: unlike abstractionist theories, Lewis' view is a form of possibilism. In other words, Lewis rejects the thesis that whatever exists is actual because, in his view, there are many worlds that exist *outside* of what we call the actual world. In contrast to the actualist who sees the actual world as a comprehensive universe that *encompasses* possible worlds and so enables, in Robert Adams' (1974: 224) words, 'to gain, so to speak, a standpoint outside the system of possible worlds', the possibilist offers a more egalitarian conception of possible worlds, where we begin not with the actual world as the all-encompassing universe but with the system of worlds as such, in which our (i.e., actual) world is just one among many. Figuratively speaking, actuality 'shrinks' within the possibilist's framework: for us, the actual world is the world we happen to inhabit – a maximal mereological sum of spatiotemporally connected things, of which we ourselves constitute a part; nonetheless, other worlds exist *beyond the confines* of this world and are no less real. This difference between the actualist and possibilist stances is represented visually in Figure 4:

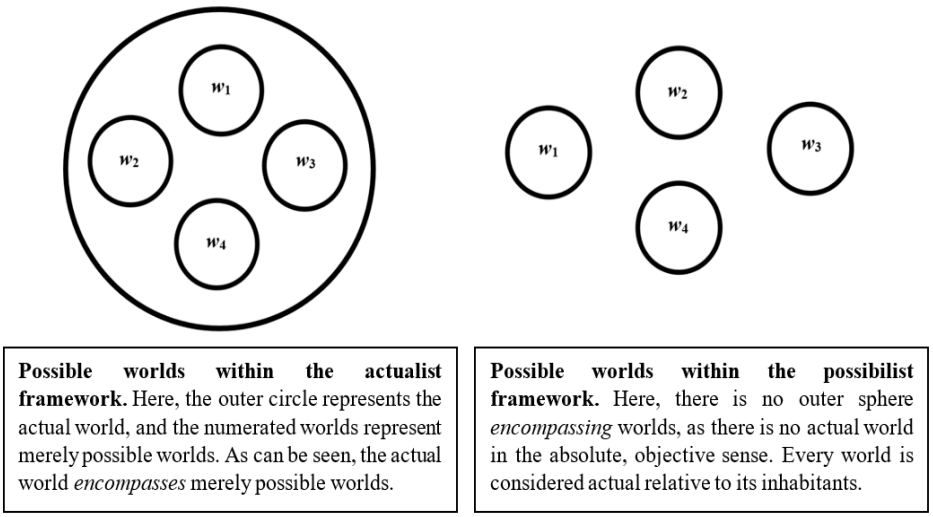

Figure 4. Possible worlds under the actualist and the possibilist frameworks.

of more entities of the same kind as the very world we are familiar with (see Lewis 2001 [1973]: 87).

To state it differently, the idea rooted in Lewisian concretism that none of the worlds is 'more special than others' naturally implies that actuality also fails to be something that could set our (or any other) world apart from the rest. As articulated by Russell Wahl (1987: 431), '[i]f possibility is taken to be variation from world to world, the actuality of the actual world cannot consist in a feature that the actual world has and the merely possible worlds lack, except from the point of view of the actual world, and there can be nothing special about the point of view of any world'. Consequently, as Wahl points out, possibilism is committed to the indexical theory of actuality, wherein 'actual' is treated as an indexical term, its extension determined by the context of utterance. For Lewis, saying that a particular world is actual is tantamount to saying that the world in question is *this* world. When uttering this, we mean *our* world, but for the denizens of another world, it denotes *theirs* (see Lewis 1986: 92–93).[114]

The final significant trait of Lewisian modal realism demands our consideration. As previously noted, within the Lewisian account, absolutely every way that a world could possibly be is a way that some world is. In addition to this, it is claimed that absolutely every way that *a part of a world* could possibly be is a way that some part of some world is (see Lewis 1986: 86). Known as the principle of plenitude, this principle is intended to secure that there are 'no gaps in logical space; no vacancies where a world might have been, but isn't' (*ibid.*). Importantly, this requires another pivotal tenet – the principle of recombination, which states, roughly, that anything can coexist with anything else and anything can fail to coexist with anything else.[115] Lewis sees it as a necessity to safeguard plenitude, for if, say, there could be a dragon and a unicorn independently but the possibility of them

[114] It is important to note that Lewisian possibilism should not be confused with what is called *classical possibilism*. The latter is based on the idea that there is a substantial ontological difference between *being* and *existence* (or *actuality*). Being is conceived as a broader category encompassing all that in some sense is, and so it is held that everything that exists (is actual) has being but not vice versa. Within classical possibilism, therefore, merely possible objects are entities that do not have existence (or actuality) but still enjoy *some type* of being. Lewis, by contrast, as he articulates (see his 1990), 'dispenses with existence' and claims that everything exists in precisely the same sense. On the other hand, as has already been shown, Lewis draws a distinction between *existence* and *actuality*: some things, albeit existing, are not actual.

[115] According to Lewis (1986: 87), this second aspect of the principle expresses 'the Humean denial of necessary connections between distinct existences'.

existing side by side were excluded, it would create an 'unacceptable gap in logical space' (*ibid*.: 87–88).[116]

In the words of David Efird and Tom Stoneham (2008: 485), the intuitive idea behind the principle of recombination is that one can 'patch together' parts of possible worlds to form other possible worlds. The implications of this principle encompass the idea that any two or more distinct parts from any two possible worlds can be combined to formulate another possible world. Additionally, if a distinct part of a possible world can be identified, there exists a possible world consisting solely of that part and nothing else. In this way, then, Lewis attempts to ensure that there is always a sufficient number of worlds to satisfy the concretist truth-condition for any intuitive modal truth.

Our discussion of Lewisian modal concretism so far has overlooked a crucial aspect of this theory: the question of how Lewis accounts for *de re* modality. Here, Lewis' theory stands out as particularly original again, in the sense that Lewis rejects the view that individuals exist in more than one world. Instead, he embraces the tenet that individuals are bound to a single world, and employs the counterpart, or similarity, relation to deal with *de re* modal statements. The investigation of Lewisian counterpart theory merits a dedicated section, and that is exactly where we shall now turn.

2.2.2. Counterpart Theory

As has already been noted, Lewis dismisses the notion that an individual can exist in more than one world. Instead, he posits that individuals are inherently world-bound: there is no possibility for anyone to escape the constraints of their own world.[117] How does Lewis approach the analysis of *de re* modality,

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[116] A note for the sake of precision: since worlds do not overlap and individuals are world-bound for Lewis, a unicorn from one world and a dragon from another cannot *themselves* exist side by side. It is thus more rigorous to assert that a *duplicate* of the unicorn and a *duplicate* of the dragon exist side by side (see Lewis 1986: 88–89). The world-boundness of individuals within the Lewisian framework is also closely related to the counterpart relation, which will be explored in the subsequent section. For an explanation of the difference between the duplicate relation and the counterpart relation, refer to the aforementioned pages of Lewis' work.

[117] The statement that an individual is world-bound should be understood as the statement that no individual *that exists wholly within a world* (i.e., as a part of that world) can exist in more than one world. Individuals that exist wholly in worlds are entities such as humans, electrons, puddles, and so forth. However, Lewis (1983: 39–40) says that there are two additional ways entities can be said to be in a world. As Lewis imposes no restrictions on the mereological summation of

then? He does so by claiming that despite being world-bound, individuals have *counterparts* in other worlds.[118] For example, the sentence 'Emmanuel Macron could have been a football player' is interpreted as asserting that, in at least one possible world, there exists a *counterpart* of Emmanuel Macron who is a football player. Analogously, stating that Emmanuel Macron is necessarily human would be construed as the claim that, in any possible world, all counterparts of Emmanuel Macron exhibit the quality of being human. As articulated by Lewis (2001 [1973]: 39), the counterpart relation is a relation of qualitative similarity:

> Something has for *counterparts* at a given world those things existing there that resemble it closely enough in important respects of intrinsic quality and extrinsic relations, and that resemble it no less closely than do other things existing there. Ordinarily something will have one counterpart or none at a world, but ties in similarity may give it multiple counterparts.

Unlike the identity relation, the counterpart relation does not have to be neither symmetric (it is possible for a to have a counterpart c in world w, when a is not a counterpart of c) nor transitive (if a has a counterpart c in w and c has a counterpart c_1 in w_1, it does not entail that c_1 is a counterpart of a) (see Lewis 1968: 115–116).[119] Now, Lewis thinks that it is ultimately up to us which respects of similarity are considered relevant, meaning that the counterpart relation is context-sensitive: 'Two things may be counterparts in one context

individuals, he allows for the existence of individuals consisting of parts from several worlds – the so-called cross-world individuals. Such individuals exist *partly* in each of many worlds, but they are not possible individuals because, regardless of which world is considered actual, at most, only a proper part of such an individual exists. Finally, Lewis states that some things exist *from the standpoint of a possible world*: these entities are designated as non-individuals. They do not exist in any world in the sense of being a part of that world, nor do they exist as a mereological summation of individuals; they only exist from the standpoint of a possible world, which means belonging to 'the least restricted domain that is <…> appropriate in evaluating the truth at that world of quantifications'. Since we quantify over such entities, we must admit that they are within worlds in some sense. These non-individuals are identified with sets, while entities such as properties, numbers, propositions, and events are all reducible to sets within Lewis' ontology.

[118] The initial exposition of counterpart theory is in Lewis 1968. Within this article, Lewis proposes the *translation* of modal claims into non-modal ones. However, in his later works, he shifts his focus towards providing non-modal *truth-conditions* for modal statements (see Lewis 1986: 7).

[119] Though the counterpart relation is reflexive: any individual is a counterpart of itself within its own world.

but not in another; or it may be indeterminate whether two things are counterparts' (Lewis 1986: 254). The counterpart relation, thus, exhibits much greater flexibility compared to the structure of identity.

The contextual dependence and vagueness of the counterpart relation have been emphasised by Lewis as the primary virtue of counterpart theory: according to Lewis, *de re* representations typically embody precisely such vagueness and elusiveness. Consider questions like: could Hubert Humphrey have been an angel? Could he have been born to different parents? Could he have been a robot? Lewis (*ibid*.: 248–263) contends that these questions can only yield sensible answers when we establish the relevant criteria of resemblance, which are always context-dependent. In certain scenarios, we may hold that a person's origins are essential to them, but in others, we might not; consequently, our responses to the second question are likely to vary depending on how we conceptualise personhood as such (apparently, the same goes for other questions as well).[120] The main idea is that, for Lewis, there are simply no right (in an absolute sense) answers to such enquiries: facts about *de re* modality are not, as he puts it, 'settled' and 'fixed once and for all'.

Furthermore, counterpart theory offers a plausible solution to the well-known problem of material constitution. In its famous form, the problem prompts us to consider a statue made of clay and ask whether this statue and the lump of clay from which it is made are one and the same object. Intuitively, it might be tempting to say that the statue is really identical with the lump of clay; however, such an answer poses challenges in the sense that the statue and the lump seem to have different properties – e.g., the statue cannot survive squashing whereas the lump of clay can. On the other hand, if we stick to the idea that the statue and the lump are distinct entities, then we commit ourselves to the problematic principle that two material objects can simultaneously occupy the same spatial region.

[120] While it is a common assumption that humans have their origins essentially, further considerations may reveal a more intricate aspect to this question. Here is an illustrative passage by Lewis (2001 [1973]: 41): 'For instance, consider two inhabitants of a certain world that is exactly like ours in every detail until 1888, and thereafter diverges. One has exactly the ancestral origins of our Hitler; that is so in virtue of events within the region of perfect match that ended just before his birth. In that region, it is quite unequivocal what is the counterpart of what. The other has quite different ancestral origins, but as he grows up he gradually duplicates more and more of the infamous deeds of our Hitler until after 1930 his career matches our Hitler's career in every detail. Meanwhile the first lives an obscure and blameless life. Does this world prove that Hitler might have lived a blameless life? Or does it prove that he might have had different ancestral origins?'

The solution that counterpart theory provides to this problem is that one and the same object – the statue made of clay – can be approached from at least two different perspectives. We can regard it as a statue and associate it with properties statues possess, or we can view it as a lump of clay and associate it with characteristics clay is supposed to have. In other words, here we have two separate contexts and, consequently, two distinct counterpart relations. If we categorise this object as a statue, then we take that such an object, for instance, cannot survive squashing, must possess a particular shape, and so forth; therefore, an object highly similar to it but differing in shape would not be considered its counterpart. Yet, if we think of this object as a lump of clay, then a highly similar entity that simply differs in shape does count as its counterpart. Within this framework, thus, there are simply distinct ways of presenting an object, and whether or not something counts as its counterpart depends on what properties (and thereby respects of similarity) we hold relevant in a given context.

For this reason, Lewis' talk about essential properties of things should not be confused with the essentialist doctrine claiming that things possess modal properties in an absolute sense, i.e., independently of specifications. Essential properties, for Lewis, are simply necessary properties, and these, in turn, as we have seen, are contingent upon context and description. As Lewis (1983: 42) himself puts it, rather than endorsing 'Aristotelian essentialism', he holds that 'essences of things are settled only to the extent that the counterpart relation is, and the counterpart relation is not very settled at all'. If Lewis' view is to count as a form of essentialism, then, it does so only in a highly specific manner – namely, when no primitive or description-independent notion of essence is brought in (see Woodward 2012a: 65).[121]

This concludes our foundational overview of Lewisian counterpart theory and Lewisian modal realism as a whole. Given the original, courageous, and even provocative nature of Lewis' ideas, it is unsurprising that they have elicited numerous critiques and objections. In the next three sections, we shall survey the three most common objections lodged against Lewis' concretist conception of possible worlds, and then we will turn to the

[121] Although it must be noted that the question of what is the most exact way to characterise Lewis' relation with essentialism is subtle and that there might be different approaches employed here. Cristina Nencha, for example, has acknowledged that Lewis may be reasonably regarded as an anti-essentialist (see her 2017) yet has argued elsewhere (2022) that Aristotelian essentialism can be said to survive under the Lewisian treatment of *de re* modality in the sense that *de re* modal facts are reduced to non-modal facts, which are in turn context-independent.

question of whether modal concretism can furnish a suitable groundwork for interpreting the modal ontological argument. As in the case of modal abstractionism, I will argue once again that no such groundwork can be provided, as a successful reconciliation between modal realism and theism is highly implausible.

2.2.3. Problems with Modal Concretism

2.2.3.1. The Charge of Irrelevance

One of the most well-known objections levelled against modal concretism is the so-called charge of irrelevance. This objection comes in two forms: one of them specifically targets Lewisian counterpart theory, and the other concerns modal realism in its broader scope. We shall address each form of this objection in turn.

Recall that, when accounting for *de re* modal expressions, Lewis dismisses the thesis that individuals can exist in more than one world. For him, individuals are confined within the boundaries of their respective worlds; however, they possess counterparts existing in other worlds, and this is precisely what allows us to explain their modal properties. Critics of Lewis' theory often claim that this type of analysis confronts the issue of irrelevance. In other words, within the Lewisian framework, individuals and their counterparts only share the relation of similarity, yet it is frequently underscored that, upon closer examination, an adequate semantic analysis of *de re* modality seems to require the relationship of identity.

For instance, as has been put by Plantinga (1974b: 116), the proposition that Socrates could have been unwise is analysed by the counterpart theorist by positing that there are worlds in which there exist unwise counterparts of Socrates, though this latter fact appears to be entirely irrelevant with respect to the truth that Socrates – *Socrates himself* – could have been unwise. Another noteworthy statement of the problem is found in a famous passage by Kripke (1980: 45, fn. 13):

> The counterpart of something in another possible world is *never* identical with the thing itself. Thus if we say 'Humphrey might have won the election (if only he had done such-and-such), we are not talking about something that might have happened to *Humphrey* but to someone else, a "counterpart".' Probably, however, Humphrey could not care less whether someone *else*, no matter how much resembling him, would have been victorious in another possible world. Thus, Lewis's view seems to

> me even more bizarre than the usual notions of transworld identification that it replaces.[122,123]

The gist of this charge lies in the assertion that the truth-values of *de re* modal assertions are not determined by what is going for *other* individuals; rather, they are determined by the very individuals bearing specific modal properties. When stating that Socrates could have been unwise or that Hubert Humphrey could have won the election, what we are talking about is *Socrates himself* and *Humphrey himself*, and this appears to constitute an essential element in our fundamental comprehension of *de re* modality. The fate of individuals residing in worlds spatiotemporally isolated from ours simply seems to have nothing to do with goings-on within our own world.

Incidentally, Louis deRosset (2011: 145) has highlighted that it would be an exaggeration to claim that what is happening to other-worldly individuals has *absolutely no relation* with possibilities pertaining to this-world individuals. For example, the victory or loss of someone elsewhere might indeed provide some evidence that a similar this-worldly politician might have won or lost the election as well. However, this is not the type of relevance that is meant by the objectors. In other words, it could be said that the counterpart relation holds, at most, *epistemic* significance in the given context. The crux of the matter, however, lies in the lack of relevance in the *semantic* sense: when we talk about modal properties of individuals, what we seem to have in mind are those individuals themselves and not their counterparts, regardless of the degree of similarity. Critics of the counterpart theory thus seek to point out that the relation of similarity is simply too weak to capture the real semantic nature of our *de re* modal talk.

Critics have also articulated a charge of irrelevance against Lewisian modal realism at a broader level. Suppose that there exists a Lewisian world, a maximal mereological sum of spatiotemporally connected things. Then, van Inwagen (2001: 226) asks:

> What makes it an "unrealized possibility"? What is it besides an enormous physical object that has this feature, cosmologically fascinating but modally irrelevant, of being spatiotemporally unrelated to us? What would such things and their parts have to do with modality?

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[122] Due to Kripke's wording, some authors (e.g., Rosen 1990: 349), term this objection *the argument from concern*, although others tend to stress that the issue of irrelevance remains logically prior to that of concern in this context (see Kalhat 2008: 506; Yablo 2014: 16–17).

[123] For a related criticism, also see Salmon 1988: 239–240.

> Why should I call a horse that is a part of one of these things a "merely possible horse"? Why is that a good thing to call it?

The concern at hand is that even if we grant that there are such things as concrete world as Lewis describes them, the difficulty lies in discerning their relevance to modality as such. Recall that Lewis' modal realism is a reductive project, aiming to fully reduce our modal expressions to a non-modal discourse, and that Lewis achieves this objective precisely by providing a non-modal definition of worlds. Now, while Lewis perceives this as a substantial advantage of his theory, a specific puzzle arises. When worlds are defined in a non-modal manner, we find ourselves in a situation where it becomes unclear how such objects relate to possibility and necessity at all. In other words, Lewisian worlds appear to be just ordinary concrete entities, in the substantial sense akin to trees, rivers, or mountains – but then why should we think that they bear any meaningful relevance to modality?

As has been articulated by Bradford Skow (2022: 285), the objector simply points to the fact that 'what could be the case' and 'what is the case in places spatiotemporally disconnected from here' are two different things. If we expect modal realism to work, proponents of the theory must provide a compelling answer as to why these two should be identified.

Apparently, the challenge prompts broader questions concerning the tension between reductionism and anti-reductionism. Defenders of Lewis' theory typically align with general reductionist aspirations and maintain that the so-called irrelevance is simply a consequence of the paradox of analysis. For instance, Theodore Sider (2003: 198) posits that if unfamiliarity and strangeness to the average non-philosopher's ears were considered an obstacle, then very few philosophical analyses would be feasible at all. Echoing the sentiment, Barry Maguire (2013: 144) argues that the purported folk understanding of modality should not carry too much weight in the evaluation of our theories. He claims that pre-theoretical understanding is often vague and inaccurate, and illustrates his point by suggesting that folk perception of light, for instance, is almost worthless.

However, there are reasons to doubt whether the analogy with the case of light is truly appropriate in this particular context. Light is a physical phenomenon and can be investigated empirically. By contrast, Lewisian worlds, while also possessing a physical nature, are causally and spatiotemporally detached from us and so evade empirical investigations; our acceptance of their suitability to serve as a foundation for our modal facts rests solely on speculative and philosophical grounds. The problem, as far as I understand it, is that it is hard to imagine what exactly such grounds could

be.[124] We have seen that Lewis presents arguments for his theory based on theoretical utility. Yet, the essential question remains what reasons *intrinsic to the phenomenon of modality* we have to accept modal concretism. As long as there is no clear answer to it, the charge of irrelevance appears to persist.

2.2.3.2. A Threat to Morality?

Another challenge confronting modal concretism stems from moral considerations. Specifically, the so-called moral objection, as formulated by Robert Adams, suggests that modal realism leads to moral indifference. Adams (1974: 215–216) posits that, assuming the concretist conception of possible worlds, it is difficult to provide an ethically suitable answer to the question of why we should refrain from immoral actions. This is because, if we abstain from engaging in what is morally wrong, as long as there is a possibility for us to choose evil, our counterparts in other worlds *do* choose it. Alexander Pruss (2011: 98) illustrates this with an example: given that it is possible for me to murder Mr. Smith, if I decide not to, then a counterpart of mine in another possible world *will* murder a counterpart of him (as real as Mr. Smith himself). Consequently, whether one opts to commit or refrain from such actions, it does not impact the overall balance of good and evil across all possible worlds. Indeed, we can make no difference to this overall balance because, no matter what we choose to do, an opposing possibility will be realised in some other world. Apparently, then, we have no reason to be overly worried about the ethical status of our actions.

Lewis (1986: 123–128) has responded to this challenge by claiming that our desire to be virtuous should not hinge upon the total sum of good and evil across all worlds; in other words, we should simply avoid being a causal source of evil *ourselves*. Moreover, he states that the problem as depicted by Adams is only a problem for a specific kind of utilitarians – those who, roughly speaking, maintain that morality consists of the maximisation of the overall quantity of good, regardless of where it occurs and to whom.

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[124] Cf. Gregory Fitch (1996: 58): 'Lewis seems to think that our claim that it is possible that there is a million-carat diamond provides evidence or reason to suppose there is a Lewis-world that contains a million-carat diamond. But how could it? Or to put the point another way, on Lewis's view what reason or evidence could we have to believe that it is possible that there is a million-carat diamond? To believe that it is possible that there is million-carat diamond is to believe that there is an alternative spacetime containing a million-carat diamond. But it does not seem that we have any evidence or reason to believe there is an alternative spacetime of this sort and it is hard to see how we could get evidence for such a claim.'

Yet, Mark Heller (2003) has pointed out that, contrary to Lewis' assertion, the problem seems to concern not only utilitarians. The nub of the matter, according to Heller (2003: 3), lies in the following observation, which is of a much broader nature: if the modal realist is right and there exists a plurality of concrete worlds populated by real, concrete individuals, then we simply have to 'consider more people in moral decision making than we ordinarily do consider'. And here is an uncomforting realisation – with every decision we make, parallel situations occur in other worlds, where our flesh-and-blood counterparts opt for malevolence when we choose benevolence, and vice versa. At least for those with heightened empathy, this poses a formidable ethical burden. In fact, it becomes challenging to ever find satisfaction in our moral behaviour when, from the perspective of the pluriverse, our virtuous actions do not really change anything for the better. That is, no matter how hard we strive for virtue, our actions in no way help the concrete reality to be a better place.

This is not to say that Lewis' point concerning utilitarianism is not without merit. After all, unless we are full-blooded utilitarians, we naturally prioritise our family, loved ones, and those closer to us over strangers. That is, we cannot do good for everyone – we have to choose to whom we do it, and we normally choose those who are close to us. The same, then, applies to other-worldly individuals: even if we know of their existence, we are more concerned with those inhabiting *this world*. Still, at least to my mind, this is not the main problem here. The problem, as pointed out in the preceding paragraph, is that Lewisian modal realism appears to introduce a weighty *emotional burden* to our moral actions. Even if we prioritise this-worldly people, we are still affected by the constant awareness that our actions, however virtuous, inevitably guarantee someone else's affliction and suffering. Needless to say, this looks like a particularly unwelcoming effect that a theory of modality might have.

It should be mentioned that modal realism also gives rise to other serious implications for our moral considerations. For instance, some authors have noted that acts of self-torture, which are typically viewed as neither heroic nor praiseworthy under ordinary morals, become so assuming modal realism. To illustrate, consider a situation where I decide to stick my finger in the light socket. Now, this implies that a counterpart of mine is spared the pain of the electric shock, and so, contrary to common-sense understanding, this becomes a heroic act, a praiseworthy gesture of protecting another person from suffering (see Pruss 2011: 105–106). Sarah Adams (2015: 180) suggests a similar perspective, maintaining that an action that might initially appear not like a moral dilemma at all – for example, the decision of whether or not to

subject oneself to being pecked in the face by an emu – turns out into one under the assumption that modal realism is true. That is because, in such a scenario, we will know that, if we endure the pain this causes, someone else (namely, one of our counterparts in another world) is guaranteed to be saved from that same suffering. Thereby, according to Adams, far from being a crazy thing to do, attempting to get pecked in the face by an emu becomes a virtuous act of sacrifice.

To conclude, then, it might be said that even if these considerations may not definitively refute modal concretism,[125] they appear to exert some undeniable force against this theoretical framework. In other words, it seems that if our understanding of the moral sphere has to be so oddly affected just by a theory of modality, it provides an additional reason to think that such a theory should be approached with caution.

2.2.3.3. Paradox Again

Significantly, attempts have been made to demonstrate that a very unwelcoming paradox is generated by the Lewisian principle of recombination, with the most famous statement of this problem attributed to Peter Forrest and David Armstrong (1984). First, recall that, within the Lewisian framework, the possibility of the existence of a dragon and the existence of a unicorn implies that it is also possible for duplicates of these creatures to exist side by side (see section 2.2.1 and fn. 116 in particular). Now, of course, this principle not only applies to a pair of entities: any number of duplicates can be assembled into a world. As claimed by Lewis (1986: 89), '[n]ot only two possible individuals, but any number should admit of combination by means of coexisting duplicates'. This number, according to Lewis, might be infinite.

Forrest and Armstrong have indicated that the same principle can be applied to possible worlds themselves. That is, worlds themselves are individuals that can be collected in a set, and so there is some number of them. Therefore, it follows from the principle of recombination that there is some world (call it *w*) that contains duplicates of all the worlds. But here we confront a paradox. First, consider the set of electrons in *w*. Let us call this set *E* and say that its cardinality is κ. Therefore, *E* has $2^{\kappa} - 1$ non-empty subsets. Now, by applying the principle of recombination once again, let us suppose that for every subset of *E*, there is a distinct world containing duplicates of exactly

[125] For some positions in support of Lewis, consult Cresswell 2005; Fischer 2017; and Hill 2022.

those electrons, and no other electrons. There are thus $2^{\kappa} - 1$ such distinct worlds, each containing at least one electron and having a duplicate as part of *w*. But then it follows that *w* contains at least $2^{\kappa} - 1$ electrons, which contradicts our initial assumption that the number of electrons in *w* is κ. In simple terms, we get that *w* is bigger than itself, what is impossible.

In response to this paradox, Lewis (1986: 89–90) has restricted his principle of recombination:

> Our principle [of recombination] therefore requires a proviso: 'size and shape permitting'. The only limit on the extent to which a world can be filled with duplicates of possible individuals is that the parts of a world must be able to fit together within some possible size and shape of spacetime. Apart from that, anything can coexist with anything, and anything can fail to coexist with anything.

However, as Menzel (2016a) has noted, the restrictions put forward by Lewis are arguably *ad hoc*. Perhaps it can be simply denied that worlds can be collected into a set. Yet, this does not seem very promising either, since, as observed by Pruss (2001: 169) and Menzel (2016a), the collection of possible worlds forming a set is important to Lewis' account of propositions as sets of possible worlds. Recall from section 2.2.1 that Lewis explains a variety of phenomena, including propositions, in terms of sets of worlds. Under this account, a proposition is necessary precisely iff it is the set of all possible worlds. Nevertheless, if there is no such a set, then it follows that there are no necessary propositions – an apparently implausible outcome.

Another paradox afflicting various theories of possible worlds, including that of Lewis, is due to David Kaplan (1995). As is shown by the paradox, for any assumption about the cardinality of the set of possible worlds, there will be more worlds than there are assumed to be.[126] We will, however, not explore this argument further here.[127]

[126] For Lewis' response, refer to his 1986: 104–108.

[127] For more details on the paradox presented by Forrest and Armstrong, one should consult Nolan 1996; Pruss 2001; and ch. 11 of Bricker 2020. A convenient survey of various paradoxes afflicting possible worlds semantics (including those outlined by Forrest, Armstrong, and Kaplan) is available in Uzquiano 2015.

2.2.4. Problems with Modal Concretism in the Context of the Modal Ontological Argument

After examining the core principles of modal concretism and the essential challenges afflicting this theoretical view, we will now direct our attention to discussing why modal concretism falls short as a framework for interpreting the modal ontological argument. Chief among these reasons, as I will endeavour to show, is that the modal realist framework is unable to accommodate the argument's conclusion – namely, the claim that God (or a maximally great being) exists necessarily (i.e., in all possible worlds). As we shall soon witness, there are serious obstacles that hinder the grounding of God's necessary existence within the concretist framework, which in turn suggests that attempts to interpret the modal ontological argument through the lens of modal concretism are condemned to fail. That is, if the concretist conception of worlds lacks the means to articulate the argument's conclusion, then there is no chance that a concretist rendition of this argument could succeed.

Nevertheless, there remains a possibility that the arguments supporting this thesis may not be entirely persuasive, and some may still contend that God's necessary existence could find validation within modal realism; consequently, they might argue that there is a chance for the modal ontological argument to stand on concretist footings. Despite this, however, I will maintain that two additional reasons cast doubt on this conclusion. In other words, I will assert that even if we entertain the notion that modal concretism could accommodate God's necessary existence, there remain two substantial obstacles to thinking that the modal ontological argument could be successfully interpreted in terms of modal concretism.

Once more, if we assume that the argument is sound and a maximally great being truly exists, we should be able to explicate the relationship between the theistic worldview and the modal principles underlying the very argument. I will argue that in case we set out to combine theism with modal concretism, we confront two weighty issues: first, we are meant to hold that God's act of creation possesses necessary character, thereby fundamentally undermining his freedom; and second, we are led to the exacerbated problem of evil. Collectively, these arguments build the case that interpreting the modal ontological argument through the lens of modal concretism offers little prospect.

2.2.4.1. The Problem of God's Existence in Lewisian Worlds

In this section, I would like to argue that concretist worlds cannot accommodate God's necessary existence,[128] which means that a concretist interpretation of the modal ontological argument is simply a non-starter. That is, if God's necessity – his existence in all possible worlds – cannot be expressed assuming Lewisian modal ontology, then we cannot, in concretist terms, articulate the conclusion of the modal ontological argument, stating that a maximally great being exists in every possible world, including the actual one. If so, then, there is simply no way a concretist interpretation of the modal ontological argument could succeed.

In the literature, four main approaches to analysing God's necessary existence within Lewisian worlds have been explored: 1) attributing to God a counterpart in every world; 2) considering God as a cross-world individual (the mereological aggregate of all god-counterparts); 3) positing God's existence in every world through transworld identity; and 4) asserting that God exists from the standpoint of each world. In the subsequent discussion, each of these options will be scrutinised, and I will contend that none proves to be a viable solution.

2.2.4.1.1. God's Necessity under Counterpart Theory

Notably, Lewis employs his counterpart theory to represent *de re* modal statements concerning ordinary individuals we usually talk about, such as human beings. For instance, the claim that Humphrey could have won the election is analysed by positing that there is some possible world in which a counterpart of Humphrey did win the election. Now, while we do not usually claim that such individuals enjoy necessary existence, if we did so, we would say that their necessary existence is accounted for by the fact that they own a counterpart in each of possible worlds. The question we must tackle here is whether this same theoretical framework can be applied to accommodate the necessity of God. Can we coherently assert that God exists in every Lewisian world by virtue of having a counterpart in each of them?

The initial obstacle we encounter here stems from the fact that, under Lewis' account, counterpart theory is used to formulate claims about individuals embedded within worlds as their parts (e.g., Humphrey is a part of his world, and his counterpart is a part of the corresponding world). Given that

[128] Or God's existence *simpliciter*, under the assumption that it cannot be other than necessary.

Lewisian worlds are inherently spatiotemporal, it becomes tempting to infer that their parts must be as well. However, if God is considered to exist *outside* space-time,[129] then he cannot be a part of *any* spatiotemporal world. If this is the case, then even the possibility premise of the modal ontological argument (which posits that there is a possible world where God, or a maximally great being, exists) cannot be expressed within the concretist framework, let alone its conclusion, asserting God's existence in *every* world.

Perhaps, however, the situation is not as simple, as Lewis (1986: 86) concedes the possibility that some parts of his worlds may not be spatiotemporal. Specifically, he acknowledges that 'if universals or tropes are non-spatiotemporal parts of ordinary particulars that in turn are parts of worlds, then here we have abstractions that are parts of worlds' (see fn. 111 of this dissertation). On the other hand, this specification seems to lack direct relevance in the current context, for God is not of the same ontological type as universals or tropes; he is not a (non-spatiotemporal) part of any ordinary particular. Still, there might be alternative ways to assert that God exists in a Lewisian world as a part of it. We should consult this passage by Lewis (*ibid.*: 1):

> Maybe, as I myself think, the world is a big physical object; or maybe some parts of it are entelechies or spirits or auras or deities or other things unknown to physics. But nothing is so alien in kind as not to be part of our world, provided only that it does exist at some distance and direction from here, or at some time before or after or simultaneous with now.

The cited passage concerns the possibility of the existence of deities and similar entities within concretist worlds; however, it only seems to support the worries of those holding that God is a non-spatiotemporal being, for Lewis states clearly that even if there are deities in worlds, their existence is confined within the bounds of space-time. It appears, therefore, that the existence of a non-spatiotemporal God is inherently prohibited within the Lewisian modal framework. As articulated by Davis (2008: 59), it follows that God's existence in Lewisian worlds is 'flatly impossible'.

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[129] In spite of this, God is commonly categorised as a concrete entity in the sense that he is a personal agent with the capacity for causal relations, moral agency, and intentional actions. In the words of William Power (1994: 336), a concrete God is 'neither an indifferent void nor a hostile power but a caring and loving agent'. Nevertheless, God's concreteness diverges significantly from that of other entities precisely because he is understood to transcend the spatiotemporal reality he has created and is held to be necessary rather than contingent.

Still, one might demur here. What holds utmost significance within the Lewisian framework is the notion of spatiotemporal *relations*, and perhaps a being could theoretically possess these relations without, however, *being* spatiotemporal itself. Collier (2019: 335, fn. 10) hints at such a possibility, suggesting that God may be considered spatiotemporally related without being temporal and spatial, and thereby God's existence in Lewisian worlds could be conceded. Nevertheless, I doubt that this response works. For is it not the case that spatiotemporal relations (such as, e.g., distance, proximity, simultaneity, or duration) are relationships precisely between *spatiotemporal entities*? God is not one; thus, he cannot partake in these relations. The initial verdict seems to persist: under the assumption that God exists beyond space-time, his existence within Lewisian worlds simply cannot be established (and so neither the main premise nor the conclusion of the modal ontological argument is frameable within the concretist setting).[130]

What if we explore the possibility of God's spatiotemporality, then? Can God's necessity be successfully accounted for in terms of Lewisian counterparts under the assumption that God is, after all, a spatiotemporal being? I argue that the answer is still no.

Now, imagine that God is spatiotemporal and exists as a part of a Lewisian world. In such a scenario, he necessarily exists by virtue of having a counterpart in each of these worlds. That is, under such a picture, God does not exist *himself* in every world, he merely possesses counterparts – beings similar to him. But what exactly are those beings? Are they god-like entities as well? If so, such an account simply transforms monotheism into a form of polytheism (Davis 2009: 440).[131] At the same time, it seems that God's

[130] Obviously, there are still some ways to oppose it – one might wonder, for instance, whether some *non*-spatiotemporal relations could be invoked within the Lewisian modal framework. If so, there might be a possibility to situate God within Lewisian worlds even without him bearing any direct spatiotemporal relations with entities embedded in space-time (a suggestion of this sort is in Oppy 2009). Indeed, Lewis (1986: 74–78) has explored the concept of *analogically spatiotemporal relations* (those that hold in worlds containing a space-time of a different nature, such as a world governed by Newtonian space and time), as well as that of *natural external relations*, which in turn need not be neither strictly nor analogically spatiotemporal. Lewis' considerations here are primarily focused on physical phenomena, and it is not clear whether they might also be applied to relations involving God. Even if they might, I maintain that there are other grounds on which God's necessity cannot be accommodated via counterpart theory, as discussed further in this section.

[131] According to Collier (2019: 335–336), one may argue that, *from the perspective of each world*, there still exists one God only. Still, it is not clear how this might

counterparts must be somehow inferior to him, given the assumption that he is the unique being whose perfection cannot be surpassed or even equalled (in the words of Sheehy (2006: 319), '[t]he counterpart of the God of the actual world in some possible worlds may not possess just the same great-making properties, but rather be the best candidate as a counterpart'). However, this raises even more problems. Why should God of the actual (i.e., our) world be considered the best, the 'real' God? According to the Lewisian framework, our (actual) world does not exhibit any ontological superiority over other worlds. But then which world should contain the one true God?

Vance (2016: 563) spots another problem here. Since all god-like beings, under the current picture, are world-bound, it seems to follow that none of these entities holds the capacity to create *all* of (concrete) reality. Rather, as Vance puts it, 'each god is responsible for creating only his little corner of it'. But, clearly, this stands in tension with the fundamental Christian doctrine asserting the existence of a God who is the creator of all (concrete) realm. Alternatively, if one were to argue that only one among these god-like entities is the sole creator of everything, it leads to the conclusion, as Vance highlights, that the remaining god-like beings have contributed nothing to creation. These creatively inert 'imposters' (Vance 2016: 570, n. 5), in turn, simply appear not to be suitable counterparts for God. If so, then, this renders God a contingent rather than a necessary being, for then it fails to be the case that God possesses a counterpart in each of Lewisian worlds.

Finally, it seems that God's necessary existence in terms of counterparts can only be established at the expense of infringing the principle of recombination. It is essential to remember that, according to the principle of recombination employed by Lewis, anything can coexist with anything else and anything can fail to coexist with anything else. One of the implications of this idea is that for any distinct part of a possible world, there exists a possible world consisting solely of that part and nothing else. Consider a world consisting solely of one flying pig, then. What, then, would be God's counterpart in such a world? Would it be the flying pig itself (an undoubtedly peculiar option)? Or should we expand all worlds of this sort to include a being strikingly similar to God? Such a decision, however, would apparently run counter to the original idea behind the principle of recombination as utilised

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resolve the problem at hand, for, as Collier emphasises, God is a unique individual, which means that in *all of reality* (in the total set of worlds, in this case), there should exist only one god-like being. However, when we survey logical space in its entirety and engage in unrestricted quantification over *all* possible worlds, we see a multitude of god-like individuals instead of one God.

by Lewis within his modal ontology, for it would then follow that nothing can fail to coexist with a god-like being.

Given all the reasons discussed, I would like to conclude, then, that analysing God's necessary existence through counterpart theory is not a viable option, regardless of whether God is treated as a non-spatiotemporal or spatiotemporal. We shall thus turn to the second way to accommodate God's necessity under modal concretism.

2.2.4.1.2. God as a Cross-World Individual

An alternative option for those seeking to interpret God's necessary existence within the Lewisian modal framework posits that God is the mereological summation of all these god-like beings. In such a case, God would qualify as a cross-world individual – that is, an individual that does not exist wholly in any world but is composed of individuals existing wholly in distinct worlds (see fn. 117).[132] He could then be said to exist in all worlds (and so be necessary) by having god-like entities existing in each world as his parts – i.e., being a composite individual of a somewhat unconventional sort.

It seems, however, that this approach creates more challenges than resolutions. First of all, we still have not rid ourselves of those bizarre god-like beings under such a picture. Instead, we are now asserting that there is *one true* God while simultaneously claiming that he is *comprised* of these god-like entities. Needless to say, this sounds quite bizarre. For example, rather than possessing a unified consciousness, God is depicted as a composite of an array of conscious beings. Obviously, it is challenging to imagine how such a God could be conceived as a personal agent in the ordinary sense of the term, not to mention that the very sense in which God is said to be *one* becomes very unusual. These concerns have been accurately underscored by Vance (2016: 563):

> [I]t seems that, on this picture, the claim that 'there is but one God' is true only in a very unnatural sense. For, on this picture, God is 'unified' only in the same sense that my left arm, the Moon, and the Statue of Liberty are all 'unified' because they compose a single, scattered object

[132] In fn. 117, we stated that cross-world individuals are categorised as impossible ones within the Lewisian modal framework, consistent with Lewis' position articulated in his 1983. In his subsequent work, however, Lewis (1986: 211) refines this stance, suggesting that labelling cross-individuals as impossible ones is merely a 'terminological stipulation'. He contends that, under a more inclusive interpretation, these entities can indeed be considered possible.

(assuming that they even do so at all). Certainly, God would not be unified in the way that a classical theist would deem important, e.g. by having a unified will, or consciousness.

Now, perhaps one may object here. After all, the idea of one God consisting of three persons lies at the heart of Christian doctrine, and so Collier (2019: 343) argues that the Trinity could stand as a counterexample to Vance's claims. Perhaps we could say, in the spirit of some interpretations of the doctrine of the Trinity, that there can indeed be more than one consciousness, intentionality, and volition in God. However, even if we concede this as tenable, it appears that introducing the Trinity into the discussion complicates matters even further. Questions have been raised about the Trinity's compatibility with strict monotheism; on the other hand, Christian philosophers and theologians have attempted to reconcile this doctrine with the oneness of God in various ways. Regardless of how we interpret the doctrine, though, it does not seem to rescue the current situation. Quite the contrary: whether we speak of God as unipersonal or tripersonal, this apparently clashes with the proposal to treat God as a cross-world entity, as God would then be taken to consist of an *infinite* number of persons.[133,134]

Such a portrayal of God presents additional theological difficulties. Not only does it inherently contradict the notion of the absolute unity of God in the sense that God fails to be absolutely indivisible and mereologically partless, but it also complicates the understanding of divine omnipresence, as noted again by Vance (2016: 563). The conventional interpretation of omnipresence implies that God is fully present in every place, rather than merely having a *part* in all places (given that, again, God is commonly believed to be indivisible in the first place). The account under consideration runs counter to this theological principle, since it becomes problematic to assert that God is *wholly present* in all places.

Not to mention that the proposal to treat God as the mereological aggregate of all the god-like entities in each concretist world also appears to lead to a violation of the Lewisian principle of recombination. Once more, since there is a god-like being in every world, it follows that nothing can fail

[133] This point has also been brought forward by Vance (2016: 570, n. 6).

[134] It follows from the very nature of Lewisian modal realism: since absolutely every way the world can or could have been is reflected by how things *are* at some Lewisian world, it means that there exists an infinite plurality of such worlds. Consequently, if there is a god-like being in each of them, there is an infinite number of god-like beings.

to coexist with a god-like being, what contradicts the modal realist's tenet that anything can fail to coexist with anything else.

It therefore seems that the option at hand is also defective and thus not preferable. We should now turn to the third approach for locating God within concretist worlds, which is the statement that he exists trans-worldly.

2.2.4.1.3. God's Necessity through Transworld Identity

Evidently, the most popular way to represent *de re* modal statements within the Lewisian theory of modality is via counterpart theory. This is, once again, the method Lewis uses to talk about modal properties of ordinary individuals, such as humans, cats, tables, or electrons, and it is usually contrasted with the thesis that individuals can exist *transworldly*, i.e., in more than one world – a stance commonly adopted by modal abstractionists. Yet, it is not as widely recognised that Lewis, in one specific case, does endorse transworld identity. Indeed, this aspect of his position has been particularly brought to light in the context of the ongoing debate on whether God's necessary existence can be accommodated within Lewisian modal realism. Those participating in it have pointed out that, according to Lewis, transworld identity can actually be utilised to analyse *de re* statements concerning objects that lack accidental intrinsic properties (those that are intrinsic but contingent to them).

As explained by Ross Cameron (2009: 98), the rejection of transworld identity (in the case of ordinary individuals) is motivated precisely by the problem of accidental intrinsics. For instance, if an object *a* instantiates the property of being *F* at world *w* and being not-*F* at world *w**, this leads to a violation of Leibniz's law, a part of which is the so-called principle of the indiscernibility of identicals, claiming that self-identical object(s) must be indistinguishable in every respect. In other words, if one and the same object is said to have different properties, then it fails to be identical to itself. How can we represent the idea that an entity has some of its properties only contingently, then? Counterpart theory solves this issue by proposing that *a* is *F* at *w* in virtue of existing wholly in this world and being *F simpliciter*, while *a* is not-*F* at *w** in virtue of possessing a counterpart that exists wholly and entirely at *w** and is not-*F simpliciter*.

Hence, counterpart theory is only motivated by *de re* modal talk concerning individuals possessing accidental intrinsic properties, whereas those lacking such properties might well be said to enjoy transworld identity. Now, what are objects without accidental intrinsics? For Lewis (1986: 67), these are universals – 'the things, if such there be, that are wholly present as non-spatiotemporal parts in each of the things that instantiate some perfectly

natural property'. Lewis (1999: 11, fn. 5) states that universals can genuinely be considered to exist *across* worlds and that he sees 'no harm in it'. This has been further illuminated by Cameron (2009: 99–100):

> If there is an entity *x* such that '*x* is intrinsically F' implies 'necessarily, *x* is intrinsically F' then there is no problem in holding that *x* strictly and literally exists at more than one world. There will never arise a potential conflict with Leibniz's law, since there will never be one world at which *x* is intrinsically F and another at which *x* is intrinsically not-F. So we only need invoke counterpart theory for objects that could have differed in their intrinsic nature; all other objects can safely be said to enjoy trans-world identity.

Certain authors, Cameron included, have therefore proposed this as a potential resolution for those seeking to make room for a necessary God within concretist worlds. Given the plausible assertion that God possesses his intrinsic properties essentially, even modal realists can take him as existing in more than one world. That is, there seems to be no impediment to holding that God enjoys transworld identity and exists in every modal realist's world.

This suggestion, however ingenious, appears not to evade certain issues as well. To begin with, concretist worlds, by definition, are causally isolated, while God is a personal, causally efficacious being. Clearly, as Vance (2016: 567) notes, any causally potent being must be causally related to itself. But then it follows that a part of one world – namely, God – is causally related to a part of another world (again, God), and thereby worlds fail to be causally isolated.

Collier (2019: 341) has argued in great detail why this view leads to total modal collapse. Consider the relationship of world-mateship. According to Lewis (1986: 71), things are world-mates iff they are spatiotemporally related to each other. Next, the relationship of world-mateship is transitive: if *x* is a world-mate of *y*, and *y* is a world-mate of *z*, then *x* is a world-mate of *z*.[135] But then here is the problem: inasmuch as God exists in all worlds, he is both Collier's world-mate and otherworldly-Bill's world-mate. If Collier is God's world-mate, and God is Bill's world-mate, then, by transitivity of world-mateship, Collier is also Bill's world-mate, despite the fact that they exist in distinct worlds. We thus arrive at the conclusion that Collier is spatiotemporally related to Bill, what disrupts the presumed spatiotemporal

[135] As explained by Collier, this is because world-mateship is grounded in the spatiotemporal relation, which is itself transitive.

isolation of the worlds in which they exist. Naturally, the same holds for *every* world: since God exists in all of them, Collier becomes a world-mate of all individuals in all worlds, and all worlds just collapse into one. Consequently, no modal distinctions can longer be preserved.[136]

Yet another way to demonstrate the emergence of modal collapse is to appeal to God's role as the creator. Now, if God exists in all worlds as their part and is the creator of each (and creation involves causation), then all worlds become causally connected by sharing a causally potent part in common. But, again, according to modal realism, worlds must be causally isolated, and so it follows once more that all worlds converge into one, resulting in modal collapse.[137]

There have been various attempts to block the modal collapse argument. Notably, Collier himself, in his later work, suggests that the biconditional assertion stating that things are world-mates iff they are spatiotemporally related can be rejected, at least in its general form (see Collier 2021: 48–49). Meanwhile Andrew Bassford (2021: 109–114), relying on insights from Aquinas, proposes a departure from the assumption that creation necessarily implies a causal relationship (such that if *x* creates *y*, then *x* and *y* bear a causal relation to each other). According to Bassford, the relationship between God and a creature could be characterised as an asymmetric real relation – a relation that is real for only one of the relata. In the spirit of Aquinas, Bassford (*ibid*.: 113) argues that the relations God bears to creatures are not real, given that 'God ontologically and substantially depends upon nothing outside of himself whatsoever'. Put differently, despite God's role as the creator of everything, this relation is only conceptual from God's perspective; it holds real only from the standpoint of the creatures. Consequently, the predicate 'causally related to' only applies to creatures, but it cannot – in the same sense – extend to God. But then God is not truly causally related to all worlds (or indeed any world), thereby thwarting the modal collapse argument. Similarly, it can be posited that the relational predicate 'is world-mates with' applies exclusively to creatures; thus, we have no reason to suppose that God and, say,

[136] Not only does every truth become necessary in the case of modal collapse, but also every individual becomes a necessary existent. For if there is only one world, we simply cannot express the idea that some truth is only contingently true (i.e., there are no worlds in which it does not hold); for the analogous reason, we cannot uphold the idea that things exist only accidentally.

[137] Cf. Vance (2016: 567): 'The modal realist simply cannot endorse the existence of a causally potent God who wholly exists in every possible world, for the simple reason that worlds of the modal realist are, by definition, *causally isolated*.'

Bill are world-mates. In any way, the modal collapse objection, in the words of Bassford (*ibid*.: 114), eventually collapses itself.

Additionally, Collier (2021: 53–54) suggests that divine causation (involving the creation and sustaining of worlds) might be considered *different in kind* from non-divine causation, and that probably only standard, non-divine causation is what matters for the causal isolation of worlds. In other words, one might assert that there is a clear disanalogy between divine and non-divine causation, given that only God possesses the ability to create *ex nihilo*. Now, assuming that causality is interpreted as non-divine one within the Lewisian modal framework, we might claim that God's causal activity does not generate modal collapse, and the problem at hand would again be avoided.

Do the counterarguments presented by Bassford and Collier achieve their goal? Either way, the modal collapse argument does not appear to be decisive within the current discussion. That is, even if the counterarguments mentioned do indeed have a chance of succeeding, there are other significant objections to the current proposal to model God's necessity within Lewisian worlds – objections that, I contend, are sufficient to reject this proposal altogether.

Now, Collier (2021: 55–56) has noted that if God is a particular and is theoretically permitted to wholly exist in all Lewisian worlds through transworld identity (by lacking accidental intrinsic properties), then it seems that the same should hold for non-divine particulars (that satisfy the condition of lacking accidental intrinsics) as well. Lewis (1986: 205, fn. 6) has suggested that plausible candidates are simple particulars, such as fundamental particles; likely, they do not possess accidental intrinsic properties. Nevertheless, should we allow them to exist in concretist worlds in a trans-world fashion, we then arrive at the so-called *problem of accidental external relations*. This problem has been elucidated by Lewis (1986: 205–206, fn. 6) as follows:

> Suppose we have a pair of two of these simple particulars A and B, both of which are common parts of various worlds. A and B are a certain distance apart. Their distance, it seems, is a relation of A and B and nothing else – it is not really a three-place relation of A, B, and this or that world. That means that A and B are precisely the same distance apart in all the worlds they are both part of. That means (assuming that we explain representation *de re* in terms of trans-world identity when we can) that it is impossible that A and B should both have existed and been a different distance apart. That seems wrong: it is hard to suppose that the distance is essential to the pair, equally hard to suppose that distance is not the plain two-place relation that it seems to be. So trans-world

identity, even for simple particulars without accidental intrinsic properties, is *prima facie* trouble.

According to Collier, some might claim that God is *sui generis,* being the sole transworldly existing particular. Yet, it seems difficult to find a non-*ad hoc* justification for this assertion (naturally, the same goes for the suggestion that only God lacks accidental intrinsic properties). Nor does giving up on God's particularity seem promising, insofar as we take the universal-particular distinction to be exhaustive and exclusive (see Collier 2021: 57). In any case, then, the burden falls upon proponents of the current proposal to either justify God's uniqueness with respect to enjoying transworld existence within Lewisian worlds or confront the problem of accidental external relations.

But here is an even more serious problem. That is, we can question whether it is indeed the case that God is devoid of accidental intrinsic properties in the first place. While undeniably, attributes like omniscience and omnipotence are both intrinsic and essential to God, does this necessarily imply that God lacks any intrinsic properties that are, in fact, accidental? In the words of Michael Almeida (2017a: 7), there appears to be a sort of conflation of God's intrinsic properties and his intrinsic nature. While God indisputably possesses his *intrinsic nature* essentially, one could argue that not every intrinsic property of God is a part of his intrinsic nature. Consider this: in some possible worlds, God may believe that it is valuable to create a six-feet-tall prophet, while in others, he might take it valuable to create a six-feet-two-inch prophet instead. Similarly, God may aim to create a world with maximal diversity in one world when adhering to ontological minimalism in another. According to Almeida, these beliefs are intrinsic properties (that, furthermore, cannot be consistently coexemplified) of God, yet they do not seem to be essential to him. But if we allow God to possess accidental intrinsic properties, the entire rationale behind the current proposal – to treat God as existing transworldly in all concretist worlds – is undermined, since the problem of accidental intrinsics then reappears in his case as well.

Lastly, God's transworldly existence also appears to flout the principle of recombination. Once more: the principle implies that there are multiple worlds consisting solely of one entity, such as a flying pig or a literate wombat. This is because, in accordance with the principle of recombination, for any distinct part of a possible world, there exists a possible world consisting solely of that part and nothing else. If, however, God is mandated to exist in every Lewisian world, then it follows that neither a flying pig nor a literate wombat are allowed to exist 'on their own' in distinct possible worlds. Nothing can

fail to coexist with God, and so the principle of recombination once again goes awry.

I thus conclude that the current proposal ultimately falls short as well. We shall now turn to the last option those seeking to locate God within Lewisian worlds appear to have – that is, to the claim that God might be held to exist from the standpoint of each concretist world.

2.2.4.1.4. God's Existence from the Standpoint of Every World

Notably, Lewis claims that there are entities which do not exist within any world. Such entities only exist *from the standpoint* of a world by belonging to the least restricted domain according to which truth-values of quantified sentences at that world are evaluated (refer to fn. 117). For Lewis, entities existing from the standpoint of worlds are sets, while numbers, properties, propositions, and events are all reducible to them (see Lewis 1983: 40). The motivation to distinguish sets as only existing from the standpoint of worlds stems from the assumption that sets are not spatiotemporal objects. That is, they have no location in space-time, and so they do not literally inhabit worlds like people, puddles, or buildings do. On the other hand, since we quantify over sets, we must admit that they somehow exist. Lewis' solution is to posit that, instead of literally inhabiting worlds, sets merely exist from the standpoint of worlds, with pure sets existing from the standpoint of all of them.[138]

Now, Cameron (2009: 97), Almeida (2017a: 6–7; 2017b: 4), and Collier (2021: 58–63) have suggested that God could also be said to exist from the standpoint of each concretist world, inasmuch as he fails to be spatiotemporally located. Almeida here points out that, unlike properties and propositions (which are reducible to sets), God is 'no doubt a concrete individual', yet he also fails to exist in or be a part of any possible world within the Lewisian pluriverse – without having any spatiotemporal location, he is also best considered as existing from the standpoint of each world.

In contrast to Almeida's wording, however, some authors have contended that this proposal renders God an abstract object. For instance, Sheehy (2009: 103) maintains that making God exist from the standpoint of each Lewisian world means 'introducing *another* kind of abstract entity' into the modal realist's ontology. Nonetheless, it appears that such a worry is undermotivated: even if Lewis indeed appoints the existence from the

[138] In the words of Lewis (2001 [1973]: 39), they inhabit no particular world, but they exist 'alike from the standpoint of all worlds, just as they have no location in time and space but exist alike from the standpoint of all times and places'.

standpoint of worlds to entities that are typically considered abstract, this does not necessarily imply that, if needed, non-abstract objects cannot enjoy this type of existence as well.[139]

Yet, there is another concern related to the current proposal, which seems to be much more intimidating. If God is a concrete being and, moreover, a creator of everything – that is, he apparently bears a causal relation to worlds (I will here assume, *pace* Bassford in the previous section, that creation necessarily implies a causal relationship) – the question arises: how can a being be causally related to a world while existing only from its standpoint? For recall that, in the Lewisian framework, causal relations only hold *within* worlds, and Lewis (1986: 3) explicitly states that 'if worlds are causally isolated, nothing outside a world ever makes a world'. Now, if God does not exist in worlds as their part, it appears that he is barred from creating them altogether, what suggests that the perspective at hand ultimately undermines theistic creationism.

We can here revisit Collier's proposal to treat divine causation as inherently dissimilar to non-divine one. That is, it might be said that divine causation differs so significantly from non-divine one that when Lewis discusses causal relations, he may exclusively refer to the latter. Perhaps, then, it could be argued that only non-divine causal relations outside worlds are prohibited, leaving room for divine causation in such a scenario. Is this move truly convincing? It does not seem so. Divine causation, while indeed unique in certain aspects, shares fundamental features with standard, non-divine causation: in both cases, specific effects or outcomes are brought about, in both cases, there is an essential dependence of the effect on the cause, and so forth. Insisting that divine causation is so different from non-divine one that the former can be excluded from the causal framework within the Lewisian pluriverse appears to be nothing more than an evasion of the underlying problem.

Another argument provided by Collier (2021: 62–63) relies on the notion of divine omnipresence. Collier points out that within the discourse on God's omnipresence, two ways in which God can be considered omnipresent are distinguished: he can be considered *fundamentally*-omnipresent in the world

[139] In a similar vein, the fact that Lewis terms sets (i.e., entities existing from the standpoint of worlds) non-individuals (see fn. 117) does not pose a significant issue in my view. Again, Lewis is here talking exclusively about sets, but if it turned out that, say, God can be said to exist from the standpoint of worlds as well, this terminological nuance would not present a substantial challenge – we could then state that there is at least one individual among entities existing from the standpoint of worlds.

(in the sense that ordinary objects, such as tables, cats, or stars are fundamentally omnipresent), and he can be considered only *derivatively*-omnipresent in the sense that he bears, say, causal and epistemic relations therein; only in the former, but not the latter, case, it is possible to ascribe a (fundamental) location to God. Now, Collier claims that we can opt for the model of derivative omnipresence here. That is, we may maintain that, being only derivatively omnipresent, God lacks location and so does not exist *within* worlds in the strict sense, yet he is still connected to worlds by bearing certain (including causal) relations to them. In other words, God can be causal and still exist only from the standpoint of worlds.

Upon initial examination, however, Collier's argument appears circular. He asserts that God maintains causal connections with worlds through the possession of derivative-omnipresence within them, but derivative omnipresence holds precisely because God bears certain (including causal) relations. That is, Collier's attempts to explain God's causal relations with worlds by endowing him with a special sort of omnipresence in them does not appear illuminating, given that the notion of derivative omnipresence is itself based on the pre-existence of causal (among other) relations.

But perhaps I am misinterpreting Collier's reasoning here. Now, his focus is on answering the question of how a being can be causally related to a world while existing only from its standpoint. According to Collier, the key to resolving this puzzle lies exactly in the concept of derivative-omnipresence: the concept, in other words, provides us with a means of coherently asserting that God *both* lacks a fundamental location (existing not within worlds but solely from their standpoint) and maintains causal relations. Even with this granted, however, it seems to be a solution from one side only – namely, the theistic one. Seen from the modal realist's perspective, the issue all the same remains unresolved. That is, even if theism permits God to be devoid of location and yet engage in causal relations, this seems to be prohibited within the Lewisian framework, and so Collier's argument is, at best, lacking. We could, of course, return to the idea that, unlike non-divine causation, divine one might not be problematic for modal realists, but I have already dismissed this proposal as unconvincing. The problem thus appears to endure.

Consequently, I conclude that the choice to frame God's necessity within the Lewisian modal framework by asserting his existence from the standpoint of all worlds is ultimately lacking and therefore, at least for the time being, inadequate. In fact, after examining all four ways to accommodate God within the Lewisian pluriverse, it appears that none of them is truly viable, which, in turn, means that endeavours to interpret the modal ontological argument through the lens of modal realism are severely compromised. Indeed, if the

statement that God exists in all possible worlds – which is the conclusion of the argument – cannot be articulated assuming this theory, it is tempting to conclude that any modal realist interpretation of the argument is destined to fail.[140]

Even so, it might be that the arguments I have presented for this view are not persuasive enough. Perhaps it might still be claimed that a necessary God can reside within the Lewisian pluriverse, and that the modal ontological argument can be effectively expressed in the modal realist language. I shall contend that even in such a case, the likelihood of a modal realist interpretation of the modal ontological argument succeeding remains little. Once more, assuming that the argument is sound and God indeed exists, the challenge lies in explicating how the modal principles used in the formulation of the argument could prove to be theism-friendly. Now, I argue that even if God can somehow find a place within the concretist framework and, avoiding the problems already discussed, be considered the creator of concretist worlds, another significant difficulty emerges: under such a view, God's act of creation seems to be rendered necessary, thereby compromising God's freedom with respect to creation. Furthermore, given that concretist worlds are real, flesh-and-blood entities, the problem of evil becomes particularly pressing when possible worlds are interpreted in a concretist manner. I shall proceed by exploring these issues in turn.

2.2.4.2. The Problem of Necessary Creation

Suppose we have found ways to address the problems expounded upon in the preceding section: namely, let us presume that God can be accommodated within Lewisian worlds and adopt the role of their creator. I claim that even in such a case, a serious problem arises. Specifically, it seems that, assuming the concretist account, God's creation cannot but become necessary, thus contradicting the core theistic commitment that the act of creation is fundamentally free.

[140] Crucially, I assume the Lewisian statement of the theory specifically. I have not investigated other versions of modal realism, such as that of Phillip Bricker (2001) or Kris McDaniel (2004), which are possibly more favourable to theism. A rendition of the modal ontological argument rooted in the modal framework integrating perspectives from Lewis, Bricker, and McDaniel has been recently advanced by Sijuwade (see his 2023).

In order to unwrap the problem, we shall begin with the observation that, for Lewis, worlds themselves exist necessarily.[141] In other words, the logical space does not just *happen* to exist; rather, it *must* exist and do so in the way it does (see Lewis 1986: 86–92). Now, in light of Christian metaphysics, it is traditionally held that God has created the entire concrete reality. Hence, the conclusion seems to follow that, given the existence of Lewisian worlds, God must be their creator. But if the plurality of concrete worlds could not have failed to exist, the apparent implication is that God has created it out of necessity. The view that the combination of theism and modal realism results in the notion of necessary creation has been compellingly voiced by Almeida (2017b: 5):

> Theistic modal realism holds that God necessarily creates the pluriverse. It is not as though there are other possible pluriverses that God might have created instead or that God selected one pluriverse over another. There is only one possible pluriverse and God necessarily creates it. The view then is that the pluriverse is both necessarily existing and metaphysically dependent.

Is the idea of necessary creation conceptually coherent, though? Does not the very concept of creation as such entail freedom, wherein freedom implies the ability to choose among alternatives? At first glance, it appears that God's being free with respect to creating the concrete reality requires that God could have refrained from creating it altogether, which means that his act of creation was contingent rather than necessary. In other words, the freedom inherent in the act of creation seems fundamentally at odds with any form of necessity.

But perhaps we are moving too hastily. In fact, there are considerations suggesting an interpretation of freedom that does not inevitably involve choosing from alternative actions. Put differently, one might argue that even if God creates out of necessity, there is a sense in which his act of creation might still be considered free. Reflecting on the earlier discussion in section 2.1.4.2, it is worth recalling the viewpoint presented by Morris and Menzel, who claim that abstract entities are created by God in a necessary manner and that this does not diminish God's freedom:

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[141] The claim that possible worlds exist necessarily should be understood as an instance of what Divers (1999a: 218–219) calls 'advanced modalising': i.e., making modal statements about pure sets, numbers, possible worlds, and other entities that do not belong to the category of basic individuals (such as atoms, humans, cats, etc.).

> On the view of theistic activism, God's creation of the framework of reality is both eternal and necessary – it never was, never will be, and could not have been, other than it is. But there is a sense, a different sense, in which even it can be considered free. It is an activity which is conscious, intentional, and neither constrained nor compelled by anything existing independent of God and his causally efficacious power. The necessity of his creating the framework is not imposed on him from without, but rather is a feature and result of the nature of his own activity itself, which is a function of what he is. (Morris, Menzel 1986: 357)

Those wishing to reconcile the necessity of Lewisian worlds with theistic creationism may find solace in similar considerations. Specifically, they could state that, despite being unable to abstain from the creation of concreta, God can be said to have created freely in the sense that he performed this creative act intentionally and without external coercion. The idea behind this proposal is to shift from viewing freedom as the availability of alternatives to conceiving it as the alignment of actions with one's beliefs and intentions. Collier (2022: 477) has put forth a similar proposal within a related context: namely, he posits that, instead of embracing an alternate possibilities model of freedom – wherein to be free means to be able to select actions from possible alternates, – one can adopt a source-hood model of freedom, wherein individuals are free 'by virtue of their actions arising out of or originating in themselves'.[142] In other words, it can be argued that despite having had no choice as to whether to create the concrete reality, God remains free by virtue of having undertaken the creative act that arose out of (or originated in) himself.

This manoeuvre, however, appears unpromising. The reason is simply that the source-hood account of freedom does not seem to make much sense when applied to God's freedom specifically. In other words, it appears to be a trivial truth that God's acts arise out of (or originate in) himself – it simply could not be *otherwise*. If by 'agents' actions arising out of or originating in themselves' we mean something like 'agents behaving according to their own desires and beliefs', then it becomes evident that, when it comes to God, this is always and necessarily the case. After all, according to whose desires and

[142] By focusing on the absence of external obstacles, the source-hood model of freedom aligns with the concept of the so-called negative freedom, which emphasises freedom from external constraints or coercion. The idea is that the less our decisions and actions are affected by others, the freer we are (naturally, this implies that agents can be free even when lacking alternative possibilities, as long as they are not influenced by external factors).

beliefs could God act if not his own, and can he in principle be coerced into doing something? If there were even the slightest possibility that God could fail to be the ultimate source of his actions, God would simply not be God – i.e., an independent and omnipotent being. Therefore, even though the source-hood account of freedom is meaningful in the context of human action, it simply does not appear to be relevantly applicable in the context of divine action – only the alternate possibilities model seems to make sense here. The question remains whether God is, in a sense, 'programmed' to create, or whether he deliberates and makes a choice, and it appears that only in the latter scenario can God be said to be genuinely free.

Indeed, as observed by William Wainwright (1996: 128), the Christian tradition has, by and large, attributed libertarian freedom to God (understood as the ability to choose from alternative possibilities), for 'if God possesses libertarian freedom, He seems somehow greater and His sovereignty more complete'. Other authors (Garcia 1992: 192; Rowe 2004: 113–114, also see Lohmann 2018: 371) mention an additional reason to do so: according to them, if God's creative act bears a necessary character, it makes no sense to thank or praise God for his creation, because, in such a scenario, God simply cannot help but create us and the whole concrete reality around us. Not to mention that the notion of necessary creation appears to contradict another significant theological doctrine – namely, the doctrine that God is self-sufficient. That is, it is natural to infer from God's self-sufficiency that anything he has created could have failed to exist, because God never *needed* to create. Yet, if we claim that God's creative act possesses a necessary character, this clearly implies that, without the creation of something, God is somehow lacking – i.e., not self-sufficient.

Still, some may object here, arguing that reasons inherent to the Christian worldview might challenge the notion that God's act of creation was contingent, at least in an absolute sense. Within the Christian worldview, there is an important principle stating that God's nature is characterised by love and goodness, and that these naturally tend to expand outwards. Within the context of the doctrine of creation, this principle may be interpreted as suggesting that this natural expansion leads to the act of creation, and that God's creative activity becomes an expression of perfect divine love and generosity. Indeed, this is the very reason *why* God creates in the first place: the act of creation is an expression of God's abundant love and benevolence. Inasmuch as these are expansive and essential to him, one might claim that they, in fact, necessitate that God create.

In this vein, Norman Kretzmann (1991: 215–223)[143] has argued that there is a noticeable tension between the self-diffusiveness of goodness and freedom of choice in the Christian conception of creation as expounded upon in the writings of Aquinas. Now, Kretzmann states that, despite Aquinas' explicit endorsement of the libertarian model of freedom concerning creation, there is a discernible inclination towards a necessitarian strain. According to Kretzmann, this tension arises from the fact that the divine attribute of goodness, essentially associated with creation by Plato and Augustine, is essentially self-diffusive. Consequently, Kretzmann (*ibid.*: 219) states that '[i]f perfect goodness is an aspect of God's essence, and self-diffusiveness is essential to goodness, it looks as if creation has got to be an inevitable consequence of God's nature'.

However, it is far from obvious that the principle of self-diffusiveness of goodness implies the inevitability of creation. That is because, as Kretzmann himself acknowledges, Aquinas (*DV* XXI.I.ad4) suggests that the diffusiveness essential to goodness is merely linked to final, but not efficient, causation. In other words, divine goodness is not in itself the force that brings the world into existence but is rather the *purpose* of creation: God wants to create because he wants to share his goodness, yet it does not mean that God *has* to create (similarly, we could say that explaining the intentions behind human actions is not generally considered to render these actions necessary). Because of being free, God is still able to choose not to create (despite wanting to share his goodness), and so there seems to be no obstacle to the libertarian concept of freedom within the context of creation.

This principle has been echoed by Michael Liccione (1995: 243–244), who states that, for Aquinas, the essential self-diffusiveness of God's goodness 'entails only that *if* God creates, he diffuses his goodness as much as possible, and *in that way* has good reason to create' (emphasis in the original). Still, as Liccione emphasises, this explanation does not show that God must create *rather than not* – what Aquinas seems to mean is that, *assuming* that God creates, he diffuses his goodness so that many things can share it, but it does not follow from it in any way that creation as such is inevitable.[144]

Therefore, there seems to be no clear justification for the position that God's goodness makes the act of creation necessary – neither within the philosophy of Aquinas nor in general. On the contrary, only if we suppose that

[143] Also see Kretzmann 1983.

[144] For a comprehensive critique of the necessitarian reading of Aquinas' account of creation, refer to Wippel 2003, 2011.

God's act of creation is contingent, we can uphold God's freedom of choice, self-sufficiency, and, at the same time, the inherent value of creatures, which lies exactly in the fact that they *did not have* to exist. As articulated by Gaven Kerr (2019: 67),

> <…> the lack of necessity in God's willing of creatures illuminates something of their value, and this precisely because without having to will that creatures exist and so being able to enjoy His divine goodness quite easily without creatures, God nevertheless chooses to bring things into existence so that they can enjoy something of the goodness that He enjoys. That confers a special significance on creatures despite their lack of necessity, precisely because God chooses to create them when He doesn't have to, thereby raising the possibility that Christianity affirms to the effect that God has a particular concern for creatures precisely because of His love for them. On the other hand if creation was some necessary emanation from God, as Kretzmann appears to wish it to be, it would be difficult to embrace some of the more compelling religious conceptions of God as being worthy of worship (not to mention love and devotion); for necessitarianism would imply that God is indifferent to creatures.

In other words, the idea of necessary creation does not only seem to diminish the value of creatures but also, once again, complicates the rationale for feeling gratitude and praise to the creator himself. Assuming that worship, love, and devotion are meaningful only when they are offered voluntarily – i.e., arising from a personal and conscious choice – the most rational interpretation seems to remain that God decided to create despite having the option not to do so.

For all the reasons discussed, thus, it shall be claimed that the notion of necessary creation is ill-fitting within Christian metaphysics, and the fact that it is implied by the combination of theism and modal concretism apparently speaks poorly for it. Within the Christian worldview, we find the essential notion that God chose to bring concreta into existence out of his free will: creation, despite having a purpose, was a voluntary action of the creator, not compelled by any external force or necessity. Accordingly, if the necessary existence of the plurality of concrete worlds requires that God had no choice but to create them, it is fundamentally at odds with the theistic principle that God's creation of the concrete realm was free and, thus, contingent, leaving anyone wishing to reconcile theism and modal realism in burdensome trouble.

As if that were not enough, attempts to reconcile theism with modal realism result in another significant challenge: they considerably sharpen the problem of evil. Again, suppose we have found a way to somehow place God within Lewisian worlds and regard him as their creator. Now, it is true that, within the plurality of these worlds, there exists a huge array of worlds with tremendous evil and suffering (because as long as some evil is possible, it means that it is instantiated in some world). Furthermore, it is not merely an abstract idea of evil – rather, these concrete, real worlds contain concrete, real ills and anguish. Undoubtedly, this is a particularly serious consequence of the concretist account, since, as articulated by Collier (2022: 471), 'there being real, flesh and blood gratuitous evil seems worse than, say, there being an abstract proposition, as a member of some abstract set of propositions, whose content concerns gratuitous evil'.[145] Yet, if God is the creator of concrete worlds, it means that he has brought into existence every single world – that is, a multitude of them – with real evil and real suffering. The question of how an omnipotent and perfectly good being could have done so is exactly what constitutes the problem at play.

The implications of Lewis picturing other worlds and their denizens as real have already been underscored in our previous exploration – specifically, we asked how the knowledge about the existence of our counterparts influences our moral considerations (see section 2.2.3.2). This time, the question is whether and how the existence of worlds with real, suffering individuals can be reconciled with the idea that such worlds were created by an omnipotent and omnibenevolent God. For the sake of illustration, let us consider a Lewisian world wherein the sole existing entity is a child suffering from an incurable disease. Applying the Lewisian principle of recombination (which posits that any distinct part of a possible world itself represents a distinct possible world), such a world is deemed to exist. Accordingly, if we embrace both modal realism and theism, we find ourselves compelled to assert that this world has been brought into existence by God. However, the assertion

[145] This is not to say that the problem of evil does not arise in the context of abstractionist theories of possible worlds. We have already seen a comparable, albeit not identical, challenge within the framework of divine psychologism: recall Robson's (2011) contention that the existence of ugly (including evil) worlds poses a significant impediment to the aesthetic conception of God as a perfectly beautiful being. Additionally, should we adopt the view that God *produces* abstract evil worlds, we are prompted to question why, being perfectly good, God chooses to do so. In this respect, the problem of evil holds relevance within the framework of abstractionist theories of possible worlds as well.

that an omnibenevolent God could create a world characterised by such profound suffering appears utterly implausible.[146]

Indeed, even those sympathetic to the union of theism and modal realism have acknowledged the difficulties embedded within it. Specifically, Oppy (1993: 19) states that Lewisian worlds containing a 'vast amount of unmitigated evil' are in no way compatible with the existence of God and that '[n]o omnipotent, omniscient and omnigood being could permit such worlds to exist (far less create them)'. What solution does Oppy offer, then? He seems to imply that these evil worlds could be simply rejected or excluded from consideration in order to circumvent the problem at hand. While adjudging that this 'represents a slight complication in the theory', Oppy still finds that it is an acceptable step to take.

Now, although modifying modal realism by simply denying the existence of worlds with gratuitous evil and suffering might seem like the most natural option, it is clearly not as innocuous as it first appears. For this move is not only *ad hoc* but also at odds with fundamental principles of modal concretism as such, as we can no longer uphold the essential implications of the principle of recombination,[147] which dictates that there *do* exist many worlds with a substantial amount of evil and suffering.[148] Without their existence, the logical space is incomplete, and its very structure collapses. Consequently, it is far from obvious that this presents only a 'slight complication' of the concretist account – on the contrary, it is a drastic transformation of the theory.

Interestingly, however, some have taken that the fusion of theism and modal realism allows us to effectively *solve* the problem of evil rather than deepening it. For example, Almeida (2017b: 5–6) claims that if God has created all worlds out of necessity, we cannot 'accuse' him of creating ones with gratuitous evil and suffering because *there is simply no option* that God might have created the whole concrete reality otherwise. According to

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[146] Perhaps one might argue that imagining worlds of real, concrete suffering is not particularly counterintuitive if we consider theological concepts such as hell, which are already present within the Christian worldview. Yet, the problem of hell (which arises from the question of how the existence of a place of eternal suffering can be reconciled with divine omnibenevolence) is generally considered a part of the broader problem of evil. In other words, the doctrine of hell is not a *solution* to the problem of evil – it is an *instance* of it.

[147] As noted by Oppy himself.

[148] Once more: the motto that everything could coexist with anything else and anything can fail to coexist with anything else implies the existence of a world where the only existing entity is a child suffering from an incurable disease, a world where the only existing entity is a starving human being, a world where everything that exists is thousands of suffering animals, etc.

Almeida, there is therefore 'no eliminable evil anywhere in the pluriverse', and so no problem of evil. Almeida's argument, however, is dubious because it is based on the notion of necessary creation, which I already found significantly problematic. In other words, his response only stands a chance of succeeding if the very problem of necessary creation can be effectively tackled. Unfortunately, due to the reasons laid out in the previous section, this appears highly implausible.

Now, to make his point stronger, Almeida introduces the following lifeguard analogy: suppose that a person, R, *can* save person S and *can* save person S' but *cannot* save both S and S'. Given this condition, Almeida claims that it is perfectly (morally) permissible for R to save one of S and S' at the necessary cost of sacrificing the other. Framed in the language of counterpart theory, Almeida's (2008: 142) argument unfolds as follows:

> [A]n Anselmian God would be *morally forbidden* to actualize the world *w* in which Smith suffers undeservedly and preventably. But, necessarily, had the Anselmian God prevented the suffering of Smith in *w*, there would have been a moral equivalent of Smith enduring precisely the same undeserved and preventable suffering in world *w'*. <…> So it is morally forbidden for the Anselmian God to actualize the world *w* in which Smith suffers undeservedly *only if* there is some moral reason why the morally equivalent counterparts of Smith *ought* to endure the undeserved suffering rather than Smith. But the relevant counterparts of Smith are no more deserving and no less good than Smith. So there is no moral reason why any of the relevant counterparts ought to endure the suffering rather than Smith.[149]

Almeida (2011: 8) highlights that, in the logic of counterpart theory, all closed sentences are governed by the B axiom $p \rightarrow \Box\Diamond p$; when we apply it to *Sa*, which symbolises 'Smith endures preventable suffering', we get $\Box\Diamond Sa$. In other words, we get that it is *necessary* that either Smith or some of his (morally equal) counterparts endure needless suffering. God can only prevent the suffering of one of them at the cost of letting some other one suffer – it is not possible to prevent the suffering of *all* of them. Inasmuch as the logical space is shaped as it is out of necessity, God simply cannot do any better: the

[149] God's creating or actualising a world should be understood synonymously in this context. Yet another notion – that of God's *allowing a world to exist* – could be brought in here, as discussed by Collier (2022: 471, fn. 5). Nonetheless, as noted by Collier, it is doubtful whether there is a morally significant difference between these notions when considering God and the existence of evil worlds.

amount of gratuitous evil and suffering within the pluriverse is fixed, and although it can be relocated from one world to another, this does not lead to any moral advance. God is thus in a situation analogous to that of the lifeguard described above: he can only save one person of the two but not both, which means that the saving of one comes at the necessary cost of losing the other.

Almeida's decision to frame his argument in terms of counterpart theory, however, does not seem to advance his initial line of reasoning any further. Ultimately, all these considerations come back to the one primary point: that the logical space is inherently fixed and could not have been otherwise. That is, God could not have created other worlds instead of those factually existing, and so it is futile to 'accuse him' in this regard. In the words of Klaas Kraay (2011: 363–364), Almeida is actually sacrificing *moral* intuitions in favour of *modal* ones: i.e., he sticks to the idea that there *have to* exist evil worlds (so that the principle of recombination can be preserved), but is then forced to state that it is morally acceptable that God permits their existence. Consequently, it might be said that Almeida merely restates his initial point – articulating it in terms of counterparts still does not address the essence of the objection, which is exactly that the existence of evil worlds appears to be incompatible with the existence of an omnipotent and omnibenevolent God.

As already noted, if Almeida (or anyone else) wishes to anchor his case in the notion of necessary creation, then he must confront the problem raised in the previous section – that is, the question of how God can simultaneously create necessarily and freely. Even setting aside the problem of necessary creation, however, there are additional reasons to think that Almeida's attempts to solve the problem of evil fail. As noted by Kraay (2011: 364), the idea that evil worlds exist and that this does not count against the (essentially unsurpassable) God is a remarkably surprising and counterintuitive result for theism, given that theists have generally held that *no* amount of gratuitous suffering is compatible with theism. Yet, according to Almeida's account, *every* conceivable degree of such suffering is consistent with theistic commitments, which means that theists are required to dramatically revise their understanding of God.

Collier (2022: 477) has proposed a somewhat similar angle to the problem at hand. According to him, in case we hold that God lacks the autonomy to determine which worlds there are, i.e., in case there is a sort of 'rule book' about how to create worlds, probably rooted in God's own nature (which commands that evil worlds must exist, leaving God with no option as to whether to create them or not), we are compelled to accept that God's nature as such is not maximally perfect – the idea that few adherents of theism, at least in its traditional form, would find palatable:

> Whilst it may be true that we cannot blame God for His nature, and so we ought not blame Him for His creation of evil worlds, we can (and should) certainly think that His nature is not maximally perfect. For classical theists, however, God's nature *is* maximally perfect. If we found in God's nature an aspect that ordained the existence of infinite on-balance evil worlds of terrible suffering, we would most likely think that such a nature was not maximally perfect: we could conceive of a more perfect being – that is, one that did not have a nature such that the existence of terrible suffering is ordained.

It seems implausible to think that God, as a perfectly omnibenevolent being, could harbour a nature that implies the existence of worlds of terrible suffering – creating such worlds obviously contradicts his goodness. The reliance on necessary creation, therefore, is not only challenging in terms of undermining God's freedom in the act of creation but also compels theists to undergo a radical re-evaluation of their understanding of God – probably to the extent of holding that God's nature (and consequently, God as a being) is not perfect. Needless to say, this goes against the very core of the theistic worldview, marked by the idea that God is the most perfect, or the greatest possible, being.

We can thus conclude that no strategy attempting to reconcile concrete evil worlds with the existence of God proves satisfying, which in turn serves as another salient reason to assert that the very combination of theism and modal concretism is rather prospectless. Indeed, after exploring the main problems faced by proponents of the modal ontological argument within the framework of modal concretism, it becomes evident that the potential of successfully rendering this argument in such terms is highly doubtful. As observed, the most formidable challenge lies in interpreting the argument's conclusion – the assertion of God's necessary existence – within the concretist setting. The concretist construal of possible worlds appears inherently incapable of accommodating God's necessary existence, which suggests that interpreting the modal ontological argument in terms of modal concretism is deemed a non-starter.

Moreover, even if the points I have made in support of this claim are perceived as lacking, there are two additional reasons to think that modal realism does not favour the modal ontological argument: assuming the argument's soundness, we should be able to demonstrate the absence of inherent conflict between the concretist construal of possible worlds and theistic metaphysics. Unfortunately, two major issues arise in this context: the fusion of theism and modal realism leads to the problematic notion of necessary creation and significantly intensifies the problem of evil. This

makes us conclude that there is no apparent way to reconcile theism with modal concretism, which substantiates the initial thesis that an interpretation of the modal ontological argument through the lens of modal concretism is destined to fail.

2.3. Critique of Interpretations of the Modal Ontological Argument Based on Modal Fictionalism

The final sections of this chapter will be dedicated to arguing that, much like modal abstractionism and modal concretism, modal fictionalism fails to provide a suitable framework for interpreting the modal ontological argument. I will begin by providing an overview of the modal fictionalist account and addressing three main challenges it encounters: the irrelevance of the fiction, the so-called Hale's dilemma, and the problem of incompleteness. Following an examination of these difficulties, I will turn to the exploration of the problem arising when modal fictionalism is employed within the context of the modal ontological argument.

2.3.1. Modal Fictionalism

The interpretations of possible worlds explored thus far recognise the genuine existence of these worlds. While differing in their characterisation of the precise nature of worlds, both modal abstractionists and modal concretists share the foundational belief that *there are such things as possible worlds*. In contrast to this, modal fictionalists deny the literal existence of possible worlds. They engage in possible worlds talk because they see it as a useful tool for discussing modal matters; however, they maintain that these worlds lack true existence and serve merely as convenient fiction. In this way, modal fictionalism provides a conceptual framework enabling us to make sense of the semantic machinery of possible worlds without, however, entailing serious ontological commitments.[150]

[150] Evidently, modal fictionalism is part of the broader fictionalist tradition in philosophy. For instance, mathematical fictionalists reject the existence of (abstract) mathematical entities and, hence, do not consider statements about them as literally true, whereas moral fictionalism is a position in metaethics that views moral statements as literally false yet useful to produce and accept.

Originally formulated by Gideon Rosen (1990),[151,152] modal fictionalism treats possible worlds in a manner analogous to discussions about fiction in literature. For example, the sentence 'There is a brilliant detective at 221b Baker Street', if interpreted as a straightforwardly existential claim, is considered false; nonetheless, Rosen argues that in certain contexts, such a statement can be deemed 'perfectly *correct*' – specifically, in conversations about the fictional character Sherlock Holmes. In this context, the aforementioned statement is seen as an elliptical representation of 'In the Holmes stories, there is a brilliant detective at 221b Baker Street'. In other words, when supplemented with the prefix 'In the Holmes stories …', the statement transforms into a perfectly true assertion (see Rosen 1990: 331).

Similarly, modal fictionalists take that statements like 'There is a possible world where there are flying pigs' are literally false, as there are simply no such entities as possible worlds. However, when accompanied by certain clarifications (referred to by Rosen as *story prefixes*), such as 'According to the fiction of possible worlds, there is a possible world where there are flying pigs', the claim becomes unproblematically true. More precisely, the fictionalist treatment of possible worlds can be seen as characterised by the following biconditionals: 1) $\Diamond p$ is true iff, according to the fiction of possible worlds, p is true in at least one possible world, and 2) $\Box p$ is true iff, according to the fiction of possible worlds, p is true in all possible worlds.

It goes without saying, however, that this is only one of the prefixes available. Alternatively, one may invoke constructions such as 'If there were possible worlds of such-and-such a sort, then …' or 'Given the presupposition that there are possible worlds, …' (see Nolan 2022), or refer to a particular possible worlds theory, exemplified by phrases like 'According to Plantinga's theory of possible worlds, …'.[153,154] The question of which theory to choose is somewhat open, but typically, as noted by Borghini (2016: 142), fictionalists opt for the theory exhibiting the greatest conceptual potency.[155]

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[151] Though it should be indicated that Rosen does not always identify himself as a fictionalist.

[152] Some subsequent defences and refinements of the theory include Menzies and Pettit 1994 and Rosen 1995. An allied, though not straightforwardly modal fictionalist, account is presented in Sider 2002.

[153] For Rosen, the relevant theory of possible worlds on which he bases his fictionalist talk is Lewis' modal realism (see his 1990: 332).

[154] As noted by Rosen (*ibid.*: 332), the prefix can sometimes be silent (implicit).

[155] Indeed, the allegation of fetishism directed towards modal fictionalism revolves precisely around the perceived lack of a substantive reason to select a particular possible worlds theory as the content of the fiction, as opposed to alternative

Now, the fictionalist treatment of *de re* modal claims is analogous to the one just mentioned: *de re* modal statements are to be interpreted in a manner consistent with the chosen possible worlds theory, augmented by the inclusion of the relevant story prefix. For instance, should we stick to the counterpart theory for the analysis of *de re* modal statements, our approach would align with that of the counterpart theorist, with the only difference being the incorporation of fictionalist prefixes. Hence, if the counterpart theorist analyses 'Humphrey could have won the election' as 'There is a possible world in which a counterpart of Humphrey did win the election', the fictionalist rendition would be 'According to the modal realist fiction of possible worlds/given the presupposition that there are concrete possible worlds/according to Lewis' theory of possible worlds/etc., there is a possible world in which a counterpart of Humphrey did win the election' (see Rosen 1990: 351).

The main motivation of the fictionalist approach to possible worlds is somewhat obvious. We have already witnessed that, despite the semantically rich account of modal language, possible worlds semantics gives rise to a plethora of metaphysical and epistemic challenges. The fictionalist's agenda, therefore, involves a deliberate attempt to avoid these challenges, driven by an aspiration to provide a practical and useful framework for approaching modality.[156] By refraining from positing the genuine existence of possible worlds, modal fictionalists can retain the technically advantageous possible worlds discourse while simultaneously sidestepping dubious ontological commitments. Simply put, the only thing we need to do is to enrich possible worlds talk with story prefixes, and in so doing, we ensure that no serious commitment to the literal existence of possible worlds is entailed.[157]

Notwithstanding its apparent efficacy, modal fictionalism is not immune to a spectrum of critiques and objections. In the upcoming sections, we shall

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theories (see, e.g., Peacocke 1999: 154). In response to this concern, Richard Woodward (2011: 537–541) has proposed modifying the fictionalist biconditional in such a way that modal claims are analysed in terms of a whole *range* of acceptable fictions.

[156] Cf. Stan Husi's (2014: 82) observation in the context of moral fictionalism: 'Fictions cannot be epistemically justified, for they are plainly and literally false, and thus the only kind of justification left is pragmatic in nature.'

[157] There exists a distinction between the so-called strong and timid versions of modal fictionalism. Roughly, strong modal fictionalism aims to be a serious theory of modality in the sense of providing the truth-conditions for modal statements. By contrast, timid modal fictionalists, despite employing fictionalist biconditionals, do not regard them as providing analyses of modal assertions. Within this dissertation, the strong version of modal fictionalism is assumed.

explore three pivotal challenges that cast a shadow on the fictionalist programme, and then we will move to the question of whether modal fictionalism can establish a proper framework for interpreting the modal ontological argument. Drawing upon the relevant work of Parent, I will contend that the realisation of such a prospect is highly unlikely, while also addressing a significant counter-objection to this stance.

2.3.2. Problems with Modal Fictionalism

2.3.2.1. The Irrelevance of the Fiction

The first and probably most natural reservation towards modal fictionalism is that it appears unclear why those concerned with modal matters should care about a fiction at all. Recall from section 2.2.3.1 the analogous charge of irrelevance put forth against Lewis' counterpart theory and his modal realism as such: that is, facts about what is happening (to our counterparts) in other concrete worlds appear to have nothing to do with what is possible and necessary. Similarly, it seems highly bizarre to tie modal statements to the content of some fiction:

> How are we to believe – one might object – that a fiction can have such a relevant role in our lives that it can determine – say – whether Elena should be punished for drunk-driving because, *according to a fiction*, the fictional character representing her does harm someone? More important to us is what Elena does in our world, not what happens in some fiction, no matter how useful such a fiction may be claimed to be. Ultimately, modal fictionalism commits the same fallacy committed by the counterpart theorist <…>: explaining possibility in terms of entities that are not the ones for whose behavior we sought an explanation. (Borghini 2016: 146)

Rosen (1990: 352) has addressed this sort of concern, which is basically that Humphrey, presumably, does not care much whether a special possible worlds theory claims that his counterpart has achieved electoral victory in an alternative universe. As Rosen himself emphasises, the story should not be construed as *evidence* for the modal fact that Humphrey might have won; for the fictionalist, the fact about the story *just is* the modal fact (that Humphrey might have won) itself. Now, Rosen's response[158] is that the objection merely

[158] Which, according to Rosen, is parallel to that preferred by Lewis.

underscores the need for a revision of our beliefs, suggesting that such a revision is not implausible. In other words, if fictionalism stands as an acceptable theory of modality, it follows that the modal facts about us *just are* modal facts about the fiction of counterparts (once again, provided that we adopt the counterpart theory as the content of the fiction). Consequently, this implies that we *should* care about occurrences within the fictionalist narrative, even though we did not think so before accepting the theory in question.[159]

Yet, this does not sound convincing, for the irrelevance appears to be one of the most cogent reasons to think that modal fictionalism is *not* an acceptable theory of modality. Again, as with the Lewisian account, there is an inescapable lack of semantic relevance, because our talk about modal properties of individuals seems to be exactly about those individuals themselves, and not their counterparts or a fiction about them. Inasmuch as both counterpart theory and its fictionalist rendering fail to grasp the real semantic nature of our modal talk, they remain irrelevant to it, and so they do not appear to be suitable frameworks of modality.

In this way, a noteworthy drawback of adopting a fictionalist stance becomes evident: despite its advantage in avoiding ontological commitments to possible worlds,[160] such a stance appears to be simply inadequate in capturing the essence of the very phenomenon it is intended to illuminate. As highlighted in section 2.2.3.1, the question remains: what reasons *related to modality* do we have to accept that the truth-values of our modal assertions are determined by the content of fiction? This is exactly what is supposed to determine the suitability of modal fictionalism for the analysis of modal statements. As long as such reasons are not provided, the objection of irrelevance is destined to endure, and the whole status of modal fictionalism as a serious theory of modality becomes, at best, doubtful.

2.3.2.2. Hale's Dilemma

Another important objection to modal fictionalism is raised by Bob Hale (1995a, 1995b). Hale claims that modal fictionalism, as developed by Rosen, confronts a dilemma concerning its foundational principle – namely, the

[159] Alternatively, Rosen suggests the possibility of transitioning from strong modal fictionalism to a more cautious timid version.

[160] Although it must be noted that we can enquire about the ontological status of the fiction itself. Is it an abstract object of some sort, and if so, is the theory truly as ontologically 'innocuous'? Alternatively, is the fiction a linguistic/conceptual construct, namely, a tool created by humans to explain modal discourse? If so, what is its explanatory power? Is it sufficient to effectively account for a variety of modal claims?

assertion that the fiction of possible worlds is not to be taken as literally true. Given its lack of literal truth, it must be literally false, but then this leads to the question of whether it is *necessarily* or merely *contingently* false. As has been shown by Hale, regardless of which option the modal fictionalist takes on this matter, they find themselves in trouble.

Suppose that the modal fictionalist chooses to hold that the fiction of possible worlds is necessarily false. In such a case, employing the prefix 'According to the fiction of possible worlds' (interpreted as 'If the fiction of possible worlds were true') would make any modal statement true. This is because any claim of the form 'If the fiction of possible worlds were true, then …' will have a false antecedent, resulting in the consequence that all modal statements will be rendered vacuously true. Needless to say, this is an undesirable outcome.

Now, should the modal fictionalist opt for regarding the fiction of possible worlds as only contingently false, the implication is that the statement 'Possibly, the fiction of possible worlds is true' is deemed true. However, when we try to analyse this statement in terms of modal fictionalism itself, we get a somewhat peculiar result. That is, we get that 'If the fiction of possible worlds were true, then there would be a world at which the fiction of possible worlds is true'. In other words, we obtain a trivial truth, whereas acknowledging that it is possible for the fiction of possible worlds to be true is evidently non-trivial. On the other hand, if there exists some alternative way to interpret this particular modal assertion, then, as posited by Hale (1995a: 74), it becomes unclear why *any* modal claim cannot be understood in that alternative manner, with the upshot that fictionalisation as such loses its point.

In his 1995, Rosen presented a series of points in an effort to escape the dilemma, meanwhile Hale (1995a) dismissed them as unpromising. The dilemma has been further expounded upon in Lukas Skiba's (2019) analysis, where he introduced an alternative approach to counter Hale's conclusion. However, the exploration of Skiba's proposal involves a broader discussion, and it will not be pursued further within this context.

2.3.2.3. Incompleteness

The final concern I wish to touch upon regarding modal fictionalism arises from Rosen's (1990: 341–344) own incompleteness worry: namely, a worry about how to treat fictionalist renderings of propositions whose truth-values are not disclosed by the modal fiction. Recall that the modal fictionalist must select some possible worlds theory to serve as the content of their fiction; for Rosen, such a theory is Lewis' modal realism. Now, Rosen observes that,

within the framework of modal realism, there are some modal claims that have determinate truth-values, although we may be ignorant of them. Consider the claim:

(1) There might have been κ non-overlapping physical objects (where κ is a cardinal number larger than the number of space-time regions in our universe).

For the modal realist, such a claim carries a definite truth-value, yet it remains unknown to us. Lewis thinks that there must be some maximum size of possible worlds (i.e., the maximum number of non-overlapping physical objects in a single world),[161] but we do not know what it is.[162] The question, then, is this: how should the modal fictionalist interpret (1)?

As noted by Rosen, for the modal fictionalist, (1) is equivalent to

(1f) According to the fiction of possible worlds, there is a universe containing κ non-overlapping physical objects.

Once again, the content of the fiction – modal realism – is simply silent on whether there is a universe containing κ non-overlapping physical objects. However, (1f) implies that it gives, as Rosen puts it, *a definite positive answer* on this matter. Therefore, (1f) is not true.

Two options on how the modal fictionalist might treat the truth-value of (1f) remain, then: to hold that (1f) is false or that it is truth-valueless. In either case, however, since (1f) is considered not true, the modal fictionalist is obliged to affirm that (1), which is equivalent to (1f), is also not true, and this already constitutes a departure from modal realism. In other words, the modal realist cannot rule out the possibility that (1) might be true, but the modal fictionalist is compelled to do that. Now, the more natural option for the modal fictionalist seems to deem (1f), and so (1), as false – after all, (1f) says that modal realism settles the question, which, in reality, it does not. In such a case, however, the modal fictionalist must treat

(2) It is not the case that there might have been κ non-overlapping physical objects

as true since it is the negation of (1). Yet, this presents a challenge, since, on the fictionalist analysis of (2), it means

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[161] See section 2.2.3.3. As indicated there, the claim that there are restrictions on the possible size and shape of possible worlds is Lewis' attempted response to the paradox presented by Forrest and Armstrong (i.e., the paradox stemming from the unrestricted principle of recombination).

[162] As emphasised by Rosen (1990: 341), this is not ignorance about certain empirical facts of our universe. Rather, '[i]t must be a robust modal ignorance – an ignorance that would survive an arbitrary extension of our scientific and historical knowledge'.

(2f) According to the fiction of possible worlds, no universe contains κ physical objects.

But the fiction is silent about whether no universe contains κ physical objects, and since an analogous situation led to the characterisation of (1f) as false, it appears that the modal fictionalist should treat (2f), and, consequently, (2), as false as well. The modal fictionalist is thereby forced to concede that (1) and (2) – a modal claim and its negation – share the same truth-value, which violates the ordinary understanding that such claims are always contradictory.

To circumvent this, the modal fictionalist can take (1f) and (2f) (and so (1) and (2)) as lacking a truth-value. Nevertheless, this move is also challenging. First, it leads to the result that when applied to modal statements, the ordinary logical connectives cease to be truth-functional. To illustrate, (1) and (2) are truth-valueless, but their disjunction is a logical truth, and so we find ourselves in a situation where the disjunction is true without the truth of either disjunct. In other words, the modal fictionalist is compelled to acknowledge that in the modal case, a true disjunction can occur without either disjunct being true.[163] Second, it seems implausible to treat (1f) and (2f) as truth-valueless since, as Rosen states, it is generally assumed that story prefixes do not give rise to truth-value gaps (that is, if a certain fiction is silent on a matter, speaking as if the fiction provides a definite answer on that matter is typically treated as speaking *falsely*).

In the end, it turns out that neither option – treating (1f) as false or treating it as truth-valueless – is desirable. Some efforts to solve the incompleteness problem involve Woodward 2012b and Skiba 2017, but the question of their success remains open.

2.3.3. A Problem with Modal Fictionalism in the Context of the Modal Ontological Argument

Following the exploration of the modal fictionalist account and the key challenges it confronts, I would now like to argue that the fictionalist conception of possible worlds fails to adequately frame the modal ontological argument. I would only like to discuss one yet decisive problem coming up in this context: as we will come to see, it proves sufficient to conclude that an interpretation of the modal ontological argument through the prism of modal fictionalism is unlikely to succeed.

[163] As Rosen (1990: 343) observes, this result is not unique to the present context. Be that as it may, its failure to be unique does not make it more desirable.

I will build my case upon a fictionalist interpretation of the modal ontological argument as presented by Parent (2016). The problem, as Parent has shown, is that such an interpretation does not establish God's actual existence: within the fictionalist framework, the argument only indicates that the *modal fiction* is committed to the actuality of God.

The reason behind this is that the modal fictionalist views all propositions posited in Plantinga's argument as entailments of the modal fiction. Consider the main premise of the argument, stating (in its simple form) that there is a possible world with a maximally great being. From the modal fictionalist's perspective, this assertion is construed as claiming that *according to the fiction of possible worlds*, there is a possible world in which there exists a maximally great being. Analogously, the argument's conclusion, asserting that a maximally great being exists in every possible world (including the actual one), is understood as the claim that *according to the fiction of possible worlds*, in every possible world (including the actual one), there exists a maximally great being.

Needless to say, this constitutes a problem for the modal ontological arguer aiming to establish a genuine (i.e., non-fictional) existence of a maximally great being. For the most the fictionalist rendition of the argument can reveal is that such a being exists *within the confines of a fiction*. Apparently, however, fictions can be false. As averred by Parent (2016: 343), it is a general principle that if a fiction says that *p*, it does not follow that *p*. Just like the fictional existence of Sherlock Holmes does not imply his real-world existence, the fictional existence of God says nothing about whether such a being truly exists. It follows, therefore, that in case the whole argument, as Parent (*ibid*.) puts it, is 'embedded in a fiction', it seems unable to unveil what lies beyond this setting. In other words, it cannot convince us that God *really* exists.

Now, recall that the modal fictionalist has the flexibility to employ various story prefixes to articulate modal claims. That is, instead of using 'According to the fiction of possible worlds, …', they might choose alternatives such as 'If there were possible worlds (of such-and-such a sort), …' or 'According to Plantinga's theory of possible worlds, …'. In any case, however, the conclusion appears to persist: when viewed through the lens of modal fictionalism, the modal ontological argument is incapable of establishing the actual existence of God. For whether framed as 'If there were possible worlds (of such-and-such a sort), a maximally great being would exist in every possible world (including the actual one)', or as 'According to Plantinga's theory of possible worlds, a maximally great being exists in every possible world (including the actual one)', such statements always remain

conditional or confined within the bounds of a particular theoretical (and fictionally interpreted) framework. As a result, it appears evident that any attempt to run the modal ontological argument assuming modal fictionalism is doomed to fail in terms of establishing the purported conclusion. In other words, a fictionalist interpretation of the argument ends up as a non-starter.

But now one might object here.[164] Apparently, one could argue that while talk about possible worlds is construed as merely fictive under modal fictionalism, talk about modality as such might still be given a straightforwardly realist (i.e., non-fictionalist) interpretation. Put differently, one could posit that nothing prevents us from interpreting the left-hand side of the biconditionals *'It is possible that p' is true iff, according to the fiction of possible worlds, p is true at some world* and *'It is necessary that p' is true*

[164] Another important objection one could raise has been addressed by Parent (2016: 346–347) himself. Parent invites us to ponder the following line of reasoning:

(1) Necessarily, camels are mammals.
(2) Necessarily, mammals are animals.
(3) So, necessarily, camels are animals.
(4) So, camels are actually animals.

Now, Parent observes that, when approached from a fictionalist perspective, such reasoning also falls short of establishing its conclusion outside the realm of fiction. That is because these propositions are again interpreted only as entailed by the fiction, which is simply silent about the extra-fictional world. It thus appears, as Parent notes, that modal fictionalism undermines a notably valid line of reasoning.

Nonetheless, Parent contends that, unlike the modal ontological argument, this reasoning appears primarily aimed at systematising existing knowledge rather than striving to establish novel truths. Furthermore, following the insights of Bas C. van Fraassen (1989), Parent suggests that talk of necessity as such within this or analogous contexts might simply serve to focus enquiry by excluding certain explanatory questions from consideration (e.g., the inclusion of 'necessarily' in premise (1) may just obviate the need to engage in the exploration of why mammalhood in our world is 'constantly conjoined' with animalhood).

If I understand Parent correctly here, he maintains, first, that fiction should not always be seen as providing erroneous information about the real (i.e., extra-fictional) world. Put differently, just because fiction *can* be false, it does not follow that it *must* be false. Therefore, the modal fictionalist might concede that, at times, the modal fiction can indeed convey truths about reality – such as in cases where the correspondence between truth and fiction is clearly established – but this is, to say the least, not always the case. If we are unsure whether what is true and what the fiction says coincide, we have to remain cautious and remember that the fiction may err. Second, Parent highlights that certain instances of apparent modal discourse may not be intended as modal talk in the strict sense of this term. In other words, modal expressions (such as 'necessarily') may sometimes serve pragmatic functions, facilitating the organisation and refinement of our understanding of specific concepts, rather than asserting modal claims.

iff, according to the fiction of possible worlds, p is true at every world realistically. Consequently, it could be claimed that modal fictionalism can still accommodate a non-fictionalist interpretation of propositions contained in the modal ontological argument, including the argument's conclusion that God necessarily, and so actually, exists.

Such a consideration, however, seems to be based on a certain misconception of modal fictionalism. Precisely, it is founded on the presupposition that there is a fundamental symmetry between both sides of the aforementioned biconditionals – a presupposition that is highly doubtful, given that the very purpose of modal fictionalism (or indeed any possible worlds theory) lies in dissecting modal assertions through the lens of possible worlds discourse, not vice versa. For the modal fictionalist, the right-hand side of the biconditionals has to take semantic priority.

David Liggins (2008: 153) has tackled precisely such a misunderstanding. As he has emphasised, modal fictionalism contends that 'modal sentences express propositions that are more perspicuously expressed by sentences about the plurality of the worlds hypothesis – not the other way round'.[165] The same principle has been echoed by Parent (2016: 341), who asserts that paraphrasing sentences about the modal fiction back into ordinary modal discourse is not a part of the fictionalist's programme – quite the contrary. What the modal fictionalist aims to do is to translate modal discourse into talk about fiction, and so the right-hand side of each biconditional always emerges as the fictionalist's preferred idiom.

This can be further clarified by considering, as once again accentuated by Parent (*ibid*.: 349), that modal fictionalism does not accommodate fiction-independent modal facts. Recall Rosen's claim: under modal fictionalism, the fact that Humphrey could have won the election *just is* the fact that, according to the fiction of possible worlds, there is a world in which a counterpart of Humphrey achieves victory. It is not that the modal fictionalist maintains *both* a modal fact (or statement) and its fictional interpretation; rather, they present us with a *single* fact (or statement) – namely, the fictional rendition of the original modal assertion. Perhaps the modal fictionalist might concede that modal statements can be accepted at face value in everyday discourse, yet,

[165] As pointed out by Liggins (2008: 153, fn. 2), this facet of modal fictionalism is also explained in Rosen's own writings (see Rosen 1990: 332–333, 335; 1993: 72–73; and 1995: 67–68), albeit in a different fashion than that of Liggins himself.

according to their view, such statements are ultimately rooted in fictional narratives[166] rather than being representations of objective modal facts.[167]

In fact, an analogous point can be applied to modal concretism and modal abstractionism. Within these paradigms, the right-hand side of the biconditionals – namely, *'It is necessary that p' is true iff p is true in all possible worlds* and *'It is possible that p' is true iff p is true in at least one possible world* – also holds semantic priority, because the interest of modal concretism and modal abstractionism lies in establishing a framework to analyse modal claims in terms of possible worlds discourse, rather than the other way round. Despite its rejection of the literal existence of worlds, modal fictionalism is not an exception in this regard. The conceptual scheme remains the same in the sense that modal assertions are provided truth-conditions in terms of possible worlds talk precisely with the aim to get rid of primitive modal assertions (i.e., assertions containing modal operators).

On the other hand, the crucial difference among these perspectives lies in the fact that, unlike modal concretists and modal abstractionists, modal fictionalists do not take possible worlds semantics as ontologically committing.[168] In this sense, while we can at least hope that concretist and abstractionist interpretations of the modal ontological argument might tell us something real about God, interpreting the argument in terms of modal fictionalism is unlikely to assist us in this regard from the very outset.[169] To clarify: a fictionalist interpretation does not assert that *it is not the case* that there is a maximally great being in every possible world – it is unable either to *affirm* or *negate* that. To take an example, Arthur Conan Doyle's stories do

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[166] Borghini (2016: 143) offers the following analogy here: consider the case of an interior decorator, who speaks of sofas, chairs, tables, etc., while furnishing a house. While referring to fictional entities, the decorator prescribes what should or should not be done in the house. In a similar fashion, then, modal fictionalists hold that, through the use of the modal fiction, the truth regarding modal discourse is determined.

[167] By rejecting the view that modal claims correspond to objective modal facts, modal fictionalism takes sides with another perspective known as modal conventionalism – i.e., the thesis that modal truths (wholly or partially) depend on the conventions of our talk or thought. As articulated by Leftow (2022: 233), if the content of the pertinent fiction(s) is ultimately up to us, then modal fictionalism is not relevantly different from modal conventionalism. Modal fictionalism, in this light, can be understood as 'conventionalism by way of fiction-writing rather than setting words' meanings, or analyticities, or the contents of necessary-truth lists.'

[168] Or, as formulated by Parent (2016: 351), they are cautious in considering the possibility that modal logic might not be 'a window to our world'.

[169] Recall Plantinga's germane position (depicted in section 1.1.2) that if we do not take possible worlds semantics seriously, disregarding their implications for reality, the effectiveness of employing such semantics remains highly doubtful.

not *negate* the existence of Sherlock Holmes beyond their fictional realm; rather, they simply do not serve as guides to determine Sherlock Holmes' existence outside of fiction. The same principle applies to interpreting the modal ontological argument through the lens of modal fictionalism: everything this fiction tells remains *within the fictional framework itself*. Consequently, we simply cannot expect it to tell us something about the extra-fictional world.[170] Surely, this can be generalised to various modal arguments seeking to provide novel insights into the metaphysical realm.[171] The lesson to be learned is that, when approached from a fictionalist perspective, such arguments lack the tools to guide us towards objective reality.

All in all, it can be concluded that a fictionalist interpretation of the modal ontological argument is a non-starter. Inasmuch as modal fictionalism takes modal claims to be rooted in a fictional narrative, fictionalist renderings of modal assertions cannot be expected to unveil what exists beyond this narrative. As a consequence, when the modal ontological argument is run assuming modal fictionalism, all its propositions are construed as products of fiction, incapable of shedding light on the extra-fictional reality. It cannot show that the claim that a maximally great being exists in every possible world (including the actual one) is *really*, i.e., non-fictionally true, and hence proves untenable within the context of the modal ontological argument.

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[170] One may, of course, doubt what such a theory is good for, after all. In other words, if it is essentially built upon fiction, why would anyone employ it at all? Perhaps, however, these doubts are question-begging with regard to the fictionalist account – perhaps the latter is simply difficult to digest for those with a realist leaning (apparently, a similar point could be made regarding (modal) conventionalism). Moreover, one should not forget the initial impetus behind the development of modal fictionalism, as described in section 2.3.1. It may be, then, that the oddity of the theory is merely one of its inherent limitations.

[171] For instance, consider the famous zombie argument against physicalism, particularly known through the work of David Chalmers (1996: 94–99). This is a thought experiment that invites us to imagine a hypothetical being – a zombie – which is identical to a conscious being in every physical aspect but lacks consciousness or subjective experience. According to proponents of the zombie argument, if such zombies are conceivable, they are considered metaphysically possible. The argument concludes that if zombies are indeed metaphysically possible, meaning it is possible for beings to be physically identical yet differ in terms of having consciousness, then consciousness must be non-physical.

Parent's (2016: 350–351) objection to this argument reiterates the contention that, when viewed through the lens of modal fictionalism, the argument only shows that the modal fiction is committed to a possible world containing zombies. Yet, this does not imply that it is ontologically true – outside the realm of fiction – that consciousness cannot be reduced to the physical domain.

We are thus in the position to bring the current chapter of the dissertation to an end. As noted at the outset, the goal of this chapter was to argue that possible worlds theories – modal abstractionism, modal concretism, and modal fictionalism – fail to offer a proper basis for interpreting the modal ontological argument. Upon examining each theory, it becomes apparent that none of them provided a satisfactory resolution within the context of the discussed argument. Despite the fact that the argument was originally formulated by Plantinga assuming the abstractionist construal of possible worlds, this account poses substantial challenges in case we assume the argument's soundness and suppose that God really exists. In such a case, we are expected to shed light on the relationship between God and abstract possible worlds; yet, as we have witnessed, there is no compelling means to demonstrate that God can coexist with abstract possible worlds in a theologically appropriate manner.

Renditions of the modal ontological argument in terms of modal concretism have also encountered setbacks, for this theoretical framework struggles either to accommodate the argument's conclusion – the claim that God exists in every possible world – or, this problem notwithstanding, presents broader theological issues. Finally, in case we approach the modal ontological argument through the prism of modal fictionalism, we find ourselves unable to establish the existence of God beyond the confines of fiction. In light of these considerations, we can thus conclude that neither modal abstractionism, modal concretism, nor modal fictionalism[172] offers a viable avenue for proponents of the modal ontological argument. Having substantiated the thesis that interpretations of the argument within the aforementioned possible worlds theories ultimately falter, we are now ready to explore a, hopefully, more auspicious alternative: an interpretation of this argument based on modalism.

[172] Perhaps one could also suggest exploring the modal ontological argument from the perspective of modal combinatorialism à la David Armstrong, wherein possible worlds are seen as rearrangements of certain metaphysical simples. It is noteworthy, however, that while Armstrong indeed employed possible worlds talk in his earlier writings on modality (1989), he deflated possible worlds discourse altogether in his subsequent work (1997). For this reason, it would be hardly tenable to treat his mature account of modality as a possible worlds theory.

3. A MODALIST APPROACH TO THE MODAL ONTOLOGICAL ARGUMENT

After calling into question possible worlds-based construals of the modal ontological argument, I shall now provide a novel interpretation grounded in modalism, or the view that modal concepts and modal truths are totally primitive and unanalysable. In pursuit of this goal, the chapter is structured around the following objectives. First, I will present a comprehensive overview of the modalist stance, tracing its development through the works of key contributors. Next, I will examine the principal objections to it, aiming to show that none of these objections majorly compromises the theory. The remainder of the chapter will focus on presenting the modalist interpretation of the modal ontological argument. Initially, a formal basis will be set forth – that is, it will be demonstrated how the conclusion of the argument can be derived from its premises, assuming the modalist viewpoint. I will then explore how modalist principles might be reconciled with the broader theistic worldview – once again, this is essential in case the argument is sound and God truly exists – and argue that modalism and theism form a coherent and well-balanced framework. Finally, I will respond to some foreseeable criticisms.

> *'Quantifiers are understood and discussed in their own terms. In philosophy, if not mathematics, modal operators deserve the same treatment.'*
> *(Forbes 1992: 62)*

3.1. Modalism

At the heart of modalism lies a fundamental principle: modal concepts, such as *possibly* and *necessarily*, are unanalysable. In this regard, the modalist stands in direct opposition to the possible worlds semanticist, who advocates for the analysis of modal notions through the quantificational framework of possible worlds.[173,174] Generally speaking, modalists posit that modal terms

[173] The modalist believes that quantification over worlds is to be explained in terms of primitive modal operators – not the other way round (see Forbes 1992: 57). Timothy Williamson (2013: 333) dubs it a debate between modalists and anti-modalists: the former contend that quantification over worlds can be reductively explained in terms of modal operators, whereas the latter assert the reverse.

[174] As formulated by Borghini (2016: 75), the core idea for the modalist is to endorse the syntax of quantified modal logic while at the same time rejecting the semantic account appealing to possible worlds.

are inherently primitive and resistant to any further analysis or explanation. This core maxim of the modalist account has been aptly summarised by Stephen McLeod (2008: 184–185):

> On a standard modalist view of alethic modality, <...> the modal operators are not reducible to quantifiers over possible worlds or otherwise reducible or eliminable. Rather, they are syntactically and semantically primitive. Their grammar is not captured by some other syntactic device, such as quantification, and nor are the semantic contents of the claims that use of the modal operators enables us to make.

Under the modalist view, then, modal sentences are subject to homophonic truth-conditions wherein modal operators figure. For instance, 'There could have been a talking donkey' is true iff there could have been a talking donkey (Wang 2021: 1890). In other words, 'There could have been a talking donkey' simply conveys the truth that there could have been a talking donkey, and *not* the truth that there is at least one possible world in which such a donkey exists. As articulated by Divers (2007: 78), the underlying idea is that modal truths are 'both perfectly objective, and metaphysically perspicuous as they stand'.

What this means is that, under modalism, modal truths merit the same treatment as the so-called categorical truths (truths about how things actually are). Modalists believe that we should not feel the need to reduce 'There could have been a talking donkey' or 'It is possible that there are unicorns' just as we do not feel the need to reduce 'There are horses'. That is, they believe that modal truths stand on their own and that we need them to tell the full story of the world, because no number of categorical truths suffices to do it (hence the name 'modalism'[175]).[176] Borghini (2016: 74) illustrates this tenet by employing the metaphor of the universal catalogue:

> Let us suppose that we are to compile a catalogue of the universe, in which we will include everything – every last thing – that exists. We will

[175] As noted by Melia (1992: 55, fn. 4), it appears that the term 'modalism' was originally introduced by Kit Fine when describing Arthur Prior's views on modality in the postscript to Prior and Fine 1977. We will explore this postscript within the subsequent section of this chapter.

[176] In this vein, modalism also presents a direct counterpoint to Quine's hostile attitude towards modality (see Melia 2003: 81). Unlike endeavours aimed at abolishing the modal, modalism champions the utmost respect for modal talk by treating it as basic and clear as our discourse about categorical truths. To the modalist, modality is neither veiled in obscurity nor requires elucidation from non-modal explanations; modal truths stand as absolutely transparent and self-contained.

> include Napoleon and the Battle of Waterloo; the Colosseum; Tasmania; rhythm and blues; cider; and so on. At some point, we will have to consider that which is possible: should we include it in the catalog, and, if so, how? The modal skeptic would advocate doubting that modal scenarios can be included; the expressionist would include the sentiments expressed by modal terms; and the modalist? She would include … modal facts: the possible victory of Napoleon at Waterloo; the possible end of the world on December 31, 1999; the necessary fact that the sum of two plus two is four; and so forth.

According to the modalist, therefore, the world is characterised not solely by categorical truths but also by modal ones. Both categorical and modal truths serve the same function – namely, to describe the way the world is. Just as the world is such that there are horses in it, it is also such that it could have ended on December 31, 1999, and such that it is necessary that two plus two equals four. There is simply nothing *under* modal truths: they are completely venerable and self-reliant, and they do not need to be 'backed' by any sort of non-modal basis.

Now, a crucial clarification shall be made at this point. Apparently, there are other theories on the market alongside modalism that also posit the non-reductive nature of the modal. Consider, for example, dispositionalism, which accepts primitive dispositions of objects (such as fragility or magnetism) and contends that modal claims can be explained in terms of them. As long as disposition – an object's capacity or potential to behave in a certain way under specific conditions – is itself a modal notion, dispositional accounts of modality count as forms of modal primitivism (i.e., the stance acknowledging the irreducibility of the modal to a non-modal ground). Nevertheless, they differ from modalism precisely in the sense that they do not take the concepts of *necessity* and *possibility* themselves (as well as claims containing them) as primitive. In other words, the dispositionalist *analyses* these concepts and the claims involving them (e.g., interpreting 'It is possible that *p*' as conveying 'There exists a disposition whose manifestation includes *p*'),[177] whereas the modalist, as noted previously, chooses to leave them completely unanalysed.

[177] An analogous point can be made regarding modal abstractionism, which, despite being a possible worlds theory, precludes the complete reduction of the modal by keeping modal definitions of worlds themselves. However, inasmuch as modal abstractionists, by relying on possible worlds semantics, analyse modal concepts and modal truths, they still can be said to offer a partial reduction (as explained in fn. 76).

It is therefore pivotal to stress that while modalism constitutes a variant of modal primitivism, there are also other primitivist perspectives, and these differ among themselves depending on which modal notions – including necessity, possibility, essence, dispositions, etc. – they take as primitive. What is primitive for modalists is (at least one of) the modal operators 'necessarily' and 'possibly' themselves,[178] implying that sentences containing these operators are likewise held primitive, whilst other modal primitivists posit that talk about necessity and possibility can be reduced to talk about other modal notions, such as essences and dispositions.[179] The unifying idea across all modal primitivist positions lies in their acknowledgement that the truth-conditions of modal propositions inevitably include modal notions, but what sets modalists apart in this context is their refusal to reduce the concepts of necessity and possibility *even to other modal concepts*. In other words, modalists take these concepts and claims involving them as *absolutely primitive*.

For this reason, it could be said that the modalist would not find non-modalist primitivist positions truly satisfactory. From the modalist's point, these approaches are simply not radical enough as they still perform an *intra-modal* reduction (i.e., a reduction of necessity and possibility to other modal notions) when, according to the modalist, *no* such reduction is needed (or indeed feasible) at all.

But what spawns this radicalism of the modalist account? That is, what supports the idea that the concepts of necessity and possibility and the propositions encompassing them should be regarded as totally primitive? Among the main motivations fuelling the modalist perspective, one could perhaps primarily discern negative ones, yet these are shared across all (or at least the majority of) primitivist viewpoints. In other words, the advocacy for primitivism often arises from nothing other than a disappointment with non-

[178] As we will come to see, modalists also typically include the actuality operator alongside the familiar possibility and necessity operators.

[179] As indicated by Jennifer Wang (2021: 1891), such primitivist positions typically embrace property talk, thus situating primitive modality at a 'lower' level. Among the works on the side of dispositionalism are Ellis 2001; Pruss 2002, 2011 (also noted for its theistic nature in fn. 66); Molnar 2003; Mumford 2004; Borghini and Williams 2008; Contessa 2010; Jacobs 2010, 2011; Vance 2013; Vetter 2015. Explorations into primitivism concerning essence are to be found in Fine 1994, 1995; Lowe 1998, 2008a, 2008b; and Mallozzi 2021. Wang herself proposes yet another version of modal primitivism – the so-called incompatibilism, which is the view that modal claims come down to incompatibilities between certain properties and relations (refer to her 2013a, 2013b, and 2020).

primitivist positions and a critical examination of their weaknesses (see McLeod 2018 [2001]: 28).

However, modalism differs from other primitivist stances precisely by its stubborn refusal to perform even an intra-modal reduction, and this particular feature of modalism can be said to be motivated by its pursuit of maximal ontological simplicity. For unlike other primitivist positions, such as dispositionalism, which accept the existence of modal entities such as modal properties, the modalist account, at least on the face of it, does not risk assuming any serious ontological commitments. As Jennifer Wang (2021: 1890) puts it, the modalist simply claims that if some proposition or sentence *p* is possible, it indicates that the world is such that *p* is possibly true, and that the world's being this way does not require any additional analysis – a contention that appears rather ontologically innocent. In other words, acceptance of the notions of necessity and possibility as primitives, in and of itself, does not imply that these notions correspond to some entities within one's ontology.

The same principle has been echoed by Bueno and Shalkowski (2015: 677), who state that there is 'no special modalist ontology', and Divers (2007: 78), according to whom, modalism means taking 'modality as real, and as metaphysically fundamental but also as nonexistential'. Now, there are potential variations in interpreting the modalist account in this regard: for instance, as exemplified by Borghini's quote earlier, modalists may be construed as endorsing the existence of modal *facts*.[180] Nevertheless, it appears that the modalist is in no way *obliged* to accept this kind of ontological commitment. That is, if the modalist is able to articulate their position in terms of modal *truths* and do so through ontologically non-committal means, then their stance is evidently less ontologically burdensome compared to other primitivist (and also some non-primitivist) views.[181] As we shall see in the course, this is precisely what makes modalism distinctly promising with respect to accommodating the modal ontological argument.

Finally, it could be said that the modalist perspective is strongly motivated by the attempt to offer an account of modality that would be as close as possible to our ordinary modal reasoning (see, e.g., Melia 2003: 81). Consider once again the sentence 'It is possible that there are unicorns'. According to the modalist, it just conveys that it is possible that there are unicorns (or that the world is simply structured in such a way that it is possible

[180] Also see Borghini 2009: 210.

[181] I aim to thoroughly explore the feasibility of such an articulation later in this chapter.

that there are unicorns). By contrast, consider the possible worlds semanticist's account: for them, such a sentence conveys the truth that 'There is at least one possible world in which there are unicorns'. However, this latter account implies that the simple sentence 'It is possible that there are unicorns' cannot be understood by someone who lacks the conception of *a total way things could have been* (a.k.a. a possible world) – the idea that, in Graeme Forbes' (1992: 61) words, is 'very hard to swallow'. In other words, it appears simply implausible to think that we really mean such totalities when engaging in our ordinary modal reasoning; rather, we likely just mean *possibility* and *necessity* as unanalysed primitives. But if so, then the modalist stance, which provides homophonic truth-conditions for sentences with these modal operators, stands closest to our basic modal endeavours.

This marks the conclusion of our initial reflections on the modalist account and its basic motivations. Next, we will dive deeper into the development of this theory, focusing on the seminal works of Prior and Fine, Forbes, and Christopher Peacocke, where the core principles of the modalist perspective are laid out. Then we will proceed to the discussion of the main challenges modalism confronts – for, clearly, it could be considered a suitable framework for interpreting the modal ontological argument only if it stands as a viable theory in its own right and can effectively address key complaints from objectors' side.

3.1.1. Early Version of Modalism: Prior and Fine

Worlds, Times and Selves (1977) is a book that Prior was assiduously working on yet did not manage to complete before his death. The task Fine undertook was to integrate various published and unpublished pieces by Prior, filling in the missing parts and giving the book a finalised form. The main objective of the book, as articulated by Fine (Prior and Fine 1977: 7), 'was to show that modal and tense logic could stand on their own, that talk of possible worlds or instants was to be reduced to them rather than the other way round'. Fine further elaborated on this conception in the postscript, where the very name of modalism was introduced (as mentioned in fn. 175).

Central to Prior's views was his belief in the intimate connection between modal logic and tense logic. Indeed, Prior is credited with laying the very foundations of tense logic and demonstrating its profound significance in

reasoning.[182] His aim was to treat propositions as inherently tensed, thus departing from their tenseless treatment in classical logic, which he achieved formally by introducing temporal operators. The standard semantics of Prior's tense logic, like that of modal logic, adopts possible worlds semantics. Notably, Prior is the one who invented crucial elements of possible worlds semantics for propositional modal logic several years ahead of Kripke.[183] However, it is essential to emphasise that, in Prior's opinion, possible worlds discourse should not be considered a genuine *semantics* for modal discourse. According to him, primitive modal operators come prior to the possible worlds framework; while the latter may serve as a model for modal logic, it is, in Prior's (*ibid*.: 54) words, by no means an *interpretation* of the modal words.

In the postscript to *Worlds, Times and Selves*, Fine (*ibid*.: 116) elaborates on one of the fundamental theses in Prior's conception of modality: the idea that ordinary modal idioms (such as *possibly* and *necessarily*) are primitive – a view called by Fine *modalism* or *priority*. This doctrine, as Fine explains, contrasts with the idea that ordinary modal discourse should be explained in terms of possible worlds. Fine also discusses another thesis by Prior known as actualism, which asserts that only actual objects exist.[184] Merging modalism and actualism together, Fine proceeds with what he terms *modal actualism* and strives to consider what it can make of possible worlds discourse, or, more precisely, the possible worlds framework that admits merely possible individuals. In other words, Fine's goal within the postscript is not to advocate for modalism but rather to explore how typical possible worlds discourse could be understood from the modalist's perspective.

Fine presents two options for approaching possibilist discourse. The first is to reject it outright as illegitimate, while the second, less radical approach acknowledges the legitimacy of possible worlds talk but views it as non-fundamental, thereby requiring analysis in terms of ordinary modal idioms. In

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[182] In the words of Peter Øhrstrøm and Per Hasle (1993: 23), Prior did not regard tense logic as merely another branch of logic like, for instance, deontic logic. Instead, Prior believed that logic in general should be understood as tense logic – the view that gained traction not only among logicians but also among computer scientists and some physicists.

[183] All the basic elements of possible worlds semantics are sketched in the paper 'Interpretations of Different Modal Logics in the 'Property Calculus'' (1996 [1956]), authored by Prior in collaboration with the Irish mathematician and logician Carew Meredith.

[184] Fine (Prior and Fine 1977: 116) also notes that Prior held corresponding theses about time – namely, that the tenses (such as *it will be* and *it was the case*) are primitive, and that only present objects exist.

the postscript, Fine explores how this programme – translating possibilist discourse into modal actualist one – could be executed.

The postscript thus lays the initial groundwork for the modalist perspective, yet its focus remains highly formal and somewhat narrow. Fine's primary concern is reconstructing Prior's views and considering how, based on the idea of the primitiveness of modal operators, one could make sense of possible worlds talk through reverse translation – that is, not translating modalist talk into possible worlds discourse, but vice versa. The essence of the modalist account remains somewhat demure at this stage. Nevertheless, before long, the first comprehensive defence of modalism in a systematic way was undertaken by Forbes, who was in turn influenced by Peacocke's work, and it is to their ideas that we now turn.

3.1.2. Classical Exposition: Forbes and Peacocke

The first attempt by Forbes to defend modalism is, like in the case of Prior and Fine, mostly related to the search for a scheme that allows the translation of possible worlds sentences into modal sentences with primitive modal operators, or to a modal language that lacks explicit quantification over worlds. In addition to that, however, Forbes offers a critique of the realist position concerning possible worlds semantics. According to Forbes (1985: 74), when interpreted realistically, possible worlds talk presents a 'disturbing feature': it introduces specific entities – possible worlds – that modal sentences themselves apparently do not introduce. Furthermore, Forbes argues that both concretist and abstractionist[185] interpretations of possible worlds face the Benacerrafian challenge, which raises questions about how we can claim knowledge about objects beyond our sensory experience. That is, if our modal knowledge depends on worlds that are epistemologically inaccessible, then the entire epistemology of modality seems to be called into question (*ibid.*: 79).

Simultaneously, Forbes (*ibid.*: 80–81) intends to demonstrate that the relationship of synonymy between expressions in possible worlds language and those in modal language (i.e., language featuring primitive modal operators)[186] fundamentally favours the latter with asymmetry. What this means is that a possible worlds sentence does not convey its meaning independently; rather, the meaning of a possible worlds sentence is derived

[185] Forbes (1985: 75) himself terms concretism as *absolute realism*, and abstractionism as *reductive realism* about worlds.

[186] The term 'modal language' as used by Forbes (1985: 80) should be understood synonymously with 'modalist language' as employed in this dissertation.

from its expression in modal language, such that, for example, $(\exists w)P(w)$ has the meaning attributed to it by $\Diamond P$. Now, what makes this view plausible, as explained by Chihara (1998: 145),

> is the thought that, for a great many years, philosophers (and non-philosophers) have reasoned modally without any talk of possible worlds. It is reasonable to suppose that all this talk about possible worlds did not proceed from the *discovery* of new universes so much as from the *invention* of a new way of thinking about possibility and necessity; perhaps, what underlies this new way of talking is merely a new metaphor. If so, it might be thought, all of our meaningful talk about possible worlds should be reducible to straightforwardly modal talk, involving just the modal operators and such words as 'can', 'could', and 'might'.

Next, Forbes goes on to consider two problems that arise from this perspective. First, he claims that there is a problem of validity: if possible worlds sentences lack their standard quantificational meaning, we cannot rely on the standard possible worlds account of validity in modal logic; and so an alternative account must be provided within this context. Forbes thus introduces a proof-theoretic characterisation of validity, where the usage of modal operators conforms to natural deduction rules. Basically, Forbes suggests that competent English speakers have some native intuitions about logical inference, and that these intuitions underpin the meanings of logical connectives, with the same principle applying to modal operators alike (see Forbes 1985: 82–85).[187,188]

But then there is another significant challenge. Specifically, if we claim that each possible worlds sentence gets its meaning from a synonymous modal sentence, we are effectively eliminating the need for possible worlds as part of our ontology. Such elimination is possible only if *every* meaningful possible

[187] Forbes' idea is to provide introduction and elimination rules for the necessity operator (which give its meaning) and state that the possibility operator $\Diamond$ is introduced by definition as "$\sim\Box\sim$". By incorporating these rules into the standard natural deduction framework for propositional logic, an S5 modal propositional logic is established.

[188] Forbes (1985: 87–89) also presents the substitutional conception of validity as an alternative. According to this view, a schema is valid for language L iff it is not possible that there is some extension of L from which substituents can be chosen in such a way that it is possible for the premises of the resulting instance to be true and the conclusion false. This approach, however, lacks detailed elaboration in Forbes' work.

worlds sentence can be converted into a meaningful modal sentence. The issue, though, is that, as Forbes (*ibid*.: 89) himself notes, possible worlds talk seems to possess greater expressive power compared to modal operators talk: certain possible worlds sentences appear meaningful but are, at least on the face of it, not reverse-translatable into modal language. An example of such a sentence is given by Allen Hazen (see his 1976: 38):

(1) $(\forall w)(\exists x)(\mathrm{E}(x, w) \,\&\, \mathrm{E}(x, w^*))$[189]

The sentence says that in every possible world, there exists some object that also exists in the actual world. Now, the same sentence, as Forbes (1985: 90) notes, has a perfectly natural English rendering – 'Necessarily, some actual object exists' – which does not use the vocabulary of possible worlds. How can we translate this into modal language? As suggested by Hazen himself, modal language can be augmented with the actuality operator A. This augmentation then enables it to express (1) as

(2) $\Box(\exists x)\mathrm{A}(\mathrm{E}(x))$

Here is another example:

(3) $(\exists w)(\exists x)(\mathrm{E}(x, w) \,\&\, \sim\mathrm{E}(x, w^*))$

The sentence asserts that in some world, there exists something that does not exist in the actual world, or, in simple modal English, that there could have been things other than those that actually exist. To express this in modal language, Forbes writes:

(4) $\Diamond(\exists x)\sim\mathrm{A}(\mathrm{E}(x))$

But now there are more difficult cases. Consider, for instance,

(5) $(\exists u)(\forall w)(\exists x)(\mathrm{E}(x, w) \,\&\, \mathrm{E}(x, u))$

Now, Forbes states that it is tempting to render (5) in English as 'It could have been that necessarily, something is actual'.[190] The question, then, is how to convey this sentence in a language with primitive modal operators, when we want to express the principle that 'actual' refers back to the initial 'it could have been that'. In other words, the question is how to structure such a sentence in modal language in such a way that 'it could have been that' can bind 'actual', which is not immediately within its scope. To do so, Forbes adopts a technique of indexing operators with numerical subscripts – a device he borrows from Peacocke.[191] In Peacocke's (1978: 486) work, this method is explained in the following way:

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[189] Where $\mathrm{E}(x, w)$ is a predicate which means 'x exists in w', and w^* denotes the actual world.

[190] I.e., if we interpret 'actual' as pertaining to a specific way things could have been, rather than taking us back to what is *actually* actual (see Forbes 1983: 280–281).

[191] In his 1989, Forbes also employs the ↑ and ↓ operators introduced in Vlach 1973 to achieve the same effect.

> However many modal operators separate an indexed operator '$\Box_i$' (say) from its associated 'A_i' (or string of them), in evaluating the clause governed by the associated 'A_i' we turn our attention to the world originally being considered in evaluating the clause governed by the original '$\Box_i$'.

The fact that Peacocke explains this indexing method in terms of possible worlds might be a bit misleading, given that we are now dealing with the modalist account; nevertheless, the ideas are fundamentally connected: just like in possible worlds discourse there are instances when one wishes to evaluate a part of an expression from the point of view of a specific world, there are also cases in modal language when one wants to indicate for the inner modal operators exactly those outer modal operators within whose semantic scope the inner operators are intended to occur (cf. Divers 1999b: 341). Actually, as Forbes explains, the fact that in the above sentence 'actual' refers back to the initial 'it could have been that' seems to follow from English itself (see Forbes 1985: 91).

Thus, by indexing the possibility operator and the actuality operator, we can transform (5) into

(6) $\Diamond_1\Box(\exists x)\mathrm{A}_1(\mathrm{E}(x))$,

which conveys the idea that it could have been that necessarily, something is actual. As we can see from this formulation, it is clear that 'actual' is bound with 'it could have been that', just like intended.

Additionally, Forbes (*ibid*.: 92–93) introduces doubly indexed operators, for they are required for some even more complicated instances. For example, consider the sentence

(7) My car (a) could have been the same colour as yours (b) actually is.

Forbes claims that the sentence could be formalised by quantifying over colours, yet he denies that there are such abstract objects. In order to avoid quantifying over colours, thus, he introduces a two-place predicate C so that we can write 'C(a, b)' to mean 'a is the same colour as b'. Then, he introduces both subscripts and superscripts for operators, where the former function as before, and the latter are used to associate a specific object with a given operator. And so we can express (7) as

(8) $\Diamond_1\mathrm{A}_1^{\mathrm{a}}\mathrm{A}^{\mathrm{b}}\mathrm{Cab}$

Thus, at least for the sentences in question, the problem appears to be resolved: even complex expressions framed in terms of possible worlds can be successfully translated into modal language.

Having outlined the core principles of modalist language, Forbes continues his elucidation of modalism in his work *Languages of Possibility* (1989). Here, he explicitly criticises the view that modal operators should be regarded as quantifiers. While providing a plausible rationale for this perspective, Forbes (1989: 84–85) claims that it is 'extravagant' to suppose that, when talking about possibilities, we truly intend to quantify over them. According to Forbes, expressions like 'There is a possibility that P' merely serve as elaborate synonyms for 'Possibly, P', with the latter holding semantic primacy. He posits that 'it' and 'there is' in phrases such as 'It is a possibility that P' or 'There is a possibility that P' simply function as demonstratives, referencing either the sentence-token, the proposition, or the state of affairs.[192] In other words, Forbes maintains that there is nothing in such discourse that commits us to the existence of a specific entity x – a possibility – which we would need to *identify* with a certain proposition, sentence-token, and so on; the only entity involved, according to him, is the proposition, sentence-token, etc., *itself*. When we say that 'There is a possibility that P', what we really do is not quantify over possibilities – we simply make a 'verbal gesture' to a modalised sentence-token/proposition/state of affairs P.

Hence, Forbes suggests that our mere capacity to discuss what is possible does not commit us to the existence of *possibilities* as such, let alone complete ones called possible worlds. Indeed, Forbes criticises possible worlds semantics on the basis that it embodies a kind of holism regarding the grounds of possibility, since, within this framework, the truth of ◊A cannot be explained without comprehending the state of affairs associated with A as embedded within a *complete* way things could have been. What underlies this holism? Forbes claims that it may find justification in combinatorialism, which posits that ◊A holds true if there exists an arrangement or combination of objects, properties, and relations that makes A true; a stricter interpretation would demand all such combinations to be total. Yet, Forbes states that this raises a difficulty for combinatorialism in how to exclude combinations that correspond to no possible world (e.g., one assigning both 'green all over at t' and 'red all over at t' to the same entity). As Forbes (*ibid*.: 111) further clarifies,

> [i]f the combinatorialist could identify within his theory certain features which any totally defined combination must possess and such that some

[192] Though notice that the latter two options would entail a commitment to abstract objects – a position incompatible with the nominalism Forbes advocates in his 1985 work.

> partially defined combination has no completion possessing them, we would have the rationale for holism that we seek. But I am unaware of any successful combinatorialist criterion for admissibility of total combinations. And if we use modal criteria (effectively abandoning combinatorialism) we could presumably bring these to bear directly on the partial combinations, so that the detour through their completions would be unnecessary.

In the face of such challenges, Forbes contends that it is implausible to think that holism could be properly justified.[193]

Regarding the ontological side, Forbes (*ibid*.: 103) states that modalism seems compatible with nearly any standpoint concerning the ontological issue of what sorts of entities exist for there to be modal facts about. He proceeds to accentuate that modalism is compatible even with an ontology that includes possible worlds, provided that quantification over them does not serve as an explanatory basis for the semantics of modal operators.[194] This marks a crucial principle: as also highlighted by Divers (1996: 106), primitivists seem to encounter no hitch in acknowledging entities such as worlds and interpreting 'possible' in 'possible world' much like one would in the concept of, say, a 'possible swan'.[195] The modalist thus possesses considerable flexibility in determining the objects to which modal truths pertain, potentially including even worlds – if these are indispensable within the modalist's ontological framework – given, once more, that such objects impose no explanatory burdens on the meanings of the modal operators. In the version of modalism to be pursued within this dissertation, however, there will be no need to include worlds in our ontology, and the latter will be kept as simple as possible.

Before proceeding to the question of how modalism can provide a foundation for interpreting the modal ontological argument, it is imperative to address the main objections levelled against this stance. We shall first confront the contention that modalism lacks credibility as a serious theory of modality.

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[193] Also see Forbes 1985: 95, where it is claimed that 'possible worlds are complete ways things might have been, and there is apparently nothing in the meaning of 'Possibly, P' which corresponds to this element of completeness', and Forbes 1992: 61, already mentioned in section 3.1.

[194] Although in his earlier work, Forbes suggested treating sentences about worlds as some sort of uninterpreted stipulations, akin to how certain mathematical sentences were regarded by David Hilbert. See Forbes 1985: 94–95.

[195] In the words of Forbes (1989: 103), 'if we are going to include worlds amongst the things we can talk about, then presumably we may make modal claims about them just as we do about other objects'.

Subsequently, we will move to the objection from expressive power – the most formal critique of modalism and one that has remained the most widespread. Lastly, we shall tackle the issue regarding modalism's relation to the ordinary use of modal talk. After examining each of these concerns, I hope to show that none of them has the power to vanquish modalism.

3.1.3. The Main Objections to Modalism

3.1.3.1. Objection: Not a Serious Theory at All

One criticism voiced against the principal tenet of modalism has been expressed even before the initial presentation of the modalist theory within the work of Prior and Fine. Such criticism comes from David Lewis but is perhaps shared more widely among critics of this stance. The point made by Lewis is that a non-reductionist approach to modal notions fails to constitute a serious theory of modality. As Lewis (2001 [1973]: 85) puts it, taking modal idioms as unanalysed primitives is simply 'an abstinence from theorizing'. Now, this objection may reflect a broader sentiment of dissatisfaction with the apparent triviality of the modalist view. In other words, some may complain that modalists are exhibiting a certain kind of intellectual dishonesty: they want their view to be regarded as a serious theory when all they do is stipulate certain discourse as primitive, thereby avoiding any burden of explaining it (cf. Borghini 2016: 79–80).

Be that as it may, I consider this concern itself to be ill-founded, for it is based on the controversial presupposition that only reductionist perspectives merit recognition as genuine theories.[196] This position may seem somewhat intuitive: for a viewpoint to count as a theory, we anticipate it to offer an explanation and an augmentation of our existing understanding regarding certain phenomena, and this is usually achieved through reduction. Yet, there remains a question of whether we should impose this expectation uniformly across all theoretical frameworks, especially within the context we are currently exploring. Perhaps there are phenomena that simply resist reductionist analysis, and theorising about them must adopt alternative approaches. The modalist's view precisely maintains that modality is one such

[196] Or perhaps the presupposition at play is somewhat more nuanced, asserting solely that theorising about modality must take a reductionist form (as indicated in McLeod 2018 [2001]: 62), although Lewis apparently is a reductionist not only in the context of modality. Regardless of which interpretation is adopted, however, it does not alter the essence of the argument I give against this concern in the current section.

phenomenon because modal concepts rank among the most fundamental ones in our conceptual system (see Dresner 2002: 433).

In fact, one could even argue that a reductionist stance proves inferior to a primitivist one in the sense that, by reducing the complexity of the studied phenomenon, it actually oversimplifies its intricacies and thereby leads to a somewhat distorted view. Alessandro Vercelli (1997: 285), for example, claims that in most scientific disciplines, way may often distinguish between two divergent theoretical paradigms: the reductionist approach, which seeks to reduce complex occurrences, and an alternative non-reductionist stance, which maintains that reductionism overlooks or misinterprets some crucial facets of actual phenomena.

Now, this may portray non-reductionist perspectives as mainly reactive, but it does not seem to scathe their theoretical credibility. Naturally, if non-reductionists do not think that any type of reductive analysis must be pursued, their primary task becomes defending their position against reductionist methodologies; as illustrated in the preceding sections, this principle also applies to modalism to a significant extent. Alongside other primitivist perspectives on modality, modalism frequently arises from a critical assessment of the limitations of reductionist positions. Yet, as pointed out by McLeod (2018 [2001]: 28), this argumentative foundation is exactly what makes these perspectives count as genuine theories. In other words, as long as these viewpoints are argued for using clear-cut arguments, they may be rightfully claimed to be established through theorising.

Indeed, this latter point is the exact reason why modalists do not provide an analysis of modal notions – the very goal of their project is to show that this is *not feasible* (recall, for instance, Forbes' objection to the analysis of modal operators in terms of quantification over possible worlds, claiming that its implied holistic stance towards the grounds of possibility does not seem to be justified). One may, of course, disagree with the modalist at this point by giving reasons for why reduction of modality is both feasible and preferable, yet *the very fact* that modalism does not analyse modal notions does not in itself demonstrate that it fails to be a serious theory of modality. In other words, holding that the theoretical basis of modalism is defective on the grounds that it postulates primitive modality ultimately appears to do nothing more than beg the question, and hence it can be concluded that the Lewisian complaint does not constitute any real harm to this stance.

3.1.3.2. The Objection from Expressive Power

Another prominent challenge to modalism is more technical in nature and stems from the view that modalist language lacks suitable resources to formalise certain modal expressions. We have already witnessed that some expressive limitations of modalist language have been reflected on by Forbes himself, and specific instruments – such as the actuality operator and indexed operators – have been introduced to overcome these difficulties. Nevertheless, critics argue that modalist language so enriched makes implicit use of possible worlds semantics, which makes it merely a notational variant of quantification over worlds.

An objection of this sort has been most powerfully presented by Melia (2003: 82), whose critique commences with the assertion that 'there are certain natural modal thoughts and intuitions that cannot be articulated using simply the concepts of *possibility* and *necessity*'. In other words, Melia argues that there exist certain important modal truths that find expression within a familiar first-order predicate logic, one that quantifies over possible worlds (and possibilia), yet remain resistant to formalisation in a manner acceptable to proponents of modalism. Melia (1992: 36) also advances an even stronger claim, suggesting that if there are modal sentences in English which can only be expressed by quantifying over worlds or possibilia, then the idea that the modal operators should not be analysed in terms of quantification over any entity is undermined. According to Melia, the overall success of modalism thus hinges on the availability of a modal language capable of expressing *all* modal sentences.

Among the instances of sentences presenting challenges for the modalist, Melia (2003: 82–92) discusses phrases such as 'There could have been things that don't actually exist' and 'There could have been more things than there actually are'. We have already seen in section 3.1.2 that Forbes proposes to formalise the former sentence by introducing the actuality operator A, which results in the formula $\Diamond(\exists x)\sim A(E(x))$. What about the latter proposition? Melia posits that the sentence requires the existence of worlds that, as well as containing something that does not actually exist, also encompass every actually existing thing. How can the modalist articulate this idea? According to Melia, the modalist can express it by employing indexed operators, again already explored in section 3.1.2. In other words, by using numerical subscripts on the possibility and actuality operators, the modalist can express 'There could have been more things than there actually are' as

$\Diamond_1((\Box(\forall x)(A(E(x)) \rightarrow A_1(E(x)))) \,\&\, (\exists y)\sim A(E(y)))$.[197] Recall that such indexed operators are intended to capture certain semantic connections between operators. In the example above, we can see that the indexed actuality operator refers back to the initial possibility operator: in other words, it brings us back to the possibility introduced by the original $\Diamond$, so we can convey the idea that it could have been the case that, on top of all the things that exist actually, there also exists at least one extra thing.[198,199]

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[197] This formalisation is also given in Forbes 1989: 87, although here Forbes uses the Vlach operators instead of subscripted indices. See fn. 191.

[198] Cf. non-indexed notations proposed by Melia:
(1) $\Diamond((\forall x)(A(E(x)) \rightarrow E(x)) \,\&\, (\exists y)\sim A(E(y)))$ and
(2) $\Diamond((\Box(\forall x)(A(E(x)) \rightarrow E(x))) \,\&\, (\exists y)\sim A(E(y)))$.

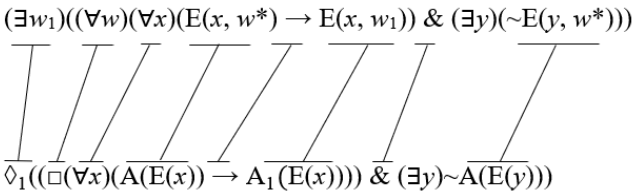
The problem with (1), according to Melia, is that ∀x may not have the correct range. Suppose, e.g., that it ranges only over the actual objects *a*, *b*, and *c*, plus some object *d* that is not identical to any actually existing object. Clearly, this suffices to make $\Diamond((\forall x)(A(E(x)) \rightarrow E(x)) \,\&\, (\exists y)\sim A(E(y)))$ true, despite the fact that ∀*x* does not range over *all* actually existing objects (Melia himself frames the explanation in terms of possible worlds, saying that such a formalisation merely tells us that there is a world that contains everything it contains, plus something the actual world does not – i.e., the claim that can be satisfied by worlds that contain only a small subset of the actual world and one non-actual individual).

In (2), on the other hand, the universal quantifier is no longer restricted: it refers to all possible individuals, not just the ones under the scope of the possibility operator. Nonetheless, the problem with the second formalisation is that the second E*x* no longer refers us back to the possibility introduced by the initial $\Diamond$. In other words, the string $\Box(\forall x)(A(E(x)) \rightarrow E(x))$ merely expresses the necessity of the proposition 'Everything is such that, if it exists at the actual world then it exists', which is trivially satisfied (see Melia 2003: 84–87).

[199] There is also another category of theses that, according to some authors, cannot be adequately expressed within modalist language. Lewis (1986: 14–17) has argued that this category includes claims about supervenience. For instance, consider the sentence 'Two worlds could not differ in laws without differing in their distribution of local qualitative character'. Lewis says that we cannot express this sentence using just the modal operators, because ~◊(two worlds differ in laws but not in their distribution of local qualitative character) just means that there is no world wherein two worlds exhibit such a discrepancy, which, as Lewis puts it, is trivially true, because 'there is no world wherein two worlds do anything. At any world W, there is only the one single world W'. According to Lewis, we need (modal realist) possible worlds to quantify over in order to accurately express the original supervenience thesis.

First of all, I find it somewhat peculiar that Lewis formulates this supervenience thesis in terms of possible worlds and then contends that the modalist lacks the resources to articulate it. Be that as it may, even when formulated in this manner, the thesis might still be expressible within modalist language. As discussed in section 3.1.2, modalists are permitted to include worlds in their ontology, provided these worlds do not underpin the semantics of modal

But now Melia (*ibid*.: 92–97) worries that such modal language that features subscripted modal operators is nothing other than a notational variant of a first-order language that quantifies over worlds. In other words, Melia claims that the structural and grammatical similarities between these languages are so 'striking' that modalist language reveals itself not as a competing theory to the quantificational framework of possible worlds but simply as an alternative way to express the latter. To corroborate his point, Melia draws our attention to both the possible worlds and the modalist formalisations of the sentence 'There could have been more things than there actually are' and points out their structural parallels:



Thus Melia (*ibid*.: 93):

> Were I a linguist who came across an unknown tribe who used the subscripted boxes and diamonds in this way, and were I to notice such close grammatical and structural similarities between the sentences that this tribe wrote and the sentences of a first-order language that quantified over worlds, I would be strongly tempted to conclude that what we had was not a totally new way of thinking about modality, but merely just a slightly different notation for making the same old claims about modal reality.

And so Melia suggests that the modalist has not truly escaped the ontological commitment to worlds: that is, if it turns out that the expressive instruments available to the modalist simply mimic those of the possible worlds semanticist, and if the latter is committed to the existence of possible worlds, it is highly tempting to surmise that the modalist is committed to worlds inasmuch as the possible worlds semanticist is.

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operators (refer to Forbes 1989: 102–104). A powerful critique of Lewis' claim that the modal realist approach to analysing the concept of supervenience is superior to the modalist (and other modal primitivist) approach can also be found in Divers 1996.

Forbes already responded to this kind of objection in his 1989, stating that the indexed operators serve as scope indicators (see Forbes 1989: 91–93). Melia (2003: 96) illustrates this with the formula $\Diamond_1\varphi\Diamond_2A_1\psi$: although the syntactic structure suggests that the ψ falls under the scope of the second $\Diamond$, the subscripts indicate that, semantically, it is attached to the first $\Diamond$. Yet, Melia simply dismisses Forbes' answer, arguing that it is difficult to make sense of the idea of there being multiple potential scopes within a modal proposition. A more articulated critique comes from Paul Dicken (2006: 202), who finds Forbes' response unsatisfactory on the grounds that quantifiers also denote scope. Consequently, Dicken asserts that for Forbes to establish that his indexed operators are not disguised quantifiers, he must provide an alternative account of how these operators are supposed to function.

A germ of a plausible answer to this objection is found in another passage of Forbes (1985: 91) (as cited in section 3.1.2), where he claims that the relationships between operators, as revealed through their indexing, seem to reflect the structures inherent in English itself. This idea is also echoed by Daniel Nolan (2007: 189), according to whom the modalist is free to explain the Peacockian operators through their connections with natural language modal constructions. Now, if semantic relationships between operators are discernible in natural language, then it appears entirely unjustified and even biased to insist that modalist language merely mimics the quantificational one. Perhaps both modalist and possible worlds formalisations draw from nothing other than the structure of natural language itself, and, in such a case, it should not be surprising that they might exhibit certain structural and grammatical resemblances. Such similarities by themselves, however, do not imply that one of these artificial languages is fundamentally grounded in the other; rather, they just represent alternative ways of expressing what lies within natural language itself.[200]

I have already pointed out one instance from English, as indicated by Forbes himself, where we can discern some sort of relativisation or contextualisation. In the phrase 'It could have been that necessarily, something is actual',[201] the term 'actual' can be understood as referring back to 'it could have been that'. The challenge, then, lies in selecting the appropriate

[200] Chris Daly (2005: 527) offers yet another way to block Melia's objection: he posits that endurantist and perdurantist analyses of physical-object sentences, for instance, also have very similar syntactic structure (e.g., 'A dog howled' and 'Some connected doglike temporal parts each produced a howl' each have the form $(\exists x)(Dx \,\&\, Hx)$), but, in spite of this, express different concepts.

[201] Although, as also noted by Forbes (1985: 91), in S5, this proposition of natural language is equivalent to 'Necessarily, something is actual'.

formalisation to capture this interpretation of the sentence. One approach is to speak of possible worlds, or, more precisely, about the perspective of one specific possible world introduced by the phrase 'it could have been that'. Alternatively, though, we can choose not to postulate any specific entities such as possible worlds at all and instead speak abstractly about relativisation or contextualisation. In the latter case, it seems natural to opt for the modalist formalisation and simply index the possibility operator and the actuality operator with the same numerical indices to indicate that the latter is tied to the former. Regardless of the chosen approach, the foundational element in this process remains the act of relativisation or contextualisation itself.

In other words, the necessity to relativise modal contexts seems to arise from natural modal reasoning as such, with possible worlds semantics and modalist semantics just being distinct approaches aimed at capturing this aspect of ordinary modalising. If this is the case, however, then such a fact alone is clearly insufficient to characterise one of these approaches as parasitic upon the other: instead, both semantics simply serve the purpose of representing our intuitive modal reasoning in different formal frameworks.[202]

The charge levelled by Melia against modalists that they are not able to escape the ontological commitment to worlds, therefore, does not seem compelling. Given that the formal language proposed by the modalist draws from English[203] – and not from the language of possible worlds semantics – it becomes challenging to discern any basis for the modalist's supposed commitment to the existence of possible worlds. The only way to argue for this would be to insist that English as such is committed to such entities, but this appears entirely implausible, given that our talk about possibilities, in itself, does not seem to imply any quantification over such complete ways things could have been (as noted in section 3.1.2).

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[202] On the other hand, Shalkowski (2021: 119–120) asserts that we should not cast the question of expressive power as decisive. He posits that the expressive power of a language, after all, merely reflects our own creative capacities, without necessarily shedding light on the modal reality itself. Perhaps the main question here lies in what we expect from formal languages as such. If we do not expect them to serve as a bridge to reality, then Shalkowski's suggestion appears apt. Nevertheless, if we employ formal mechanisms with the ambition to say something about reality itself (see, e.g., fn. 169), then the significance of expressive power and associated questions becomes more pronounced.

[203] This should not be taken to imply that the point made holds *exclusively* for English; it applies equally to other natural languages as well, meaning that formal modalist language draws from these languages rather than from the language of possible worlds semantics.

Indeed, this observation offers an important indication that possible worlds formalisations and modalist formalisations, after all, should not be viewed as *equally suited* to representing natural language. There are additional arguments supporting the view that modalist formalisations align *more closely* with how modality is naturally expressed (which, in turn, is why the modalist interpretation of modality can be seen as informing and grounding the meanings of possible worlds sentences). This point will be substantiated in greater detail within the next section, where we will tackle the final charge levelled against modalism.

3.1.3.3. The Objection from Failing to Connect Formal Language Expressions with Ordinary Language Ones

A criticism of modalism, which comes from Borghini (2016: 79), is that modalist language struggles to interpret certain modal sentences in the way they are interpreted in the context of natural language. Borghini exemplifies this with the sentence 'Perhaps Ubaldo could have and should have eaten less ice cream last night'. Now, the problem, according to Borghini, is *not* that the modalist lacks a model for translating such a sentence into their language; rather, the problem, as Borghini puts it, is that modalism simply 'does not jibe with the way we speak of possibility'. Borghini states that, according to modalism, the quoted sentence must be interpreted as expressing three distinct facts: that Ubaldo ate ice cream, that he could have eaten a smaller portion than he did, and that he should have eaten a smaller portion than he did. Nevertheless, intuitively, one is inclined to read the sentence as conveying *one* singular fact: namely, that Ubaldo ate ice cream – a fact with which, as Borghini phrases it, a certain possibility as well as a certain obligation are associated.

Does this objection succeed? There are two main reasons why this is highly doubtful. First of all, I must say that I find it quite peculiar that in order to criticise modalism, Borghini chooses a sentence involving two different types of modalities – one that indicates what could have happened and one addressing obligation. The sentence about Ubaldo involves both alethic modal and deontic aspects, and, considering that modalism is a theory that primarily deals with alethic modality, it appears somewhat incongruous to contest the theory's capability based on a sentence encompassing a deontic dimension.

Furthermore, it is even less clear why Borghini insists that the modalist must see three different facts within the quoted sentence. As clarified in section 3.1, it is quite the opposite: the modalist holds that there are truths (facts) that are *distinctively modal* in nature alongside non-modal, or

categorical truths. Therefore, instead of separating the categorical truth that Ubaldo ate ice cream from the modal truth that he could have eaten a smaller portion than he did, the modalist would perceive it as a singular modal truth – namely, that Ubaldo could have eaten a smaller portion of ice cream than he did.[204] In other words, it is just entirely unclear why the modalist should separate the categorical truth from the modal one in the given sentence,[205] provided that the modalist, on the contrary, assumes that there are distinctively modal truths. It appears that the modalist would interpret it as a straightforward modal claim, whereas the part of the sentence that concerns obligations, as already indicated, is not truly under the competence of modalism.

In fact, we have already observed that modalist language is, on the contrary, closer to ordinary language than perhaps any other account of modality. Modalist language treats modal concepts as unanalysed primitives and, unlike possible worlds language, does not introduce any total, or complete, possibilities, which might seem peculiar in the context of everyday modal reasoning. As previously mentioned, Forbes argues that it is implausible to believe that our ordinary modal statements can only be understood by those who grasp the concept of possible worlds, or total ways things could have been. Importantly, such a holistic conception of possibility may also bring forth other worrying aspects.

By introducing such complete possibilities, possible worlds talk also introduces a spatial metaphor – i.e., something holds true *in* or *at* a world (or we talk about what this complete possibility *includes*). Thus, for instance, if something is merely possible, it is said to hold in at least one possible world

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[204] Leaving out the initial 'perhaps' in the sentence quoted by Borghini. Given that 'could have' already implies a possibility regarding a past event, it might seem redundant to interpret 'perhaps' as a distinct possibility here.

[205] It might be that Borghini's stance stems from his discussion regarding a potential solution to the objection concerning expressive power (see Borghini 2016: 77–78). More precisely, Borghini references a potential solution put forth by Melia (2005: 83–84), who suggests that, instead of enriching their formal language, modalists could appeal to the concept of truth-making to address the objection. For instance, they could argue that the truth of the statement 'There could have been more stars than there are' is simply grounded in the statements 'In the actual world, there are *x* number of stars' and 'It is possible that: the number of stars is greater than *x*'. However, this is not a *paraphrase* of the original sentence; apparently, such a solution may not be acceptable to those who do not subscribe to the notion of truth-making. In any case, this proposed solution originates from Melia, not from Forbes or other modalists. Consequently, it remains unclear why Borghini insists that modalists interpret modal claims by separating their categorical and modal dimensions.

other than the actual world. However, this idea seems to contradict the intuitive understanding that what is merely possible does not *hold* in any way whatsoever. Being *merely* possible, it only has the potential to hold true but does not in fact do so. Yet, within the possible worlds framework, such merely possible states of affairs (e.g., the existence of unicorns) are treated as holding true, thus contradicting the intuitive notion of mere possibility. In other words, the treatment of mere possibility within possible worlds semantics seems misaligned with the way we naturally speak about it.[206]

Now, of course, someone may argue that there is no real problem here, for even though what is merely possible indeed holds in some possible world, it holds *within a merely possible world*. In other words, they might say that this is just another way of expressing the same idea that something is merely possible. However, this reasoning seems to circle back to the original concern, which is that what is merely possible cannot hold true in any form. Therefore, if we posit the existence of an entity where what is merely possible holds true, then there seems to be a problem with such an entity, regardless of what we call it. In other words, the problem does not cease to exist just because we choose to name it a merely possible entity – it does not change the fact that, in this entity, that which is merely possible is considered true, and this is where the problem lies. If it is counterintuitive to the everyday mind to conceive of something merely possible as holding true, it is equally counterintuitive to

[206] A somewhat similar complaint, albeit with regard to the concept of necessity, has been put forth by Javier Kalhat (2008: 504): 'To say that a proposition is necessarily true just in case it is true everywhere in logical space is essentially no more plausible than to say that it is true just in case it is true everywhere within the actual world. <…> Necessity is not the same as *universality*' (emphasis in the original). Kalhat's point reinforces the same idea that the way modal concepts are modelled within possible worlds semantics distorts the way we intuitively understand them.

conceive an *entity* in which what is merely possible holds true. Thus, the problem remains unresolved.[207,208]

In contrast to this treatment of possibility, the modalist speaks about it in accordance with the way we naturally approach it: that is, simply by positing that there are truths about what is merely possible. The modalist does not posit the existence of complete possibilities nor claim that something that is merely possible holds true within them; within this framework, mere possibility does not collapse into actuality.

Hence, it can be said that, contrary to Borghini's complaint, modalism's depiction of modal truths aligns well with our natural discourse on modality, and Borghini's critique seems insufficient to undermine the modalist stance. As we have demonstrated, Borghini's critique not only stems from a misinterpretation of the modalist view but also overlooks the fact that, in several significant aspects, modalist language adheres more closely to our

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[207] An alternative approach to addressing the objection might involve appealing to the Aristotelian conception of potentiality. Within the Aristotelian view, potentiality represents a real aspect of a thing that can be actualised. What is merely possible (potential) does not possess actual existence until it is actualised; nevertheless, potentiality is a real feature of an entity. For example, while the state of being an oak tree is not actualised within an acorn, the capacity for this state is real in it. Thus, one could contend that it is not entirely accurate to characterise mere possibility as something which solely has the potential to hold true and is devoid of any reality since what is merely possible possesses some level (or form) of reality.

Be that as it may, I doubt that this response has a chance of succeeding. For saying that some entity has a real capacity or potential does not equal saying that a merely possible proposition already holds true in some form. Even within the Aristotelian paradigm, the very *state* of being an oak tree in an acorn is merely possible and does not *hold true* in any sense. In other words, there remains a clear distinction between being merely possible and holding true, despite the fact that there is some real *capacity* within an entity to reach a certain state.

[208] Some may also argue that my critique of how mere possibility is treated within possible worlds semantics (and perhaps Kalhat's critique regarding necessity, as depicted in fn. 206) stems from the presupposition that only the actual world exists, and therefore begs the question against the possible worlds framework. In other words, it can be said that the very notion that what is merely possible does not hold true in any way (and that only what is actual does) is based on the presupposition that there is only one – the actual world – and not a plurality of possible worlds, because if one accepts the latter, the idea that what is merely possible does not hold true in any way loses its foundation.

Yet, this does not seem to capture the essence of the concern correctly. The concern is not based on any presuppositions about the existence of worlds – rather, it is only based on the claim that actual *truth* differs from merely possible *truth*, which seems to mirror our intuitive understanding of modality in everyday thought. No necessary assumptions about worlds, or complete possibilities, underpin this intuitive grasp.

ordinary modal intuitions – especially when compared to possible worlds semantics.

The examination of this challenge marks the end of our general discussion of modalism. It has been demonstrated that none of the principal objections to this theory are decisive, and modalism can be firmly said to remain a credible account of modality. This conclusion now paves the way for exploring how the modalist account can serve as a framework for interpreting the modal ontological argument. We will begin by presenting a formal proof of this argument based on modalist features, and then we will move on to discussing how this account of modality could be reconciled with the core principles of theistic metaphysics.

3.2. The Modal Ontological Argument in a Modalist Framework

3.2.1. Formal Proof

As indicated in section 1.2, Plantinga has chosen to present his modal ontological argument in the form of a semantic proof within a first-order language quantifying over possible worlds. Recall that the argument commences with the premise that a maximally great being exists in some possible world and has the conclusion that this being exists in all possible worlds, including the actual one. However, if we adopt modalism and discard possible worlds discourse, such proof is no longer available to us. Abandoning the analysis of modal operators in terms of quantification over worlds would require us to reinterpret the propositions of the modal ontological argument by relying on the primitiveness of modal operators.

This means that, by accepting the premise of the modal ontological argument, we would simply regard it as a primitive truth that the existence of a maximally great being is possible. Accordingly, we would not define maximal greatness as such using possible worlds talk, as Plantinga does; instead, we would simply hold that a maximally great being is a being that is necessarily omniscient, necessarily omnipotent, necessarily morally perfect, as well as necessarily existent in case existent at all. Starting with the aforementioned premise, then, we would need to deduce that a maximally great being necessarily exists. How might a formal proof be constructed? By eschewing possible worlds talk here, we would, of course, not follow Plantinga's method of deriving the conclusion – rather, we would rely on a syntactic proof expressed in a language equipped with modal operators.

Notably, some authors have already provided syntactic proofs for Plantinga's modal ontological argument to demonstrate the argument's

validity.[209] For instance, Robert Maydole (2009: 590) has suggested a proof that quantifies over universal properties – properties that are, according to Plantinga, instantiated in every world or in no world at all (see section 1.2). Another premise concerning universal properties in Maydole's proof posits that any property that is equivalent to some property that holds in every possible world is a universal property. Now, of course, we could restate this principle without recourse to possible worlds talk: i.e., we could say that a universal property is simply one that is necessarily instantiated or necessarily uninstantiated, and that any property equivalent to one that holds necessarily is considered universal. Yet, even in such a reformulation, the proof still quantifies over modal properties, and if one of our aims in interpreting the modal ontological argument is to minimise ontological commitments, it would be prudent to opt for a more straightforward proof that does not necessitate positing modal entities.

Such more fitting proof has been offered by Parent (2016: 339–340), who, using 'g' as a name for God (i.e., a being who is necessarily existent, necessarily maximally good, necessarily maximally knowledgeable, and necessarily maximally powerful), reconstructs Plantinga's modal ontological argument as follows:

(1) $\Diamond(\exists x)(x = g)$	Assume
(2) $\Diamond\Box p \rightarrow \Box p$	S5
(3) $\Box((\exists x)(x = g) \rightarrow \Box(\exists y)(y = g))$	By definition of 'g'
(4) $\Diamond\Box(\exists y)(y = g)$	From (1) and (3)
(5) $\Box(\exists x)(x = g)$	From (4) and (2)
(6) $(\exists x)(x = g)$	From (5)

Unlike Maydole's approach, Parent's adaptation does not involve direct quantification over properties. Nevertheless, it must be noted that it does indirectly engage with *de re* modal statements, as the symbol 'g' denotes an entity that is necessarily existent, necessarily maximally good, etc., and, commonly, *de re* modal claims are taken precisely as ascribing modal properties to individuals. However, despite the popularity of this perspective, it is not necessary to adhere to it. Here, I will assume that neither *de dicto* nor *de re* modal expressions commit us to the existence of modal entities such as modal facts or modal properties (I shall revisit this point in greater detail in section 3.2.2.1).

Building upon the premise that a maximally great being is possible, the definition of a maximally great being, and the framework of system S5,

[209] No inclination towards interpreting the argument in the spirit of modalism is found on their part.

Parent's proof deduces very simply that the existence of such a being is necessary and so actual. Given also that it does not involve any direct commitments to modal properties or suchlike entities, I propose that the most straightforward interpretation of Plantinga's argument within modalism should embrace a formal proof akin to Parent's. By refraining from any semantic analysis of modal operators and utilising only modal syntax, such a proof provides a succinct pathway to establishing the existence of a maximally great being, just like intended.

On the other hand, it shall be clear that the formal proof serves merely as the outset of our undertaking. While exploring interpretations of the modal ontological argument rooted in possible worlds theories, we questioned how the existence of special entities called possible worlds could be reconciled with theistic ontology, and found such a reconciliation problematic. Now it is imperative for us to demonstrate that the modalist treatment of modality is not at odds with theism either. Once again, the question of how well our chosen theory of modality aligns with theism is a matter that we cannot sidestep when considering (and especially advocating) the modal ontological argument because in case the argument is sound and a maximally great being indeed exists, we must be prepared to expand upon the relationship between this being and the modal principles used in the construction of the very argument. In the ensuing sections, we will thus investigate how modalist principles can be tailored to align with the core doctrines of theism, with the aim to demonstrate that, in contrast to possible worlds theories, modalism presents a significantly more intuitive and natural fit with theistic ontology.

> *'One might wonder why anyone should care about the relation between God and necessary truth. Pastors picking up the phone at midnight rarely hear an anguished, "but what about* mathematics*?" Well, my animating thought is one at the core of Western theism: that God is the sole ultimate reality.'*
>
> *(Leftow 2014: 435)*

3.2.2. A Modalist Explanation of the Relationship Between God and Modality

Suppose, once again, that the modal ontological argument is sound and that a maximally great being indeed exists. How might we explicate the relationship between God and modality, then? What would this relationship look like, assuming that necessity and possibility are viewed from the standpoint of modalism? The primary goal of the upcoming sections is to establish that no

inherent conflict exists between theism and modalism and that these perspectives can be effectively unified. We will begin by addressing the question of how modal truths might be understood from a modalist perspective. Here, modalism will be treated as a framework that asserts only the existence of modal truths, without positing modal facts or similar abstract entities, as this approach promises greater simplicity within the context of theistic metaphysics. Therefore, we must first take a more thorough look at the nature of modal truths themselves and examine whether it is possible to speak of them in an ontologically non-committal way. These points will be covered within the following section.

3.2.2.1. Modal Truths

What is truth, or, if we speak of their plurality, what are truths? What sort of things are they? Are they true sentences, true propositions, or perhaps facts? The same questions can be asked specifically about *modal* truths, and there exist different perspectives regarding these matters. My purpose here, however, is not to determine which one of them is the most plausible *per se*. Instead, I only aim to show that modalism can be understood in terms of modal truths, and that such an understanding does not require a commitment to the existence of modal entities such as abstract modal propositions or facts. In other words, I set out to show that while the modalist acknowledges the existence of modal truths, these need not be construed as 'modal entities' in any traditional sense.

When speaking of modal entities, philosophers typically refer to such things as modal propositions, modal facts, modal states of affairs, or modal properties, traditionally categorised as abstract objects. However, modal *truths* need not be construed as these particular types of entities. They appear perfectly conceptualisable in a manner that does not necessitate postulating any objects enjoying an independent ontological status, or, speaking more precisely, objects enjoying an ontological status *outside language and mind*. How could such a conceptualisation be carried out?

The principal suggestion here is to treat modal truths as *true modal sentences*[210] *and beliefs* – that is, modal sentences and beliefs that correctly describe the way the world is. Consider, once more, the truth that it is possible that there are unicorns. According to the suggestion at hand, the modalist interprets this truth simply as a true sentence – something that can be inscribed

[210] In this discussion, I will be referring to sentence-tokens rather than sentence-types, the latter of which are usually construed as abstract objects.

or uttered – and/or as a true belief held within someone's mind. For instance, when one inscribes or utters such a sentence, they can be said to have articulated a modal truth; similarly, when one holds such a belief, they can be said to possess this specific modal truth in their mind.

Crucially, however, such a truth neither refers to nor is supported by any entity existing outside the realms of mind or language. Outside of these domains, there exists nothing in the world that could be called a modal truth asserting that it is possible that there are unicorns. The key tenet here is that our ontology remains unenriched by such entities. What this means is that the modalist can offer maximal ontological simplicity because no additional objects with independent ontological status need to be posited alongside conscious beings and/or language users. Modal truths can be all located within their mental and/or linguistic activity, and they require no external entities for their explanation.

On the other hand, it is essential to note that this does not imply the subjectivity of modal truths. Quite the contrary: modal truths are objective exactly in the sense that they are *descriptive* – they tell us what reality is like. In section 3.1, we have already seen that, under modalism, modal truths are irreducible to non-modal ones – modal truths stand on their own just like categorical truths do. If we assume, e.g., that 'It is possible that there are unicorns' is true, then, seen from the modalist perspective, this sentence is true in the same manner as 'The are horses' is true. It is because, according to the modalist, both categorical and modal truths have the same function – namely, to describe the way the world is. Under the assumption that the aforementioned sentence regarding unicorns is true, the world is simply *such that it is possible that there are unicorns* (just like it is *such that there are horses*), and the same goes for all other modal truths.

The suggestion, therefore, is to construe modalism as a view that regards modal truths as non-existent outside language and mind, yet simultaneously objective. For instance, the statement that it is possible that there are unicorns reflects the idea that the world is simply such that it is possible that there are unicorns, and the world's being this way is not relative to how someone perceives it. However, the world's being this way does not require there being some *specific entity* – say, an abstract modal fact or modal proposition – that asserts the possibility of the existence of unicorns. Such a modal truth can be adequately accounted for simply by positing that we entertain it within our minds and language; that is, we can write a sentence like 'It is possible that there are unicorns' or hold this belief in our minds. A straightforward implication is thus as follows: if there were no conscious beings and/or language users, there would be no one to entertain this modal truth.

Nevertheless, the world would *still be such that it is possible that there are unicorns* because being such that it is possible that there are unicorns is simply the way the world (objectively) is.[211] The idea, then, is precisely as articulated by Divers (see section 3.1): namely, to take modality 'as real, and as metaphysically fundamental but also as nonexistential'.[212]

Importantly, I will take that the same principle holds for both *de dicto* and *de re* modal truths. Commonly, *de re* modal truths are treated as referring to modal properties of individuals. For example, 'Socrates could have been a carpenter' is typically understood as attributing to Socrates the property of possibly being a carpenter.[213] However, it is not necessary to subscribe to this perspective. Given the modalist's inclination towards ontological parsimony, it is arguably more fitting to treat *de re* modal truths similarly to their *de dicto* counterparts – that is, as true modal sentences and beliefs that simply describe the way the world is. On the other hand, it is tempting to think that *de re* modal statements describe not the world as a whole but a particular individual in question, or part of the world. E.g., 'George could be a lawyer' appears to describe not the world as a whole but only a part of it – namely, George. The function of *de re* and *de dicto* modal claims, nevertheless, remains the same – to tell us what the world (or a part of it) is like. According to the modalist account I am endorsing here, neither group of these claims commits us to the existence of modal facts, modal properties, or similar modal entities.

But can we say that George could be a lawyer without attributing to him the property of possibly being a lawyer? Or, more significantly, can George *possibly be* a lawyer without possessing the property of possibly being a

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[211] A parallel with moral truths might be illustrative here. Suppose that some moral truth – say, that suicide is sinful – is an objective truth, holding because the world is simply *such that suicide is a sinful act*. Now, imagine that all conscious beings and/or language users suddenly cease to exist. Given that the aforementioned truth is objective, it would still continue to hold, even though now there would be no one to conceive it or express it linguistically.

[212] It should be noted that, despite pointing out this feature of modalism, Divers has not elaborated on it further. My purpose in this section is to flesh it out in greater detail.

[213] For instance, Amie Thomasson (2021: 2088) writes: '[O]nce we allow that modal claims can be true, we can use them as premises in trivial inferences, and <…> infer from, 'Necessarily P' to 'It is a fact that it is necessary that P', thereby concluding that modal facts exist. Similarly, from a *de re* modal claim such as 'X is necessarily p' one may trivially infer 'X has the modal property of being necessarily p' and conclude that there are modal properties.' Nonetheless, it is crucial to note that, according to Thomasson's account, entities such as modal facts or modal properties are not explanatory truthmakers of modal truths (see Thomasson 2015: ch. 3).

lawyer? It seems that he can.[214] Under the view being developed here, 'George could be a lawyer' is true because a part of the world – George – is simply *such that he could be a lawyer*, and not because there exists a specific property of possibly being a lawyer attached to him. Such descriptivism appears to be entirely sufficient, and there seems to be no necessity to posit such a property in order to account for this modal truth. Suggesting otherwise would imply a strong commitment to platonism concerning (modal) properties, a commitment that seems perfectly resistible.

Similar to how the statement 'The apple is red' can be regarded as a way of describing the apple rather than implying the existence of the property of redness, *de re* modal truths can be viewed as straightforward descriptions of individuals.[215] In the case of the apple, the description – redness – is based on our sensory experience of colour; we employ names for colours in order to describe and categorise particulars. In the case of modal truths, we likely comprehend them through some other faculties. The examination of the latter would lead us into the field of the epistemology of modality, and I shall postpone it until section 3.2.2.2.4. For now, suffice it to say that the descriptions being discussed – whether akin to 'The apple is red' or 'George could be a lawyer' – do not obligate us to acknowledge the existence of any independent entities called properties. Unless one is a staunch platonist, the coherence of this perspective is more or less apparent.[216,217]

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[214] A comparable approach, although not specifically addressing modal properties, has been previously discussed in section 2.1.4.2. However, as demonstrated therein, this method appears insufficient in overcoming the bootstrapping objection to absolute creationism.

[215] Consider the descriptions and explanations of objects featured in scientific discourse. Typically, these do not require ontological commitments to entities such as properties.

[216] Crucially, *de dicto* modal truths should also not be understood as implying the existence of modal properties *of the world itself*. E.g., it is not the case that, given that the world is such that it is possible there are unicorns, the world possesses the *property* of possibly containing unicorns.

[217] Now, one may worry that if there are only modal sentences and beliefs, it is unclear how modal truths can be *general*, i.e., shared across different individuals. Put differently, if there are no abstract modal entities like modal propositions or modal facts that these sentences and beliefs refer to, it might be challenging to understand how different people can be said to agree or disagree on the *same* modal truths. For the same reasons given, one may say that it is not obvious how such sentences and beliefs can be *meaningful* at all.

These are significant concerns, yet I do not believe that they constitute knock-down objections to my proposed vision of modalism. One might also worry whether those positing the existence of abstract modal entities successfully avoid

Now, it is pivotal to accentuate once more that this stance does not commit us to any form of subjectivism. Although we do not posit the existence of modal properties, modal facts, or any similar entities, this does not mean that modal truths are somehow up to us. As indicated, they tell us what reality is like and are thus independent of our subjective perceptions or attitudes. Still, one may raise a crucial question at this point. So far, we have said nothing regarding *truthmakers* for modal truths. Are there any of these, and if so, what are they? In other words, what are the exact things in reality that *make* modal truths true?

Mark Belaguer (2022: 48) has observed that this constitutes a serious problem for modalists. According to Belaguer, the possible worlds analysis of ordinary modal discourse (when construed in a realist manner, i.e., implying the real existence of worlds) seems to evade this challenge precisely by suggesting entities – possible worlds – that act as truthmakers for modal truths. Yet, this route is not available to modalists, who refuse to posit such entities altogether. Modalists only assert that we should treat modal truths as primitive ones, but they do not tell us at all what makes these truths true.

As a response to this problem,[218] Belaguer (*ibid*.: 58) offers a theory that he dubs *modal nothingism*[219] – the view that some[220] modal sentences are substantively true and there is nothing about reality that makes them true. What, according to Belaguer, makes this view plausible? Belaguer argues, roughly, that modal sentences simply do not say anything about reality, or how

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these difficulties; for instance, it is not entirely clear how the mere existence of a, say, modal property could adequately explain the meaning of the concept of that property. Regarding my proposed vision of modalism, however, I suppose that we could appeal to such things as shared linguistic and/or cognitive frameworks among individuals in order to account for the meaningfulness of modal truths. Consider versions of semantic externalism, emphasising the role of social and environmental factors in determining meaning: these accounts support the view that shared linguistic practices can ground meaning without recourse to abstract entities. In general, it is not entirely obvious that committing to abstract modal entities is the sole viable approach to tackling the challenges of generality and meaningfulness.

[218] Belaguer (2022) considers it in the context of mathematical anti-realism – the view that our mathematical theories do not provide true descriptions of mathematical objects because there are no such things as mathematical objects – specifically.

[219] Importantly, however, Belaguer (2022: 57) stresses that modal nothingism is semantically neutral – that is, at the semantic level, it can be paired with both modalism and possible worlds analysis, or even a hybrid view combining modalist and possible worlds perspectives.

[220] Belaguer (2022: 59–60) asserts that he confines modal nothingism to analytic modal sentences only. For his reasoning on why he categorises sentences such as 'Possibly, there are flying saucers' as analytic, see *ibid*.: 62–63.

things really are. According to Belaguer, they do not even imply that reality as such exists. E.g., the claim that there could have been flying saucers is *not* a claim about how things are; yet, it is still a claim – a claim about how things *could have been*. In a language in which this sentence is true, it is true regardless of what reality is like, that is, it is true and would be true even if there were no such things as possible worlds, essences, potentialities, or 'free-floating' modal facts. But if modal sentences like this hold true regardless of reality and do not say anything about it, then they are not (and, in fact, could not be) made true by how things really are (see *ibid*.: 64–69). And so Belaguer rejects the very concept of truth-making in connection with these modal sentences. Inasmuch as they do not convey anything about reality as such (or about how things are), they neither are nor could be made true by any existing entity or aspect of reality.

Now, I must note that while I sympathise with Belaguer's inclination to reject the truth-making relation in the context of modality, his view is inconsistent with the perspective of modalism I am proposing. For Belaguer not only states that there are no entities capable of making certain modal sentences true; he goes further to claim that such modal sentences are not about reality at all, which contradicts the principle I have been advocating – namely, that modal truths describe the world as it is. In other words, according to the vision of modalism I support, modal truths have a clear and substantial relation to reality since they are descriptive of it, whereas under Belaguer's account, certain modal sentences have no relation to reality whatsoever.

Therefore, while I will follow Belaguer in rejecting the truth-making relation in the context of modality,[221] I will provide a different reason for it. Given that, according to my proposed vision of modalism, modal truths *do* bear a relationship with reality – they describe it – I hold that this descriptive capacity is simply sufficient for accounting for modal truths' relationship with reality. The very idea under the question of truth-making is exactly that there must be some basis in reality that corresponds to and validates true statements; however, under the modalist account I am advocating, this need is met by introducing the descriptive function of modal truths. This descriptive role eliminates the need to posit additional modal truthmakers, because we already know how these truths relate to the world as such – namely, by accurately describing it. Hence, I argue that the truth-making relation is not needed under this account of modalism, not to mention the fact that discussing truthmakers usually involves ontological commitments, which, in pursuit of ontological simplicity, we intentionally seek to avoid.

[221] I will reject it for all types of modal truths, not just analytic ones, as Belaguer does.

This concludes our investigation of the nature of modal truths and the vision of modalism grounded in this view. The subsequent section will continue to explore the proposed modalist framework within the context of theism. Specifically, we will tackle the question of how these two perspectives could be integrated, and it will lead to the introduction of the approach called *theistic modalism*.

3.2.2.2. Theistic Modalism

We have articulated a theory of modalism in which only modal truths – understood as true modal sentences and beliefs – are posited, without the need for independently existing abstract modal entities. We now turn to the question of how this framework could be reconciled with theistic metaphysics.

Before proceeding, however, it is important to reiterate a crucial point. When proposing a modal framework for the modal ontological argument, it is vital to ensure that this framework remains free of any theistic commitments – otherwise, the argument would be made circular. For this reason, our enquiry is only conditional: *what if* the modal ontological argument is sound? *What if* a maximally great being truly exists? When considering these questions, it is clearly advantageous to provide an additional explanation of how the existence of God, or a maximally great being, could in principle be reconciled with the modal principles used in the formulation of this very argument. What this means is that we should have at least two versions of modalism: a secular and a theistic one. While we assume a secular perspective of modalism[222] in formulating the modal ontological argument, we also envision how modalism could in principle align with theistic principles, should the argument prove sound and God indeed exist. In this section, we will be working exactly with the latter project: i.e., we will develop an account called *theistic modalism*.

[222] It is the version of modalism that we have been discussing thus far, that is, the version that does not include any theistic assumptions.

How could the vision of modalism I have advocated thus far be conformed to theistic metaphysics? It seems that we are able to attain a relatively simple explanation by holding that the world with various modal truths characterising it was created like this by God. That is, all we need to do to make modalism theism-friendly is to complement the modalist story with theistic creationism: we may maintain that the world, describable by modal (and non-modal) truths, is simply the product of God's creation. And vice versa: in order to give theism a modalist flavour, we simply need to assert that the world, brought into existence by God, is not characterised solely by categorical truths, but that its full characterisation includes primitive truths regarding what is possible and necessary. This combination can be depicted as follows (see Figure 5):

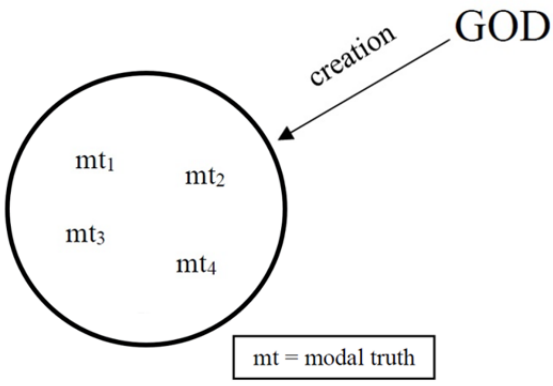

Figure 5. The combination of modalism and theism.

As illustrated in the picture, unlike possible worlds theories, the account at hand does not posit the existence of a plurality of worlds: instead, it asserts the existence of one world only – the one we are living in – that is created by God and characterised by primitive modal truths. In other words, it is held that God created only one world, whose very structure is such that it includes primitive modal truths. The resulting framework, which I dub *theistic modalism*, appears to preserve the simplicity of the modalist project while simultaneously bridging it with theistic metaphysics in a purely natural manner.

Once more, the significant benefit of this approach is that it eliminates the need to reconcile God's existence with a plurality of worlds. Moreover, as explained in the previous section, modal truths themselves are construed in an ontologically non-committal manner – as true modal sentences and beliefs – without postulating independent modal entities such as modal facts, modal

propositions, or modal properties. Thus, the difficulty of reconciling the existence of such objects with the existence of God simply dissolves.

Still, the present account should clarify the relationship between God and modal truths themselves. We have already indicated that we construe modal truths as true modal sentences and beliefs, and now we must specify how this applies to God's case specifically. Now, inasmuch as God has no body[223] and is a non-linguistic being,[224] we shall hold that God can neither utter nor inscribe modal truths. Nevertheless, as a personal being, God can possess beliefs and thus entertain modal truths in his mind. Therefore, for God, 'modal truths' shall be understood exclusively as modal beliefs. Also, we have stated that modal truths are descriptive in the sense that they tell us what the world is like. However, there is an exception to this principle when considering modal truths about God. I maintain that these truths are descriptive, yet instead of describing the world, they describe God himself. That is, under the account of theistic modalism, only the so-called secular modal truths describe the world; modal truths about God, in turn, are characteristic of God. For example, 'God is necessary' (or 'God necessarily exists') is true iff God is necessary (God necessarily exists), 'God is necessarily omnipotent' is true iff God is necessarily omnipotent, and so on.[225]

But now, a crucial concern shows up. We have witnessed that, under theistic modalism, secular modal truths essentially depend on God in the sense that the very act of creation establishes their validity (although we will revisit this nuance later). Yet what about modal truths concerning God himself? Should we hold that these truths are up to him? Naturally, some theists may wish to maintain that there are no truths, including truths about God himself, that are not within God's control (see Plantinga 1980: 90), on the grounds that there being such truths would impugn his absolute autonomy and independence. The notion of God exerting control over (modal) truths regarding himself, however, presents arduous difficulties.

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[223] Cf. Swinburne (2016 [1977]: 104): 'That God is a person, yet one without a body, seems the most elementary claim of theism. It is by being told this or something that entails this (for example, that God always listens to and sometimes grants us our prayers, he has plans for us, he forgives our sins, but he does not have a body) that young children are introduced to the concept of God.' For a defence of the coherence of the claim that there exists a non-embodied person who is omnipresent, refer to *ibid*.: 103–125.

[224] Although it is important to note the exception in Christian theology regarding Jesus Christ, or the *Logos*, who is believed to have taken on human form and thus engaged in human speech.

[225] This means that only secular modal truths are represented in Figure 5.

First, let us clarify what it means to say that God has control over (modal) truths about himself. I find that the most plausible way to interpret this principle is to suggest that it is within God's power to render (modal) truths about himself false and, conversely, to make (modal) falsehoods about himself true. God can, for instance, make 'God is necessarily omniscient' false, and he can also make 'God is necessarily evil' true. Yet, what we are left with, then, is the concept of God that is basically ungraspable. That is because what it is to be God can always change in any direction: it is totally in God's power to instantly become, say, necessarily irrational or necessarily evil, and then revert to necessarily benevolent again. I simply do not think that such a God is something that can be coherently referred to and talked about. Not to mention that in case God enjoys the ability to make himself necessarily evil, to name just one, then it is likely not the same God whose existence is sought to be proved by means of modal ontological or other theistic arguments.

An analogous argument has also been put forward by Eleonore Stump (1983: 621) in her critique of universal possibilism, or the view that God controls all truths:

> [O]n universal possibilism, the concept of God itself becomes unintelligible. On this view, God has no nature, and there is no property he could not have <…>. God is the sort of being, then, who could be both omnipotent and powerless, morally perfect and wicked; he is such that he could know he does not exist <…>. But if this is the account universal possibilism has to give of God, I cannot grasp the concept of God and I do not believe anyone else can either. Like the descriptions 'a square circle' or 'a married bachelor', 'God' on the possibilist account is a familiar expression but what it is supposed to call to mind is inconceivable.

For this reason, then, I choose to maintain that modal truths concerning God are not within his control. In fact, it appears plausible to posit that both modal truths about God and modal truths about the world are fixed. The former simply reside beyond anyone's influence. As for the latter, God decides to create a world in such a way that these truths hold there; by creating the world, God sets forth laws and truths governing the universe. Yet, there are reasons to hold that this fundamental structure of the world – including its modal truths – is not changeable. Within the subsequent section, I will explain how

concerns regarding rationality suggest that God keeps this order fixed without arbitrary alteration.[226]

We can thus see that the fusion of modalism and theism appears to be a much more natural and less troublesome approach compared to attempts to reconcile theism with theories positing the existence of possible worlds. By not positing the plurality of entities called possible worlds here, we circumvent numerous challenges that arise when trying to reconcile their existence with the existence of God, understood as the sole supreme being. Embracing modalism allows us to maintain ontological simplicity, as we posit only one world created by God. The key precept here is that this world is characterised by primitive modal truths – a notion that appears sufficiently plausible, given the credibility of modalism itself. Therefore, theistic modalism presents a coherent and intuitive framework, and for this reason, interpreting the modal ontological argument through the lens of modalism seems to be a fruitful path for theists. Assuming that the argument is sound and God indeed exists, theistic modalism offers a compelling explanation of how the modal framework embedded in the argument can be successfully reconciled with the cornerstone tenets of theism.

The theses presented in the current section, however, only constitute the core essence of theistic modalism. Over the next four sections of this chapter, I aim to clarify some additional nuances and dispel potential worries surrounding this proposed framework. I will start by addressing the question of what status the presented account accords to mathematical and logical truths. As we shall see, the most plausible perspective will lead us to the view according to which there exists a specific hierarchy of modal truths, where

[226] In fn. 217, we discussed the problems of generality and meaningfulness arising in the context of modalism construed as the view postulating primitive modal truths and rejecting the existence of such abstract modal entities as modal propositions. Now, it seems that, in the context of theistic modalism, we can propose some additional solutions to these issues. For instance, viewing God as the creator of the world as well as the designer of its modal structure seems to enhance our confidence in the claim that modal truths are inherently consistent and universal. In other words, the fact that the modal framework of the world has been established by God appears to provide additional support to the idea that this framework is unified, and so that modal truths are not subjective to individual perspectives but are shared across all individuals. Furthermore, we could extend the view that the generality and meaningfulness of modal truths find their grounding in shared cognitive faculties and linguistic capacities by adding that these capacities have been bestowed upon humans by God. Likewise, if we rely on some versions of semantic externalism, according to which the meaning of modal truths is grounded in social and environmental contexts, we could posit that the latter are simply part of God's created order.

mathematical and logical principles come forth as the fundamental bedrock upon which all the other modal truths are based.

3.2.2.2.1. The Euthyphro Dilemma in Modality: Mathematical and Logical Truths

Within the previous section, we stated that, under theistic modalism, God created the world characterised by primitive modal truths. A pivotal point here is that God's act of creation should be considered free and thus contingent; therefore, we have that the world could have failed to exist, which also means that secular modal truths – ones describing the world – could have failed to hold as well.

Yet, this seems to constitute a problem, especially when we think about such truths as mathematical and logical principles, which are usually taken to hold of necessity. On the face of it, at least, the truth that, e.g., 5 + 7 = 12 does not pertain to whether or not God has created a world where 5 + 7 = 12. In fact, it appears that 5 + 7 = 12 would have been true even if God had not created anything at all. Similar considerations apply to fundamental logical principles, such as 'Necessarily, if *p*, then *p*'. It is tempting to conclude that God, being a perfectly rational being, must know such things prior to and independently of any creation.[227] Consequently, it seems that the creation of the world cannot account for this type of necessary truth.

Now, the problem at hand bears some resemblance to the classical challenge that theists have long sought to resolve – namely, the difficulty of explaining the relationship between God and moral truths. Famously known as the Euthyphro dilemma, the challenge has been gracefully expounded by William Mann (1989: 83) in the following way:

> Does God love what is right because it is right, or is what is right right because God loves it? Socrates's question, first asked in the *Euthyphro*, has received no completely satisfactory answer. It is, in fact, the beginning of an unpleasant dilemma for theists. For if a theist says that God loves right actions because they are right, then it seems to follow that they are right independently of God's loving them. Were he not to exist, right actions would still be right (and wrong actions would still be wrong). In that case the foundations of ethics do not lie in God but

[227] The phrase 'prior to' here need not imply a literal temporal sequence. The intended point is that it is tempting to conceive God's knowledge of mathematical and logical truths as unconditioned by creation; this can be understood in a way that transcends strict temporal distinctions.

> elsewhere. But if they lie elsewhere, why not eliminate the middleman and go directly to the source? On the other hand, if a theist says that right actions are right because God loves them, then it seems as though he believes that just anything that God loves is right, *in virtue solely of God's loving it*. <…> On the second alternative it is alleged to follow that if God were to love injustice, then his loving it would make the practice of injustice morally obligatory. That consequence is scarcely credible <…> (emphasis in the original).

Significantly, Mann contends that an analogous problem rears its head within the context of modality. On the one hand, a theist may wish to assert that God, the supreme being, is the originator of all necessary truths, including mathematical and logical principles, but this stance seems to conflict with the intuition that necessary truths derive their necessity from their own inherent character. On the other hand, should the theist claim that necessary truths are necessary simply by virtue of their own nature, this would seem to undermine God's authority and power over these fundamental truths. As is well known, this dilemma troubled many philosophers, including Descartes, who chose to underscore the primacy of God's omnipotence and posited that such necessary truths are contingent upon God's volition.[228]

We have already touched on this type of dilemma in the second chapter of this dissertation, particularly in section 2.1.4.3. There, we encountered Shalkowski's stance, leaning towards the second-mentioned solution: according to Shalkowski, necessity as such cannot be accounted for, and hence it is futile to seek any explanation, including a theistic one, of it. Yet, this, according to Shalkowski, is the exact reason why abstract objects, as necessary existents, do not pose any pressing problem for theism. Now, I have dismissed Shalkowski's argumentation as unsuccessful, as it seems to conflate *necessity as such* with *objects* bearing necessity. In other words, the problem becomes even more pronounced when there are separate *entities* existing independently of God. In our current discussion of theistic modalism, however, we do not postulate any independent entities exhibiting necessity – instead, we are only dealing with necessary *truths*, and we need to account for

[228] There is also recent work on God's relationship with logic and mathematics, albeit approached from a somewhat different perspective. For instance, in his 2022, Alexander Paseau explores an argument from God to logic, framing the latter as a manifestation of the *Logos* – God the Son – and thereby as maximally infinite. Also see Kessler 2022, where it is discussed that certain elements in mathematics seem to reflect the attributes of God.

them in a manner that preserves both their non-arbitrariness and God's supremacy.

As mentioned previously, the challenge first and foremost pertains to mathematical and logical truths. On the one hand, we might posit that all modal truths, including mathematical and logical ones, were simply created alongside the creation of the world, and thus are products of God's contingent creative activity. On the other hand, though, this notion seems to contradict the intuition that mathematical and logical truths possess a somewhat 'stronger' nature and do not hinge upon any type of contingency. Moreover, it raises a significant question regarding God's rationality, since it seemingly ties the validity of such truths to the act of creation. In other words, it is enticing to think that as a perfectly rational being, God must comprehend these fundamental truths just of their own accord, independently of creation. In any case, theistic modalism faces a problem.

One way to respond to this challenge is simply to bite the bullet and contend that even mathematical and logical truths hold because of creation. That is, had God not created the world and existed only by himself, it would not be the case that 5 + 7 = 12. Of course, it may appear striking to claim that had the world not existed, God would not even know that 5 + 7 = 12. However, to this one may reply that picturing God's rationality in the way we conceive human rationality is (perhaps latently) anthropomorphic, and that mathematical and logical principles available to our intellects do not have to manifest – at least in the same form – within God's intellect as well. To put it another way, having no certainty with regard to how God's rationality is properly conceived, we cannot hold tightly that dissociating mathematical and logical truths from God's intellect really renders him irrational. Even if it may seem to us that mathematical and logical principles inherent in our minds are equally inescapable to God, this may just stem from our inability to conceive of God's thinking in non-anthropomorphic terms.

There is, however, one specific worry related to this response – a worry that makes it less appealing than it might first appear. Namely, such a response implies a violation of the commonly accepted S5 principle of modal logic, according to which modal truths bear their modal status as a matter of necessity (e.g., it is not only necessary that 5 + 7 = 12, it is *necessarily* necessary that 5 + 7 = 12). Under the account given above, had God not created the world, it would not be the case that 5 + 7 = 12. The necessity of this truth, thus, hinges on contingency.

Nonetheless, there is also another solution available. The view that God has created the world that is characterised by various modal truths does not force us to deny that at least some of these truths were also known to God

prior to creation. Indeed, these two contentions seem perfectly compatible. We can claim that God knew that 5 + 7 = 12 before creating the world (and would know it even if he had not created anything at all), but then he produced the world where this truth holds as well. In other words, it does not seem altogether implausible to suppose that mathematical and logical truths characterising the world are also characteristic of God's thinking. Prior to creation, God simply has these truths in his mind,[229] whereas when he makes the world, he designs it in such a way that these truths hold in it too.

In this manner, we can uphold the natural assumption that, as a rational being, God must know such truths as 5 + 7 = 12 prior to and independently of any creation. Moreover, we can have that mathematical and logical modalities are actually governed by S5. For if God necessarily exists and is necessarily rational (perhaps this follows from his being necessarily omniscient), then mathematical and logical truths hold no matter what. That is, even if the world had not existed, it would still be the case that 5 + 7 = 12, as there would necessarily exist a God possessing this truth in his mind as a matter of necessity. Hence, such truths could not fail to hold under any circumstances.

But now one may insist that not only logical and mathematical truths should obey S5. What about modal truths such as 'It is possible that there are unicorns' or 'It is necessary that a uniformly coloured surface is not at once both red and green' – examples of what can be called metaphysical modality?[230] Many take that S5 is the correct logic for it as well. It is therefore pertinent to proffer some account of how theistic modalism could validate S5 for a wider range of modal truths. In fact, it does not seem altogether implausible to hold that such truths as 'It is possible that there are unicorns' or 'It is necessary that a uniformly coloured surface is not at once both red and green' *follow* from necessary mathematical and logical principles. We have already stated that, as a necessarily rational being, God possesses mathematical and logical truths in his mind as a matter of necessity. Now, if mathematical and logical truths entail modal truths of the same sort as the aforementioned ones, then the latter could

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[229] Notice that in this case, God's true (modal) beliefs are not descriptive with regard to some outer reality, as prior to creation there is simply no outer reality God's beliefs could describe. Perhaps, then, we are meant to hold that God's true beliefs, unlike those of humans, fail to be descriptive at all, or alternatively, we may suppose that they describe God himself (in which case God's knowledge of any kind of things eventually becomes a form of self-knowledge). The idea that God's knowledge amounts to self-knowledge frequently emerges in the writings of such medieval thinkers as Aquinas. According to Aquinas, although God knows things other than himself, he knows them not in their own right, but within himself, as his essence contains their similitude (see *ST* I.XIV.a5).

[230] The latter example is sourced from Lowe (2012: 920), who suggests it as a case of metaphysical necessity.

not fail to reside in God's intellect either.[231] In other words, various modal claims that we intuitively accept as true are contained in God's intellect by necessity. And because God himself exists necessarily, we get that modality is unaffected by any type of contingencies.

We can then see how this account begets a potential solution to the Euthyphro dilemma. Although we affirm the independent status of modal truths in the sense that they are not created by God but simply reside in his intellect – mathematical and logical principles do so because they shape the very structure of rationality, and all other modal truths follow from them – God retains his authority in the sense that he chooses to create a world in which he instils these truths. In this sense, such truths are *just there*, they are not up to God in that he neither decides nor is able to change their content; for the same reason, God keeps this rational order in the world fixed, unable to arbitrarily alter it despite his omnipotence. However, this does not seem to imply any substantial depreciation of God's supremacy.

First, as already stated, the fact that these truths hold *in the world* is an expression of nothing other than God's will. Therefore, God keeps a crucial role in relation to modal truths: he has the power to embed them into the structure of the world, thereby ensuring that contingent beings within the world are bound by them. Second – and of utmost significance – it might be argued that modal truths as such require the existence of God. This is because, within the current framework, modal truths are true modal beliefs, and being so, they must be *someone's* beliefs. Moreover, it is tempting to think that necessity, by its nature, *has to* manifest itself in some way. Briefly put, necessary truths require an entity to sustain and apprehend them. Now, given that the world and all its constituents exist only contingently, and only God exists necessarily, it follows that only God can house necessary truths within his consciousness. Hence, modal truths, including mathematical and logical principles, must find their foundation in the perfect rationality of God, and his intellect serves as the ultimate guarantor of these truths.[232] In sum, while necessary truths are not arbitrary or subject to God's

[231] Herein, I assume that while human knowers might grasp a truth without necessarily recognising all the other truths it entails, this sort of limitation is not applicable to an omniscient being. It seems plausible to suppose that for God, knowledge of mathematical and logical principles necessarily includes knowledge of any modal truths that follow from them.

[232] Cf. Augustine's argument that inasmuch as objective, necessary, and eternal truths transcend the limited and fallible human mind, they must find their foundation in a being that is eternal and perfect – namely, God. In other words, Augustine contends that human minds, susceptible to error and subjectivity, apprehend truths that are necessary and unalterable, indicating a reality beyond mere human cognition. Therefore, according to Augustine, such truths, by their very nature,

whims or control, their very realisation as well as application in the world are essentially reliant on God.

Another important upshot worth noting is that, under our account of theistic modalism, there is a specific hierarchy of modal truths. Even though, as explained in section 3.1, modal truths stand on their own and are not backed by any non-modal basis, we now have that certain modal truths gain support from others by virtue of the latter being more fundamental. More precisely, in the context of theistic modalism, mathematical and logical truths turn out to be the core type of modal truths, serving as the bedrock upon which all other modal truths are based.[233] In this light, theistic modalism presents itself as a fundamentally rationalist view.

There is, however, one potential worry left to meet. We have suggested that mathematical and logical truths serve as the foundation from which other significant modal truths can be derived and that in this way, we can preserve the S5 principle for all. Yet, some may argue that it is not clear *just how* mathematical and logical principles can entail such modal truths as 'It is possible that there are unicorns' or 'It is necessary that a uniformly coloured surface is not at once both red and green'. For the latter truths do not seem to be based on any formal structures inherent in logic and mathematics.

This concern appears to hinge on the assumption that such modal truths as 'It is possible that there are unicorns' or 'It is necessary that a uniformly coloured surface is not at once both red and green' must have a direct logical

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necessitate the existence of an eternal and perfect being in whom they are grounded – the divine essence that embodies absolute truth itself (cf. *De lib. arbit.* 2.12.33).

Incidentally, it should be noted that while Augustine did not draw a clear line between necessity and eternity, I adhere to the principle prevalent in contemporary logic that these are separate notions. Theistic modalism focuses on necessary truths specifically.

[233] While theistic modalism introduces a hierarchical structure among modal truths, the hierarchical organisation proposed here should be understood solely as a method for *relating* these primitive truths but not as a reduction of one set of such truths to another. Specifically, logical and mathematical truths are seen as foundational in the sense that they entail other modal truths, and 'entailment' here should be viewed as an explanatory rather than a reductive relation, given that all modal statements – whether mathematical/logical or not – are still subject to homophonic truth-conditions. In other words, under this view, modal truths such as 'It is possible that there are unicorns' or 'It is necessary that a uniformly coloured surface is not at once both red and green', are not, in the end, mathematical or logical principles *themselves* – they are just *explained* by them.

The distinction between reduction and this type of entailment closely mirrors the difference between reductive and non-reductive explanations. This difference is also pivotal for understanding theistic modalism and will be covered in section 3.2.2.2.3.

or mathematical foundation. Upon closer examination, however, we may actually come to see that logical and mathematical truths do indeed provide a foundational framework within which all other modal (and maybe also non-modal)[234] truths can be coherently structured. For instance, we could maintain that the impossibility of a uniformly coloured surface being both red and green at once is a consequence of the principle of non-contradiction[235] – a fundamental axiom in both logic and mathematics. Similarly, the possibility of unicorns can be understood through the conceptual coherence: i.e., as long as the concept of unicorns does not involve contradictions within itself, the existence of unicorns shall be considered possible.[236,237]

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[234] The idea that not only the modal framework but *the whole structure of the universe* is in some profound sense mathematical has been expressed and supported by various thinkers, dating back to the Pythagoreans. Intriguingly, some more recent research argues that our physical world as such *just is* a mathematical structure (see, e.g., Tegmark 2008, 2014).

[235] This could be explicated as follows. Let us denote 'The surface is red' as p and 'The surface is green' as q. Now, q clearly entails $\sim p$; therefore, asserting that the surface is red and green simultaneously leads to a contradiction ($p \,\&\, \sim p$).

[236] I also hold that this approach encounters no particular difficulty in explaining how mathematical and logical principles can entail the category of so-called *a posteriori* necessary truths, examples of which have been offered by Kripke (1980) and Hilary Putnam (1975), among others. Consider the statement 'Water is H_2O'. Despite being a necessary truth, it is discovered only *a posteriori*, that is, through empirical exploration, because purely rational considerations alone could not reveal to us that water has this precise chemical structure.

Nevertheless, as demonstrated by Swinburne, talk about such *a posteriori* necessities can be effectively translated into talk about *a priori* ones. Swinburne (2012: 352–355) employs the terms 'informative designator' and 'uninformative designator' and claims that the use of uninformative designators results in speakers not fully understanding the meaning of statements involving such terms until some empirical investigation is conducted. For instance, individuals who do not fully know what 'water' means may initially fail to recognise that 'Water is H_2O' is necessarily true; however, when they grasp the full concept of 'water', they cannot fail to recognise this truth. What this means, then, is that when uninformative designators are replaced with informative ones, modal truths such as the aforementioned one reveal themselves to be *a priori*. In other words, if water is defined as a substance with the chemical composition of H_2O, then it must be identical to the substance with that chemical composition – 'Water is H_2O' simply translates to 'Water is water' (and therefore, the statement eventually takes the form $a = a$). Clearly, the principle of identity, which asserts that every entity is identical to itself, stands as one of the most fundamental logical principles, and so, under this type of analysis, it becomes evident that even modal truths that initially do not appear connected to formal mathematical or logical principles come out as indeed so connected.

[237] Although see section 3.2.2.2.4 for a discussion on the viewpoint that conceptual coherence may not serve as a conclusive indicator of possibility.

I thus take that logical and mathematical principles form the foundational framework for both rational thought and the structure of reality, and it would be somehow short-sighted to suppose that this framework considers only formal proofs or numerical relationships. Rather, I suppose that it should be construed as the basis giving us all the underlying principles of coherence, and, under this assumption, the relationship between mathematical/logical principles and other modal truths becomes much more evident. This perspective allows us to acknowledge that even seemingly unrelated modal truths, such as the possibility of unicorns, are ultimately evaluated for consistency within a rational, logical framework.

We may now conclude that, according to theistic modalism, mathematical and logical principles are the most fundamental modal truths, which ground all other truths regarding necessity and possibility. Since God is a perfectly rational being, he possesses mathematical and logical principles in his intellect as a matter of necessity; furthermore, given that God himself exists necessarily, these principles are guaranteed to hold in any case whatsoever. If we then add that other modal truths *follow* from mathematical and logical principles – which I hope to have shown is a plausible view – we can have that all modal truths are governed by S5 modal logic[238] – that is, they all bear their modal status by necessity, despite the fact that the world as such, characterised by these modal truths, is a contingent creation of God. Even though the world itself could have failed to exist, modal truths could not have failed to hold, as they are safely located within God's mind.

3.2.2.2.2. Non-Modal Abstract Objects

The second clarification I would like to address regarding theistic modalism deals with the question of abstract objects. We have said that we construe modalism, including its theistic variant, as an ontologically non-committal theory, meaning that we construe it purely in terms of modal truths, which are in turn understood as true modal sentences and beliefs. As a result, such an account does not commit us to the existence of any distinct modal entities –

[238] I assume that S5 can find validation within the context of secular modalism as well. Perhaps secular modalists could argue that the logical relationships among modal truths described by S5 (such as $\Box p \rightarrow \Box\Box p$ (the characteristic axiom of S4, which is subsumed under S5)) hold within the internal structure of the world itself. Alternatively, they could appeal to an explanation akin to that of the theistic modalist and contend that even though modal truths describe the world, they ultimately derive from necessary mathematical and logical principles, which would endure even if there were no world at all. The remaining task, then, would pertain to addressing the ontology of such mathematical and logical principles.

that is, it does not obligate us to accept any entities enjoying independent ontological status apart from language and mind. However, a significant question remains unresolved: even if we succeed in avoiding the postulation of abstract modal objects, what stance should we take on other, i.e., *non-modal* abstract entities? Can we entirely escape positing their existence? If not, the problem of God and abstract objects cannot but return to the scene.

We must therefore inevitably address the question of whether it is possible to entirely avoid the postulation of abstract entities, including non-modal ones. Take, for instance, the concept of sets. Now, sets play a crucial role in the contemporary philosophy of mathematics: as is clear today, most mathematical structures can be formulated in terms of sets, and many mathematical concepts, such as functions, numbers, and geometrical objects, are defined using set-theoretical terms. However, this does not necessarily mean that we are required to commit to sets as having an ontological status. Perhaps we could adopt the perspective of Hilbert-style formalists, who emphasise the internal consistency of formal systems (such as Zermelo-Fraenkel set theory) and treat sets as part of those systems rather than entities with real, independent existence.

Another option could be certain versions of mathematical structuralism, which states that 'mathematics is the general study of structures' and suggests that, in this pursuit, we can 'abstract away from the nature of objects instantiating those structures' (Reck and Schiemer 2019). Thus, while traditional platonism in mathematics views mathematical objects (including sets) as individual, independently existing entities, structuralism shifts the focus to the relational properties and the positions within a structure. The crucial question, of course, is whether we conceive of structures themselves in an ontologically non-committal manner. That is, should not structures themselves be considered abstract objects? Here, divergent perspectives arise. On the one hand, structures can indeed be seen as some sort of universals, which, instead of applying to individual objects, hold for entire systems. On the other hand, though, one might deny that structures exist at all and argue that talk of a given structure is merely an abbreviation for talking about all systems that are isomorphic in relevant ways. This would mean opting for *eliminative* versions of structuralism (Hellman and Shapiro 2019: 2).

In general, then, the idea would be to adopt such interpretations of sets (and other mathematical objects) that do not lead us to the postulation of independently existing abstract mathematical entities. While there is insufficient space here to evaluate the plausibility of each such perspective individually, the central point is that we do seem to have options within the

philosophy of mathematics that do not commit us to the plethora of abstract entities.

What about other abstract objects, such as propositions or properties? Can we effectively avoid positing the existence of such entities in a philosophically acceptable way? Again, while a comprehensive exploration of this issue would require more extensive discussion than this dissertation allows, my aim here is solely to indicate that it is indeed possible to refrain from postulating abstract entities not only in the modal context but also more broadly.

Craig (2014a: 115) has expressed the view that '[p]latonism, the view that there are uncreated abstract objects, is <…> wholly unacceptable theologically for the orthodox Christian and *on that ground alone* should be rejected, whatever other philosophical objections there might be to it' (emphasis added). Perhaps this might be a sufficient reason for theists to deny the existence of abstract objects, but even theological reasons aside, there are philosophical approaches that account for the roles propositions and properties play without positing such entities. In section 3.2.2.1, we investigated a version of modalism that does away with abstract modal propositions and properties; analogous arguments could also be applied in a non-modal context. That is, it might be argued that it is entirely sufficient to posit the existence of truths – understood as true token sentences and beliefs – rather than facts or propositions, and that, instead of postulating abstract properties, we might simply refer to descriptions of objects. In other words, it could be proposed that truths about the world, whether modal or non-modal, are best understood as true sentences and/or beliefs of concrete beings, thereby remaining fully within the confines of language and thought.

Regardless of the specific perspective chosen, then, it becomes increasingly clear that the postulation of abstracta can in principle be avoided. As long as there are viable alternatives on the market that do not require positing these entities, we can remain confident that the problem of God and abstract objects will not undermine our view. While challenges remain, the exploration of the alternatives discussed opens up a pathway where the existence of abstract objects – both within and beyond the context of modality – is by no means a form of necessity.

Within the next section, we shall tackle yet another significant issue surrounding theistic modalism. Specifically, we will probe the question of whether this framework is able to maintain the foundational modalist principle that modality is inherently irreducible.

3.2.2.2.3. Maintaining the Primitiveness of Modality

The current section will be dedicated to a further aspect of theistic modalism: the issue of the primitiveness of modality. As shall be recalled from section 3.2.2.2.1, we have stated that, under theistic modalism, modal truths require the existence of God, as they depend on a necessarily existing entity to apprehend and sustain them. In this sense, modal truths are fundamentally reliant on God. One might worry, however, that such a view destroys the very primitiveness of modality, since, instead of enjoying an absolutely independent being, modal truths become fundamentally tied to God's existence. Now, the bedrock principle of modalism holds that modal terms and modal truths are inherently primitive, resistant to any further analysis or explanation. Therefore, if theistic modalism ultimately compromises this thesis, the whole project risks becoming incoherent and hence untenable.

Be that as it may, my aim here is to clarify why there is no real basis for concern that theistic modalism faces such incoherence. Now, it is true that, according to the theistic modalist perspective, the existence of modal truths is in one important sense contingent upon the existence of God. As explained in section 3.2.2.2.1, modal truths in this case are understood as modal beliefs, and so they must belong to some rational being. As the sole necessarily existing and simultaneously necessarily rational being, God therefore serves as the essential guarantor and sustainer of modal principles. However, as was also argued, this does not imply that modal truths are up to God in the sense of being created by him or subject to his discretion (i.e., the ability to change their content). Within the framework of theistic modalism, God is seen not as the creator of modal truths but as a necessary being who comprehends and upholds them.

Now, to the clarification I wish to make. Essentially, I take that the requirement of God's existence for modal truths does not undermine their primitive nature because the core principle of modalism is simply that modal concepts and modal truths cannot be *re-expressed in some more basic, non-modal discourse*. As far as I see it, this does not imply that there cannot exist an account of why such a thing as modal discourse *exists or manifests at all*. In other words, when the modalist asserts that modality resists any further analysis or explanation, what they mean is that modal discourse cannot be reduced to some sort of 'more fundamental' level of reality that is non-modal in nature and, being more fundamental, would somehow 'dissolve' modality. Primitive modality, therefore, refers to the idea that modal truths cannot be reduced into more basic, non-modal truths; modal principles are held to be self-contained and not derivable from any other types of discourse. However,

this does not seem to imply that modalists cannot provide an account of *why there is such a thing as modality at all* – that is, an account that, instead of 'dissolving' modal discourse into a non-modal basis, would simply tell a story on what allows this discourse to hold or manifest itself in the first place.

To make the point clearer, consider those who believe that modal truths are reducible to the categorical level of reality. Even if they hold that necessity and possibility are entirely derived from the way *things simply are*, they might still seek to explain why this categorical level of reality *exists at all*, perhaps by appealing to scientific, religious, or alternative explanations.[239] Similarly, the modalist can argue that, while the modal layer of reality is irreducible to a non-modal one, it is still possible to explore the basis of its very existence. Within the context of theistic modalism, this is accomplished exactly by positing the existence of a sustaining entity – God – whose mind provides the ground for modal truths to reside.

In essence, therefore, we shall simply differentiate between two distinct senses of 'explanation' here. On the one hand, an explanation might be inherently *reductive*, aiming, in this case, to account for modal talk entirely in terms of non-modal concepts that underpin and ultimately dissolve modal truths. On the other hand, however, by 'explanation' one might mean an account seeking to illuminate why such a thing as modal discourse is present at all, while simultaneously respecting its fundamental self-containedness. Generally speaking, while reductive explanations seek to merge a phenomenon into something considered more fundamental, thereby compromising its primitiveness, non-reductive explanations simply strive to provide a rationale for why a phenomenon exists without dismantling its fundamental nature. By designating the former as 'Explanation$_1$' and the latter as 'Explanation$_2$', the distinction between the two within the context of modality can be illustrated as follows (see Figure 6):

[239] One could perhaps also consider the laws of logic in this context. The laws of logic are often viewed as primitive, which means that they are not subject to reduction to some non-logical concepts. Yet, they still are said by some to require a rational mind to apprehend and apply them. In a similar vein, I suggest that, within the framework of theistic modalism, modal truths, while being primitive, require the existence of a necessarily rational being – God – to sustain and comprehend them.

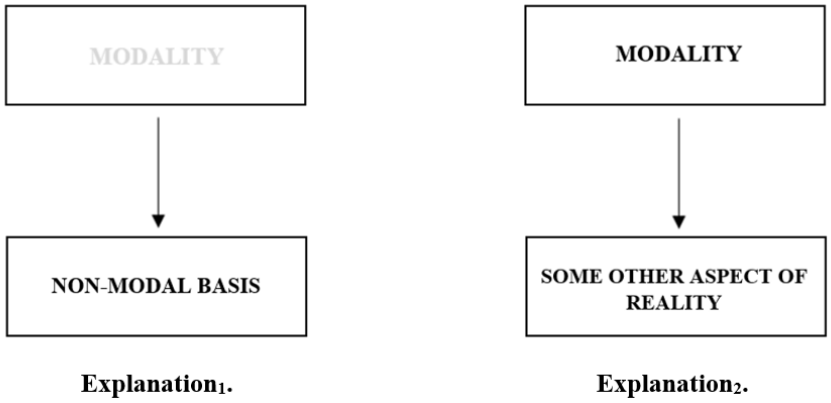

Figure 6. Reductive and non-reductive explanations of modality.

As can be seen in the scheme, Explanation$_1$ treats modality as something that is incapable of existing in itself (hence the faded colour of the letters); the primitive nature of modality is dissolved by reducing it to a more fundamental, non-modal basis. By contrast, Explanation$_2$ preserves the primitive character of modality and respects its self-containedness. Under this approach, modality remains a phenomenon that cannot be analysed, reduced, or re-expressed in terms of a non-modal basis. Explanation$_2$ aims solely to account for the existence of modality by linking it to another relevant aspect of reality – one whose existence supports such an explanation.

As a matter of fact, this is similar to how we might explain the existence of any phenomenon. Apparently, offering an explanation does not necessarily entail *reducing* the phenomenon itself. For instance, claiming that the world exists because it was created by God does not imply that the world is *reduced* to God – the world remains a standalone entity whose existence simply has an explanation. In a similar vein, we can argue that modality, while a non-reducible and primitive phenomenon, can nonetheless be explained.

A closely related position is presented by Tobias Wilsch (2017: 432), who argues that modal primitivists regard necessity as a primitive feature of the world but *do not* claim that truths about necessity are left unexplained. Wilsch posits that, in this respect, modal primitivism resembles Moorean ethical primitivism, which recognises some normative phenomenon as primitive while still providing reasons for normative facts (i.e., an action is considered right because it protects the innocent or aids the poor). In other

words, Wilsch contends that although necessity itself is primitive, the explanations of necessary facts are derived from other underlying facts.[240]

Even though my conception of theistic modalism diverges from Wilsch's view – specifically in that Wilsch grounds metaphysical necessities in essentialist truths – I agree with the core principle noted by Wilsch that the acknowledgement of modality as primitive does not obviate the pursuit of its ground or explanation, given the reasons provided in the previous passages. Turning back to theistic modalism, it is asserted that, in an important sense, modal discourse has its source in God's existence. While modal truths are independent in that they are neither created by God nor subject to any alteration from his side, they nevertheless require God, as they need a necessarily existing and necessarily rational intellect as a place in which to reside.

This especially pertains to necessary principles, for, as explained in section 3.2.2.2.1, necessity as such *has to* manifest itself, and so necessary truths *need* a necessarily existing and necessarily rational entity to necessarily sustain and apprehend them. Nevertheless, this relationship should not be construed as a reductive one or as undermining the very primitiveness of modal discourse. Under theistic modalism, modal discourse retains its primitive status, since it cannot be dissolved in some more basic, non-modal level of reality. Instead, theistic modalism only provides an explanation of why this primitive facet – modality – is there at all. According to theistic modalism, that is because there exists a necessary God, who holds modal truths in his perfectly rational intellect, and so God's existence furnishes the necessary conditions for modal truths to be sustained and apprehended.

To reiterate, primitiveness refers to the fact that modal truths cannot be reduced to non-modal ones, or, speaking more generally, dissolved into a more fundamental, non-modal level of reality. In the present context, their dependence on God does not challenge this irreducibility – rather, it only highlights the essential role of a rational framework within which these irreducible truths can exist. Inasmuch as theistic modalism upholds this core modalist thesis regarding the inherent irreducibility of modality, it can be concluded that, in the end, it does not suffer from the vice of incoherence.

The subsequent section will address another significant clarification concerning modalism in general. Particularly, it will examine the question of whether treating modal truths as primitive does not cause substantial harm to the epistemological side of modality. This concern assumes a crucial role

[240] Wilsch (2017: 432) motivates his position by pointing out that truths about necessity are similar to regularities that 'cry out for explanation'.

within the context of the modal ontological argument and will be explored in detail.

3.2.2.2.4. Modalist-Friendly Frameworks for the Epistemology of Modality

Thus far, we have not touched on the crucial issue of how it is possible to *know* which modal statements are true. What capacities or methods offer the most reliable means of acquiring modal knowledge? What interests us here specifically is the question of how modal knowledge can be gained under the assumption that modal truths are absolutely primitive. Is there a trustworthy way for the modalist to discern truths about necessity and possibility?

A potential concern is that if the modalist is right and modal truths are inherently primitive, then it is not at all clear how we are expected to discover them. Indeed, one of the primary reasons for rejecting primitivism about modality, as argued by Dana Goswick (2018: 100), is that primitive modality appears to be epistemologically impenetrable. She writes:

> One reason that philosophers tend to find modal primitivism unpalatable is that primitive modality is thought to be epistemologically intractable. We'd like an account of modality that explains how we can have modal knowledge, e.g. how we can know that the rock is possibly tossed into the pond and that the dog is necessarily mammalian. If modality is (metaphysically) primitive, the worry is that the only way we can have modal knowledge is if we posit an analogous (epistemically) primitive faculty of modal intuition.

This worry, however, might be somewhat overstated, because positing the existence of modal intuition is clearly not the only avenue available to modalists in developing an account of modal knowledge. For instance, Bueno and Shalkowski (2015) provide a modalist epistemology of modality that is, as they dub it, 'empiricist-friendly'. According to their view, we attain modal knowledge by investigating the world itself, or more precisely, by examining the relevant properties[241] and objects in question.[242] For example, we know that a table can break because it possesses the property of being breakable, a

[241] Notably, Bueno and Shalkowski (2015: 679–680) refrain from endorsing any specific ontology of properties. They clarify that their discussion of properties is merely 'a way of speaking, with some generality, about features of objects', i.e., serves only as a convenience.

[242] As accentuated by Bueno and Shalkowski (2015: 680), conceivability plays no role in their proposal, in contrast to, say, Chalmers 2002 and Jenkins 2010.

fact we ascertain by examining the structure of the materials from which the table is made. What Bueno and Shalkowski propose, thus, is a very 'down-to-earth' epistemology that, contrary to Goswick's concerns, does not rely on any mysterious primitive faculty for modal knowledge.

What of theistic modalism? Which account of the epistemology of modality would best fit this proposed framework? The most plausible route for the theistic modalist appears to be a rationalist approach. For recall from section 3.2.2.2.1 that, within the framework of theistic modalism, all modal truths are derived from necessary mathematical and logical principles. As a result, it appears both natural and plausible to hold that human access to modal knowledge arises precisely from the recognition of these principles (even though human rationality is significantly less perfect compared to that of God and is prone to occasional error). For instance, we can infer the possibility of a rock being tossed into a pond by thoroughly grasping the concepts of 'rock' and 'pond', and by recognising that there is no internal contradiction in the scenario of the rock being thrown into the pond. Similarly, we can ascertain that a dog is necessarily a mammal by properly comprehending the definitions of 'dog' and 'mammal', and understanding that the category 'dog' is a proper subset of 'mammal'.[243] All in all, then, there is still no need to appeal to any obscure faculty of intuition: we seem to be able to rely solely on the human capacity to reason according to rational principles – a capacity that is instinctively obvious and straightforward.[244]

Nonetheless, there is a specific challenge related to the modal ontological argument, in light of which such an explanation remains highly insufficient. Namely, this explanation pertains specifically to *theistic* modalism and is only relevant if we assume that the modal ontological argument is sound and that a maximally great being truly exists. Yet, when we approach the argument *without* this assumption and instead seek to determine *whether* it is sound, the central epistemological challenge becomes how we can come to know its key premise: that it is possible for a maximally great being to exist. Thus, at this stage – when we are interpreting the argument through the lens of modalism

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[243] This is not to say that empirical observations are irrelevant within this framework. On the contrary, empirical knowledge plays a crucial role by aiding in the process of *formation* of concepts, which are then structured and governed by logical and mathematical principles (also see fn. 236).

[244] While this rationalist approach suggests that our knowledge of modal truths is grounded in our understanding of necessary mathematical and logical principles, it is significant to stress that this does not imply a *reduction* of all modal truths to these principles. Rather, it simply highlights how our reasoning about more fundamental truths can lead us to *recognise* other modal truths, without, however, 'dissolving' them into purely logical or mathematical terms (also refer to fn. 233).

– our focus should be on an epistemology compatible with modalism in general; specifically, we must understand how, if we consider modal truths as primitive, we can come to know them, and, in particular, how we can come to know that the existence of a maximally great being is truly possible.

As previously indicated in section 1.2, Plantinga himself claims that the central premise of his argument should be accepted on the simple grounds that there is nothing improper or irrational about doing so, although he does not offer any positive, fully developed argument to support this claim (nor does he make use of his modal abstractionism specifically to deal with this challenge). It is important to note, however, that, when it comes to justifying the main premise of the modal ontological argument, interpreting the argument in terms of possible worlds theories seems to complicate this task even further. For the premise is then construed as the assertion that there is at least one possible world containing a maximally great being, and regardless of whether by 'possible world' we mean an abstract entity or a concrete world causally isolated from our own, the means by which we might obtain epistemic access to such an object remain mysterious. This epistemological difficulty afflicting possible worlds theories has been compellingly articulated by John O'Leary-Hawthorne (1996: 184–185):

> Our epistemological puzzle is, of course, most salient when one adopts a modal ontology of the sort embraced by David Lewis. According to Lewis, our modal thought and talk is committed to myriad concrete space-times, causally isolated from each other. We inhabit one of those space-times, which deserves to be called 'actual' by us thanks to the fact that we inhabit it. Other space-times deserve to be called 'actual' by the beings that inhabit them. Talk about how things might have been but aren't with us turns out, according to Lewis, to be rendered true or false by the goings on at certain other space-times where beings rather like us live lives similar to us in saliently similar ways. It is almost impossible to overlook the prima facie epistemological problem here. If our modal talk is made true by the goings on at causally isolated spacetimes, how can we know which modal sentences are true? <…> How <…> is it going to help if, instead of adopting a modal ontology of concrete worlds, one instead opts for a modal ontology of abstracta? Suppose that one embraces an ontology of abstract objects that serve as the truthmakers for modal talk and thought. Why should the epistemological quandary be thereby escaped?

Initially, thus, one might conclude that interpreting the modal ontological argument in terms of modalism at least does not make the task of defending its main premise more challenging than it was before. In other words, modalism at least does not appear to be less effective than possible worlds theories in this regard, considering the significant challenges already faced by the latter. Even so, however, we must ask: what positive account can modalism offer in this context? How should we proceed with justifying the possibility of a maximally great being if we consider this a primitive modal statement?

At first glance, at least, it appears that many approaches within the epistemology of modality are indeed compatible with modalism. We have already cast a look at the account by Bueno and Shalkowski, which is both empirically informed and modalist in nature. Now, while empirical methods might not prove particularly useful in evaluating the possibility of a maximally great being – given that the latter is supposed to transcend the empirical bounds of the physical universe[245,246] – there are other routes that remain available for this purpose. For instance, modalism seems fairly compatible with various conceivability theories, which, roughly speaking, state that the ability to conceive of[247] a particular scenario in a coherent manner provides evidence for its possibility. In the present context, thus, one might argue that

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[245] Cf. Edgar Sheffield Brightman (1937: 148): 'God, if there be a God, is a metaphysical object. What is true about God can neither contradict the special sciences, nor yet be derived from them alone.'

[246] Clearly, this does not mean that employing empirical observations within the philosophy of religion is fundamentally futile. Many relevant arguments for God's existence, including cosmological and teleological ones, effectively utilise such observations. In contemporary debates, there is also a powerful account by Swinburne (2004 [1979]) where, instead of focusing on the *possibility* of God's existence, he endeavours to evaluate its *probability* using various types of empirical evidence. Swinburne's primary assumption is that all empirical data, including the very existence and general features of the world, require an explanation. He then proposes a hypothesis of theism – i.e., the thesis that God exists – as an explanatory framework. By applying Bayesian probability theory, Swinburne concludes that the probability of God's existence, given the evidence, is >0.5.

[247] The precise meaning of the term 'conceive' can be context-dependent and somewhat elusive. Simply speaking, 'conceivability' might be equated with 'imaginability', yet it is important to note that conceivability is not always strictly tied to imagination. Conceivability can be understood as the capacity to form some type of mental representation of a scenario, which may involve pictorial imagery, conceptual understanding, or linguistic expression. In this sense, to 'conceive' of something involves having a mental representation – whether visual, verbal, or otherwise – that allows us to grasp or think about a particular possibility.

the ability to conceive of God's existence indicates that such existence is genuinely possible.[248] Also – notwithstanding the cautious approach voiced by Goswick, among others, – it is still possible to appeal to the faculty of intuition, although it must be acknowledged that both conceivability and intuition-based accounts face the notorious problem of subjectivity, as they rely on individual mental faculties.

Yet another way to go could be the study of the internal coherence of the very concept of a maximally great being, or God, which would bring us back to a form of rationalism. An initial challenge that arises here, however, is that consistency, or non-contradictoriness, alone might be considered insufficient to establish the possibility in question. In other words, it could be argued that mere consistency does not necessarily lead to *real* possibility and that something more is required beyond consistency alone. Sergio Galvan (2012: 215), for example, highlights this debate by contrasting two historical perspectives: the Leibnizian view, asserting that the source of possibility is the mere logical consistency of concepts, and the Kantian view, which holds that consistency is only a necessary component of possibility, with true possibility requiring a cause capable of bringing it into existence. Pruss (2015: 2342), in turn, claims that '[n]o reputable contemporary metaphysician defends the consistency theory of possibility', although it remains 'historically important'.[249]

Despite hostile views, however, the linkage between consistency and possibility still appears to hold significance, especially in considerations regarding the possibility of God's existence. When examining the main approaches philosophers have taken to justify the possibility of God, Yujin Nagasawa suggests that the most promising strategy may lie in demonstrating the mutual consistency of God's attributes.[250] Nagasawa states that both Leibniz and Gödel appealed to the notion of a positive property to argue that the set of properties ascribed to God must be consistent. Nevertheless, while acknowledging that Leibniz and Gödel were 'on the right track', Nagasawa

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[248] I will now set aside the potential challenge that God's *non-existence* might seem equally conceivable. Within the context of the modal ontological argument, there is a related issue known as the symmetry problem, which will be analysed separately in section 3.3.1.2.

[249] In the same article, Pruss develops an argument against the claim that consistency coincides with possibility using Gödel's second incompleteness theorem. For a response to this argument, consult Burton 2022.

[250] It must be indicated that, in some of his writings, Plantinga also equates the coherence of an idea with the possibility of its object: 'What [this argument] shows is that if it is possible that there be a greatest possible being (if the idea of a greatest possible being is coherent)…' (see Plantinga 1974a: 106).

contends that this method might not be the most conclusive. Specifically, if by God's properties we mean such attributes as omniscience, omnipotence, and omnibenevolence, there are powerful objections purporting to show that these properties are either internally incoherent or mutually inconsistent (see Nagasawa 2017: 197–203).

For instance, the well-known paradox of the stone seeks to expose the incoherence of omnipotence (see Mavrodes 1963), whereas the Cantorian argument developed by Patrick Grim (1988, 1990, 1991, 2000, 2007, 2013)[251] challenges the coherence of omniscience by demonstrating that there cannot exist a set of all truths. In addition to arguments targeting the internal coherence of God's individual properties, there are also those aiming to establish their mutual inconsistency – such as the claim that omniscience is incompatible with omnipotence, since an omnipotent being would be unable to fully experience fear and frustration (see, e.g., Blumenfeld 1978). Now, Nagasawa (2017: 202) maintains that for Leibniz and Gödel's approach to succeed, it is not enough to merely take that God's properties are positive properties (or composites of them), which are always mutually consistent. Instead, it would be necessary to effectively address *all* these types of challenges in order to truly establish the possibility of God's existence. Needless to say, this is an exceedingly complex task.

Therefore, Nagasawa proposes a closely related yet slightly different strategy to justify the possibility of God's existence. Namely, he aims to show that, instead of adopting a 'bottom-up' perspective, we should embrace a 'top-down' approach. What is meant by that is that, instead of analysing separate attributes, we should simply assume the overarching principle that the components of God's greatness – knowledge, power, and benevolence – form the maximal consistent set and are all internally coherent. This implies that the concept of God is *by definition* internally coherent, which in turn guarantees the possibility of God's existence. Now, of course, this strategy might not be entirely convincing, for it risks appearing circular or merely stipulative. In other words, it might be argued that by defining God's attributes as forming a maximal consistent set, Nagasawa is simply *stipulating* coherence rather than demonstrating it.[252]

In any case, however, I am inclined to agree with the view that establishing the overall coherence of the concept of God is at least a promising

[251] Also see fn. 77.

[252] Andrew Bailey (2019: 279), in turn, claims that Nagasawa's position not only presupposes the contentious principle that consistency is sufficient for possibility but also requires there being *just one* maximal consistent set of knowledge, power, and benevolence, which is far from obvious.

starting point for proving God's possibility. Even if we grant that pure consistency is not a *definitive* guide to possibility, it remains at least a partial and reliable one. That is, while consistency alone may not suffice to establish possibility, it is still a necessary condition for it, and so analysing a concept's coherence is far from futile. Also, perhaps we should take the harder yet more convincing path and seek to effectively address all relevant arguments against the coherence of the concept of God individually.[253] As indicated by Nagasawa, this is by no means an easy task, but it is certainly worthwhile.

My goal here, nevertheless, is not to justify the premise of God's possibility as such, for it would likely require a separate comprehensive study in its own right. Rather, I only aim to show that the modalist, who takes the possibility of God's existence as a primitive modal statement, has viable techniques for affirming its truth. While I tend to prefer the examination of the concept of God[254] – namely, analysing its internal consistency – I hope to have shown that the modalist has at least several alternative approaches at their

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[253] According to some philosophers, this might indeed be the only way to demonstrate the consistency of the concept of God. Cf. Malcolm (1960: 59–60): 'I do not know how to demonstrate that the concept of God – that is, of a being a greater than which cannot be conceived – is not self-contradictory. But I do not think that it is legitimate to demand such a demonstration. I also do not know how to demonstrate that either the concept of a material thing or the concept of *seeing* a material thing is not-self-contradictory, and philosophers have argued that both of them are. With respect to any particular reasoning that is offered for holding that the concept of seeing a material thing, for example, is self-contradictory, one may try to show the invalidity of the reasoning and thus free the concept from the charge of being self-contradictory *on that ground*. But I do not understand what it would mean to demonstrate *in general*, and not in respect to any particular reasoning, that the concept is not self-contradictory. So it is with the concept of God.'

[254] Once again, although this rationalist strategy suggests that our knowledge of modal truths is informed by our grasp of the principles of conceptual coherence, this does not imply any form of reduction of modal truths. The method of checking conceptual coherence functions only as an epistemic tool that allows us to *discover* these truths without, however, assuming that modal truths can be reduced to logical principles such as non-contradiction (upon which conceptual coherence is based) themselves.

Additionally, it must be clarified that talk about the mutual consistency of God's properties shall not be interpreted as endorsing any specific ontology of properties. I assume here that any instance of, say, 'Omniscience is compatible with omnipotence' can be effectively paraphrased as '*x*'s being omniscient is compatible with *x*'s being omnipotent', which indicates that, instead of investigating the compatibility of properties themselves, we are addressing the compatibility of *descriptions of x*. This approach is grounded in my general reservations regarding (modal) properties and other related abstract objects, as disclosed in section 3.2.2.1.

disposal. Whether through some sort of conceivability accounts, appeals to intuition, assessments of conceptual coherence (or other plausible methods), those who view modal statements as primitive appear to possess adequate tools to undertake the challenge at hand.

These considerations signify the end of our exploration of theistic modalism. Within the last sections, we have not only introduced the core principles of this theory but also clarified related aspects concerning the status of mathematical and logical truths, the treatment of non-modal abstract objects, the primitiveness of modality as well as the epistemological dimension of modality so understood. To reiterate, the chief goal of the present chapter was to develop a framework for the modal ontological argument that both permits the derivation of the existence of a maximally great being and is compatible with the general metaphysical commitments of theism. As I trust has been shown, the proposed modalist framework successfully satisfies both of these criteria.

The next and final task is to handle some anticipated criticisms of the presented interpretation of the modal ontological argument: this will be the focus of the remaining sections of the dissertation.

3.3. Objections to the Suggested Interpretation and Their Refutation

3.3.1. Objection 1: The Proposed Interpretation is Pointless as the Very Modal Ontological Argument is Fallacious

The first criticism likely to arise is the contention that the proposed interpretation of the modal ontological argument is ultimately idle due to the fact that the argument itself is hopelessly flawed. In other words, critics might assert that there is no even need to seek viable modal frameworks for the argument, given that various already existing points reveal it to be fundamentally defective. By analysing the core attacks on the modal ontological argument, I will thus aim to show that, upon deeper examination, none of them proves determinative.

3.3.1.1. The Charge of Equivocation

One of the main challenges directed against the modal ontological argument as such is that it is guilty of equivocation. The crux of this objection is that the term ‘possibly’, as used in asserting the possibility of a maximally great being, is framed in an epistemic sense, whereas the rest of the argument proceeds with a metaphysical notion of modality. Hence the fallacy of equivocation.

This criticism has been boldly expressed by Mylan Engel (2020: 110):

> Why then have so many people taken Plantinga's argument to be a satisfactory defense of the rational acceptability of theism? Because many, if not most, of our ordinary *possibility ascriptions* are epistemic in nature. We assert that some state of affairs *S* is "possible" when nothing we know rules out *S*, and we assert that *S* is "impossible" when we know something that precludes *S*'s obtaining. That is why we find [the possibility premise of the modal ontological argument] initially so plausible. We think that maximal greatness is a "possible" property because *nothing we know* precludes its instantiation <…>.

And so Engel concludes that arguments like Plantinga's may be rhetorically powerful, but that is only because they are built on such 'subtle equivocations'. Now, although it is indeed likely that many people approach the modal ontological argument in the manner Engel describes, I do not see how this objection could do any substantial harm to the argument itself. And if the objection purports to cause such harm, then it simply seems to conflate *the way the argument is (or might be) approached* with *the way the argument is*.

Clearly, it might be said that it is *tempting* to read the possibility premise of the modal ontological argument as an epistemic rather than a metaphysical claim, given that epistemic possibility often appears less 'mysterious' and more accessible than a metaphysical one. However, from the fact that it is *tempting* to read this premise as an epistemic claim, it does not follow in any way that it actually *is* an epistemic claim. In other words, the mere fact that *x appears* to be so-and-so does not imply that *x is* so-and-so.

Apparently, Plantinga does not say anywhere that the possibility premise addresses epistemic rather than metaphysical possibility. As Gregory Stacey (2023: 5) also emphasises, the possibility premise clearly makes a metaphysical claim: namely, that God's existence is metaphysically possible, not that God could exist based on what we currently know. Stacey further contends that it appears difficult to demonstrate the metaphysical possibility of God's existence to someone who initially doubts it, but this is a different issue, pertaining more to the dialectical strength (or worth) of the argument. So far as the question of equivocation as such is concerned, there appears to be no substantial evidence that the possibility premise deals with epistemic rather than metaphysical possibility, beyond the mere observation that it might *seem* so. As already noted, however, the latter point alone does not provide an adequate ground to support the charge in question.

It might indeed be the case that the current methods for supporting the possibility premise have proven insufficient. This is likely what Lifeng Zhang (2014: 282, fn. 11) means when he claims that the entailment relationship between, say, '*a priori* self-consistency and metaphysical or logical possibility in the absolute sense does not hold'. It is also beyond dispute that establishing this premise is far from easy and that we may not yet have a definitive answer regarding its actual truth (and consequently, the soundness of the entire argument). But these are, once again, distinct matters, and their existence does not indicate in any way that the argument equivocates between different senses of modal concepts. In the absence of credible evidence that Plantinga's argument falls into this trap, the charge remains unfounded, and the burden of proof continues to rest with its proponents.

3.3.1.2. The Symmetry Problem

Another objection to the modal ontological argument is rooted in the so-called symmetry problem. Remarkably, this issue was reflected by Plantinga himself in his 1974b, following his presentation of the modal ontological argument. Plantinga (1974b: 218–219) invites us to consider the property of *no-maximality* – i.e., the property of being such that there is no maximally great being – and presents the following argument:

(1) No-maximality is possibly exemplified.
(2) If no-maximality is possibly exemplified, then maximal greatness is impossible.

Therefore

(3) Maximal greatness is impossible.

Clearly, if no-maximality is possibly exemplified, it immediately rules out the existence of a maximally great being, for this is a being that is necessarily existent in case existent at all. In other words, the only way for it to exist is to exist necessarily (and so the only way for it to *fail to exist* is to do so necessarily); hence, the very possibility of its *non-existence* entails the impossibility of its existence. Now, the problem is that the first premise of the argument laid above might appear quite plausible, much like the possibility premise of the modal ontological argument itself. In other words, both premises might appear rational and appealing, even though the choice between them leads to drastically different conclusions: we either have that the existence of a maximally great being is impossible or that it is necessary. The stakes, therefore, are rather significant, and the concern is that it is not clear *just which* of these premises should be taken as true.

This challenge has also been addressed in various other writings. J. William Forgie (1991: 129–130), for instance, considers the predicate 'is a Deprived Person', meaning 'is a person living in a world containing no omniscient being'. Forgie then couches this line of reasoning, which he claims is perfectly valid:

(4) A Deprived Person is possible.

(5) Therefore, God does not actually exist.

Once more: God (or a maximally great being) is a being that is necessarily omniscient, necessarily omnipotent, necessarily morally perfect, as well as necessarily existent in case existent at all. Hence, if there is a genuine possibility of the existence of a Deprived Person, this possibility immediately rules out the existence of a maximally great being, for the very possibility of its non-existence entails its actual non-existence (and even impossibility). Now, what this means is that in order to determine which argument – the one supporting the necessity of a maximally great being or the one stating its impossibility – is sound, we need to know which one has the correct premise. The problem, however, is that this remains entirely unclear, given that both premises seem equally plausible. We find ourselves in a state of deadlock.

In the course of such discussions, John Mackie (1982: 61) thus argues that choosing the premise of the Plantingian argument as a correct one is rational only 'in the sense in which it is rational to do either of two things when one must do one or other of them, but has no reason for preferring either to the other'. On the other hand, there is the option to simply withhold judgement, refraining from accepting either the premise of the ontological argument or its counter-argument. This sentiment has also been expressed by Michael Tooley (1981: 424), who claims that there is simply no justification for endorsing either premise, as there is no reason to attribute a likelihood greater than one-half to either. Oppy (1995: 71) similarly points out that

> [t]he agnostic will allow that either maximal greatness or no maximality is exemplified in all worlds – but he holds that the arguments provided give him no help in deciding which. Similarly, if he grants that either it is necessary that God exists or else it is necessary that God does not exist, the agnostic will allow that one of the relevant arguments has a true premise – but, again, he will hold that the arguments give him no help in deciding which.

Despite the severity of the challenge at hand, there have been numerous efforts to develop the so-called symmetry breakers and show that the premise of Plantinga's argument is preferable to that of the reverse argument. One such

suggestion has been advanced by Joshua Rasmussen (2018: 183–185), who has developed the Value Argument.[255] The argument proceeds like this:

(6) Some degree of value can be instantiated.
(7) If *some* degree of value can be instantiated, then *each* degree of value can be instantiated.
(8) Therefore, each degree of value can be instantiated. (From (6) and (7))
(9) Maximal greatness is a degree of value.
(10) Therefore, maximal greatness can be instantiated.

Rasmussen claims that if his argument is sound, then it 'breaks the stalemate in the battle over Plantinga's 'possibility' premise'. Rasmussen's argument starts with the observation that there *actually is* some value in the world (such as the existence of a human being). He then motivates (7) by appealing to the so-called principle of modal continuity, which says that 'classes of properties that differ merely in degree tend to be modally uniform – either all possible or all impossible'. Finally, given that maximal greatness is a degree of value, one has reason to infer that maximal greatness can be instantiated, and so that there can exist a maximally great being.

Now, Rasmussen (*ibid*.: 185–186) admits that his argument can also face parallel reasonings. For example, one may argue that some degree of value can *fail* to be instantiated and that, accordingly, *each* degree of value can fail to be instantiated, from which it follows that maximal greatness can fail to be instantiated. Nevertheless, Rasmussen indicates that there is an important difference between these arguments, for the justification for (6) is based upon one's experience of *actual* value. By contrast, one cannot support the premise of the reverse argument simply by appealing to one's experience of the *lack* of some value, because even if one may fail to experience the presence of some degree of value around them, it does not follow that every degree of value is not instantiated somewhere.[256]

Another approach to breaking the symmetry has been offered by C. A. McIntosh (2021: 259–260), who argues that the premise of the modal ontological argument and that of the reverse argument are not epistemically

[255] Meanwhile, Plantinga himself has not addressed this issue in detail. As already indicated, he simply posits that (even in the face of the existence of parallel arguments) there seems to be nothing irrational about accepting the possibility premise of the modal ontological argument. He also suggests that even though his argument cannot be said to *prove* its conclusion in the strict sense, it can at least reveal the rationality of theism (see Plantinga 1974b: 219–221).

[256] Rasmussen (2018: 185–192) addresses a range of other potential objections to his proposed argument. He also anticipates and responds to the criticism posed in Erasmus 2022.

on par. Given that God's existence is either necessary or impossible, McIntosh contends that the latter premise – 'It is possible that God does not exist' – actually asserts 'It is impossible that God exists'. McIntosh claims that such a proposition, unlike the one stating the possibility of God's existence, does not constitute a proper modal appearance. Proper modal appearances, according to McIntosh, concern solely putative possibilities,[257] not *negations* of possibilities, or impossibilities. This is because 'claiming something appears impossible has a degree of boldness that invites further inquiry; presumably there is some *obvious reason*, such as contradiction, category mistake, paralyzing myopia suggesting *p* is not possible. Intuitively, then, appearances of impossibility demand explanation or justification in a way appearances of possibility do not' (*ibid.*: 250–251).

A response to McIntosh's argument has been recently provided by James Simpson (2024: 91), who claims that McIntosh's reasoning falls short of rescuing the modal ontological argument from the symmetry objection. Simpson argues that a parallel argument could begin with a premise such as, 'It is possible that every being lacks moral perfection', which is not a putative impossibility. However, it clearly remains incompatible with the premise of the modal ontological argument, as God, if he exists, is a necessary being that is essentially morally perfect.

Be that as it may, Simpson's suggested premise only seems to function as a roundabout way to claim that God's existence is not possible. Consequently, Simpson's argument does not appear to present a genuine alternative possibility; rather, it simply assumes the impossibility of God, which, as argued by McIntosh, is not a proper modal appearance. Once again, inasmuch as God is considered a necessary being, positing the possibility of his non-existence (either directly or by smuggling in a denial of one of his necessary attributes) equals stating his overall impossibility. Hence, such a proposition fails to qualify as a proper modal appearance.[258,259]

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[257] McIntosh (2021: 250, fn. 14) adds that this reasoning also applies to necessity claims, given that what is necessary must also be possible.

[258] Similarly, McIntosh (2021: 251) has written that 'There is a possible world in which there are no numbers' is not a proper modal appearance on the basis that numbers are regarded as necessary entities, and if they do not exist in one possible world, they do not exist in any.

[259] Now, of course, one may argue that stating the possibility of God's existence also implies various impossibilities (as also noted by Simpson) – say, the existence of a world without God. Therefore, one may say, the possibility of God eventually collapses into an impossibility as well and in this sense ceases to be a proper modal appearance.

Yet another way to block the symmetry objection has been proposed by James Collin (2022). He claims that the symmetry between the premise of the modal ontological argument and that of its reverse is disrupted by what he calls an 'undercutting defeater' for the latter. Collin's reasoning is as follows: the premise 'Possibly, God does not exist' entails *Not Essential Dependence* (NED), or the claim that the actual physical things are not essentially dependent on a perfect being. Collin then argues that in order to justifiably accept this premise, one would need a sufficient warrant for NED, but we seem to lack such warrant from either *a priori* reflection or empirical evidence. From an *a priori* perspective, while coherent descriptions of worlds that support NED exist, so do descriptions supporting ~NED. Meanwhile empirically, a thorough examination of all physical facts in the actual world reveals no evidence ruling out the possibility that physical reality could indeed depend on a perfect being. Consequently, this lack of warrant for NED undercuts the possibility premise of the reverse argument: as Collin puts it, entitlement to this premise is tethered to entitlement to NED, and 'we lack entitlement to this latter claim' (*ibid*.: 415).

Collin then suggests that the possibility premise of the modal ontological argument, by contrast, does not require such a dependency claim, because the existence of God could be true *regardless* of whether the physical world is dependent on him or not. In other words, even if the physical world were entirely independent of God (i.e., NED were true), this would not negate the possibility of God's existence. Thus, the main premise of the modal ontological argument requires *neither* NED *nor* ~NED. And this is exactly where the asymmetry arises: unlike the possibility premise of the reverse argument, which hinges on the contentious and unsupported principle of NED, the possibility premise of the modal ontological argument remains unaffected by such a defeater (*ibid*.).

In response, Joseph Schmid (2023) and Tien-Chun Lo (2024) have indicated that there are parallel undercutting defeaters affecting the possibility premise of the modal ontological argument. Moreover, Schmid contends that Collin's statement that the possibility premise of the modal ontological argument does not depend on any specific claims about the dependency of the physical world is mistaken. Schmid (2023: 728) argues that the traditional

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But this is a confusion. For, clearly, 'It is possible that there is a world without God' is just another way of stating God's impossibility (given that God, if he exists, does so necessarily). Hence, what the objection above states is that the possibility of God's existence implies the falsity of God's impossibility, which is trivial. 'It is possible that God exists' does not seem to imply any additional, non-trivial impossibility.

theistic view maintains that everything distinct from God is caused by him and that there is no possibility for anything else to exist without being caused by him. Therefore, Schmid states that, according to traditional theism, the possibility premise of the modal ontological argument *does require* ~NED.

Ultimately, then, it seems evident that the debate over the symmetry objection, at least in its current form, remains unresolved. This alone suffices to claim that the objection, despite its initial appeal, cannot be considered a decisive refutation of the modal ontological argument. For even if some efforts to break the symmetry fall short, there still remains the possibility that others may succeed or be refined in the future. What may appear as symmetry could ultimately prove to be only an illusion, with the two possibility premises differing fundamentally in their plausibility. The task for defenders of the modal ontological argument is to demonstrate that there is some fundamental flaw within the reverse argument and, as outlined in the current section, there are several workable paths to achieve this. The battle still continues, and the modal ontological argument is far from conquered.

3.3.1.3. Parodies

The ontological argument has long been a target of various parodies. In the words of Stacey (2023: 7), the *locus classicus* of a parody-based objection to the ontological argument comes from Anselm's contemporary Gaunilo of Marmoutiers (1997 [1078]), who proposed that by following Anselm's reasoning in the *Proslogion*, one could argue for the existence of a perfect island – an island 'than which none greater can be conceived'.[260] Such parody arguments are crafted to demonstrate that if the reasoning behind the ontological argument is accepted as sound, then closely similar reasoning could be used to 'prove' the existence of entities that are clearly impossible or simply absurd. In other words, parodies are meant to highlight how the logic of the ontological argument can be manipulated to justify the existence of

[260] Several authors have sought to demonstrate the shortcomings of Gaunilo's parody. Plantinga (1974a: 90–91), for instance, contends that the notion of 'the greatest conceivable island' expresses no coherent concept. Unlike the great-making qualities of God – omnipotence, omniscience, and perfect goodness – which are inherently maximal and cannot be exceeded, the so-called great-making qualities of an island can always be surpassed. Consequently, there can simply be no such thing as *the* perfect island.

A defence of Gaunilo's reasoning, specifically in response to Plantinga's critique, has been offered by Brian Garrett (2013). Replies to the latter include Bernstein 2014 and Ward 2018.

almost anything, suggesting that the underlying principles governing this argument may be fundamentally flawed or overly permissive.

Various parodies have been devised to challenge not only Anselm's original formulation of the ontological argument but also Plantinga's modal version. One such example is presented by Tooley (1981: 424):

> [L]et 'P' be any predicate, and introduce the new predicate '… is maximally P', defined as follows:
> *x* is maximally P if and only if *x* exists in all possible worlds and is P in every world.
> One can then parallel Plantinga's argument for the view that it is reasonable to believe that the property of maximal greatness can be exemplified, thereby deriving the conclusion that it is reasonable to believe the property of being maximally P can be exemplified. It will then follow that it is reasonable to believe that it is exemplified. As this can be done for any coherent predicate, the result will be a world that is rather overpopulated with necessary beings.

Tooley (*ibid*.) further observes that the problem extends beyond mere overpopulation of entities; by employing predicates of the form '… is maximally P', one can construct arguments that result in contradictory conclusions. For instance, consider the following: '*x* is a *maximal universal solvent* if and only if *x* exists in every world and is a universal solvent in every world, where something is a universal solvent in a given world if and only if it is capable of dissolving anything in that world.' Similarly: '*x* is *maximally insoluble* if and only if *x* exists in every world and is insoluble in every world.' By paralleling Plantinga's modal ontological argument, one could conclude that 1) there exists a maximal universal solvent and 2) there exists something that is maximally insoluble, despite the fact that 1) and 2) are clearly incompatible.

Additionally, Tooley (*ibid*.: 425) notes that the logical structure of arguments like the one used by Plantinga can be adapted to establish conclusions that are fundamentally at odds with theism itself. For example, if one defines 'the Devil' and 'maximally evil' in such a way that it is analytically true that *x* is the Devil iff *x* is omnipotent, omniscient, and perfectly evil, and that *x* is maximally evil iff *x* exists in every possible world

and is omnipotent, omniscient, and perfectly evil in every world, one could build a parallel argument to show that the Devil necessarily exists.[261]

Robert Kane (1984: 344–345) similarly introduces the concept of what might be called 'less-than-perfect necessary beings' (LPNs) – beings whose 'essence or definition is such that, if they exist, then necessarily they exist, but which lack some other attributes of perfection, e.g., they are less than omniscient or not omnibenevolent'. According to Kane, the logical principles of the modal ontological argument could be used to derive the actual existence of any such possible LPN. Kane's line of reasoning was further developed and defended by Robin Harwood (1999); related ideas were also explored by Daniel Chlastawa (2012).

The crucial step defenders of the modal ontological argument must take in the face of these parody objections, then, is to clearly establish the *uniqueness* of the concept of a maximally great being, or God. In other words, it must be demonstrated that the logic behind the modal ontological argument applies *uniquely* to God and cannot similarly extend to other entities proposed in parody arguments, such as LPNs or 'maximally P' beings. There already are compelling reasons supporting this view, suggesting that the parodies in question do not meet the parity required for their success.

For instance, one might well question Tooley's contention that one can in principle introduce just any predicate of the form '… is maximally P' and, by applying the reasoning of the modal ontological argument, overpopulate reality with necessary beings. The problem is that when we are talking about entities such as 'maximally evil' ones, 'near gods', or 'less-than-perfect necessary beings' (LPNs), we seem to possess no *parodies-independent* reasons to believe that such entities truly exist (see Wainwright 2012: 38). In this sense, the parodies seem to act as masked *ad hoc* devices, tailored specifically to challenge the original argument without simultaneously providing any genuine evidence for the possible existence of the entities in question. Thomas Morris (1985: 267) further argues that if LPNs, say, are understood as entities like human beings, stones, trees, or electrons, i.e., if we take them to be candidates for necessary beings, we would require not only coherent descriptions of such concepts but also strong intuitive support for their possible existence. However, our intuitions regarding the nature of

[261] As explained by Tooley (*ibid*.), this conclusion is incompatible with the claim that God exists in the sense that even if it is not logically impossible for there to be two distinct, coexisting beings that are both omnipotent, it is indeed impossible for two such beings to coexist if their wills do not necessarily coincide – and this will certainly be so when the one being is perfectly good and the other perfectly evil.

material substances seem to strongly suggest that they are contingent rather than necessary objects.

Now, this also significantly touches Tooley's example involving a necessarily existing solvent as well as a necessarily insoluble entity. The problem lies in the fact that these examples are meant to refer to material substances, yet it is far from clear that the latter can in principle enjoy necessary existence. As argued by Edward Lowe (2013 [2007]: 392), it seems highly plausible that all material substances are contingent, dependent beings (even if some of them should turn out to be simple substances not composed of anything further). Lowe says that this idea also seems to gain strong support by modern physics:

> [I]t seems that [material substances] are all *contingent* beings, where a contingent being is one that does not exist of necessity. Consider, for example, a single elementary particle of physics, such as a certain individual electron, *e*, which is, according to current physical theory, not composed of anything more fundamental. Surely, *e* might not have existed at all. But could *e* have been the only thing to exist? We might think that we can imagine a world in which all that exists is this single electron, *e*. But, in fact, modern physics would repudiate this idea as nonsensical. Electrons are not really to be thought of as being 'particles' in a commonsense way, but are, rather, best thought of as quantized states of a space-permeating field; and according to this way of thinking of them, it really makes no sense to envisage one of them as having an existence that is wholly independent of anything else (emphasis in the original).

The idea of a necessarily existing omnipotent, omniscient, and perfectly evil being, in turn, is accompanied by further difficulties. Richard Swinburne (2009), for example, offers a powerful defence of the view that omnipotence entails both omniscience and perfect moral goodness, thereby making it logically impossible for an evil being to possess these 'omni-properties'. Upon defining omnipotence as pure, limitless, and intentional power, Swinburne (*ibid*.: 496–497) claims that for such power to be truly intentional, one must have knowledge of all possible actions and their consequences, which involves awareness of fundamental moral truths. Swinburne posits that such complete knowledge entails a constant moral motivation in such a way that knowing what is good inherently drives a perfectly free and omniscient being to act in accordance with this moral understanding. Thus, while God has the

power to do evil, his complete and perfect knowledge ensures that he will always choose to act in accordance with what is good.[262]

It can thus be concluded that attempts to apply the logic of the modal ontological argument to other entities, as seen in parody arguments, are, at best, lacking. They not only appear to rely on *ad hoc* reasoning but also reveal complex concerns when subjected to a more thorough analysis, especially when trying to conceptualise entities that share some, but not all, of the properties traditionally attributed to God. While this clearly does not constitute a definitive rebuttal of parody objections, it does demonstrate that such objections do not serve as conclusive refutations of the modal ontological argument.

3.3.1.4. Objections to S5

Another move for objectors to the modal ontological argument is to insist that the very logical system on which the argument is based is fallacious. That is, it can be stated that the modal logic S5 (whose principal axiom is $\Diamond p \rightarrow \Box\Diamond p$) is not the right logic for metaphysical modality and that for this reason, the argument built upon it fails to even achieve validity.

The most relevant critiques have been those directed against systems B (characterised by the axiom $p \rightarrow \Box\Diamond p$) and S4 (characterised by the axiom $\Box p \rightarrow \Box\Box p$), both of which are included in S5. The goal is therefore to show that if the characteristic principles of B and S4 fail, then S5, which contains them, cannot be correct either. Now, recall from section 1.1.1.3 (see fn. 29 specifically) that, within the framework of possible worlds semantics, system B is defined by the accessibility relation between worlds that is both reflexive and symmetric. Michael Dummett (1993: 346), however, has famously challenged the symmetry condition. Dummett's reasoning is based on the assertion that there might have been such animals as unicorns. He then posits that our current descriptions and images of unicorns are insufficient to determine their precise biological classification. Thus, we must leave open the possibility that they could belong to different biological orders, such as Artiodactyla (like deer) or Perissodactyla (like horses). Consequently, Dummett argues that

> [i]n the language of possible worlds, there are no unicorns in the actual world *w*, but there is a possible world *u* in which there are unicorns, which

[262] This analysis may also apply to various other types of LPNs: by showing that God's properties are uniquely interconnected, Swinburne's assessment significantly shakes any efforts to isolate or replicate these properties in other entities.

> belong to the order Artiodactyla, and another possible world *v* in which there are also unicorns, which in that world belong to the order Perissodactyla. <…> In world *u*, any animal, to be a unicorn, must have the same anatomical structure as the unicorns in *u*, and hence, in particular, must belong to the order Artiodactyla. It follows that the world *v* is not possible relatively to *u*, and, conversely, that *u* is not possible relatively to *v*. How about the actual world *w* – is that possible relatively to either *u* or *v*? It would at first seem so, since the principal difference we have stipulated is that there are no unicorns at all in *w*. But *u* is a world in which it holds good that unicorns are necessarily of the order Artiodactyla, whereas in *w* it is possible for unicorns to be of the order Perissodactyla. Since a proposition necessarily true in *u* is possibly false in *w*, *w* cannot be possible relatively to *u*, although *u* is possible relatively to *w*. The relation of relative possibility (accessibility) is therefore not symmetrical.

Since the principle $p \rightarrow \Box\Diamond p$ holds only if the accessibility relation is symmetrical, it follows, according to Dummett's argument, that the principle must be false.

A notable objection to the S4 principle has in turn been advanced by Nathan Salmon (1989: 4–5). The argument begins with the observation that while a specific object, such as a table, could not have been composed of matter significantly different from that from which it is actually made, it could have been composed of matter that is only slightly different. However, if the table had been made from a slightly different matter (say, m_1), it could then have been made from yet another type of matter, differing only slightly from m_1 but significantly from the original one. Overall, then, this leads to a situation where something that is possibly possible is not possible *simpliciter*, thus contradicting S4 (whose $\Box p \rightarrow \Box\Box p$ is equivalent to $\Diamond\Diamond p \rightarrow \Diamond p$).[263]

Meanwhile an argument directly challenging S5 has been offered by Hugh Chandler (1993: 24). According to him, if we accept both that the possibility of someone existing necessarily implies that this person exists necessarily (reflecting the principle $\Diamond\Box p \rightarrow \Box p$, which is valid in S5), and that it is possible that there should have been absolutely nothing (with no physical entities, minds, space, etc.), we must conclude that it is impossible that someone should exist necessarily. In other words, those committed to S5 are

[263] Refer also to Salmon 1981: 229–252. His line of reasoning builds upon that of Chandler 1976: 106–107 (see also Chandler 1993: 23).

faced with a dilemma: they must either accept this conclusion or insist on the impossibility of absolute nothingness.

All these arguments, however, have either already encountered or may yet encounter several responses. Marga Reimer (1997: 45–46), for instance, has argued that Dummett's attack on the B principle falters due to the semantic indeterminacy of the term 'unicorn'. In other words, Reimer's argument is based on the idea that, in our actual language, the term 'unicorn' does not refer to any specific species. Given this semantic vagueness, neither world is properly describable – in our world – as one containing *unicorns*. Hence, the truths 'Unicorns are necessarily of the order Artiodactyla' and 'Unicorns are necessarily of the order Perissodactyla' are *not* inconsistent with the actual world scenario, where it is correct to say that there is a possible world in which the term 'unicorn' would be correctly applied – *in that world* – to the order Artiodactyla, and another world, in which this term would be correctly applied – *in that world* – to the order Perissodactyla. Dummett's argument thus fails to establish that the actual world is not possible relative to *u* or *v*, and thereby fails to compromise the symmetry condition.[264]

In response to Salmon's argument, Bob Hale (2013: 128–129, fn. 18) claims that it is plausible to require that the table could not have been composed of matter that differs by more than a slight degree from *that from which it is actually composed*, where the italicised phrase refers rigidly (i.e., it always refers to the same, original matter). Viewed in this light, then, Salmon's argument begs the question, as it assumes that the necessity in question is not absolute.[265] Finally, considering Chandler's argument, it could be argued that the supposed difficulty of the options presented is overstated. A potential response, for example, could be to reject the notion of absolute nothingness as a genuine possibility (for, at least on the face of it, it does not appear to beget a substantial metaphysical problem).

Furthermore, there clearly are well-established positive arguments in support of the position that the correct logic for metaphysical modality should be no weaker than S5. The essence of the case favouring S5 has been conveniently summarised by Pruss (2011: 14), who first mentions the strong intuitive support for the B principle:

> [T]hings could not have been such that it would have been impossible for things to have been as they in fact are. However things might have gone,

[264] Hale (2021: 315) also offers a similar critique of Dummett's argument.

[265] For a related argument, refer to Roca Royes 2006. Also see Williamson 1990: 126–143.

> it still would have been true that they might have gone the way they in fact have gone. If things could have gone a certain way, then had they gone that way it would have been true that they could have gone the way they in fact went.

And this is exactly what the B axiom tells. Pruss (*ibid*.: 14–15) then proceeds by indicating the second intuition, which is that

> when we talk about metaphysical possibility, we are talking about "ultimate" possibilities. Now, if we have a possibility operator ◊ such that ◊*p* can hold without ◊◊*p* holding, then this operator does not tell us about *ultimate* possibilities. If it could have been that it could have been that *p* holds, then there is a real sense in which *p* "could have held". If we then deny that ◊*p*, we are saying that ◊ does not tell us of the ultimate possibilities there are, but of possibilities relativized to some way that things have been. Indeed, in such a case there *is* a reasonable more ultimate metaphysical possibility operator, namely ◊◊. Thus, if we are talking of ultimate possibilities, it is reasonable to require that ◊◊*p* should imply ◊*p*. This is the S4 axiom <…>. We can also make the equivalent point using □: the ultimate necessities are necessities that couldn't have been different. So, if something is necessary, it has to be necessary – i.e. □*p* implies □□*p*, which is equivalent to S4 (emphasis in the original).

An analogous case can of course be made in direct support of the S5 principle ◊*p* → □◊*p*. The principle is grounded in the intuition that metaphysical possibility could not have been different (namely, if ◊*p* is true, then it could not have been the case that ~◊*p*). S5 thus expresses the intuitive idea of possibility in its broadest, unconditional sense. And given that S5 best captures the notion of absolute modality, it shall therefore be considered the right logic for metaphysical modality, which is typically understood to be precisely of this absolute kind.[266]

It could thus be concluded that the case against S5 is far from decisive. Although there are attempts to contest this system of modal logic, the existing responses to the presented challenges, coupled with the strong intuitive support for S5, reinforce its status as a credible and, indeed, the leading candidate for representing metaphysical modalities.

[266] Powerful arguments in favour of S5 are also presented in Kane 1984: 342–344, Williamson 2016, and Pruss and Rasmussen 2018: 18–21.

3.3.1.5. Objections to S5 as Applied in the Context of the Modal Ontological Argument

The final objection to the modal ontological argument I wish to address originates from the concern that, even if S5 shall be regarded as the correct modal logic for metaphysical modality, it may still be unsuitable in the specific context of this argument. Recall that, formally, the argument is strikingly straightforward – the conclusion that there necessarily (and so actually) exists a maximally great being follows with relative ease, assuming S5.[267] This formal simplicity may give rise to an intuition that the argument's validity is attained somewhat 'too cheaply',[268] thereby warranting a more thoughtful consideration with respect to which logical system best fits this context. For, clearly, as Tracy Lupher (2012: 244) comments, '[t]here is no single normal modal logic that can be used for every purpose', and 'S5 is not appropriate for every context'.[269]

Kane (1984: 336), in turn, asks whether selecting a modal system in theological contexts is truly 'as innocent as choosing *hors d'oeuvres*', suggesting that the answer is no. Kane argues, through the use of parody arguments (see section 3.3.1.3), that the B principle enough is problematic, as it proves too much when applied to necessary beings. By introducing the possibility of less-than-perfect necessary beings (LPNs), Kane purports to show that by defining various beings as necessarily existent (if they exist at all), we can proliferate necessary beings by relying on this logical principle.[270] And this appears suspicious, as the existence of such beings seems to follow

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[267] Though it shall be noted that there are valid modal ontological arguments employing alternative systems. Andrzej Biłat (2021), for instance, presents an argument based on the much weaker system T. However, this approach requires stronger premises: Biłat's proposed argument includes not only the premise that God's existence is possible but also the additional premise that God's existence is either necessary or impossible.

Marco Hausmann (2022), in turn, has developed an ontological argument for the actual (rather than necessary) existence of God. Hausmann's strategy does not rely on S5 but instead appeals to what he describes as 'a standard logic of 'actually' (a standard extension of the weak modal logic K)'.

[268] Cf. Tracy Lupher's (2012: 239) question of whether validity should be 'as easy as S5'.

[269] Non-normal modal logics (in contrast to normal ones) are systems that are weaker than normal modal logics in that they do not satisfy all the axioms and rules of the minimal normal modal logic K.

[270] System B enables us to infer from the possibility of a necessary being that it actually exists. However, the stronger system S5 allows us to infer immediately that such a being exists necessarily.

too easily. Thus, Kane (*ibid*.: 345) concludes that the B principle is too strong and that 'something must be wrong with its use *in this context'* (emphasis added).

In response, I would like to highlight that there appears to be no compelling reason to exclude theological contexts from the broader metaphysical framework, meaning that if S5 is accepted as the correct logic for the latter, it should equally be considered appropriate for the former. As noted in the previous section, S5 is thought to best capture the notion of modality in the *absolute*, *unconditional* sense, and questions surrounding God's existence seem to pertain precisely to such modalities. Crucially, the mere impression that S5 might not be the correct logic for theological issues does not constitute a sufficient argument against its use; more substantial objections are needed. At face value, it seems that the theological question of God's existence is part of the broader metaphysical discourse, and hence, assuming that S5 is appropriate for the latter, it is also suitable for the former.

Now, of course, it might be argued that Kane does provide a weightier reason for why S5 might not be appropriate here: he suggests that it drastically facilitates the inference of various kinds of necessary beings. But if so, Kane's argument appears to confound the intuition that S5 is unsuitable for theological contexts with the intuition that the modal ontological argument is vulnerable to parody arguments, which are two distinct issues. In section 3.3.1.3, I already showed that parody arguments, including Kane's example involving LPNs, do not present any major harm to the modal ontological argument. There are various ways in which proponents of this argument can maintain that the case of God is unique and that only his necessary existence – and not that of other beings – can be derived using the proper principles of modal logic. Consequently, if parody arguments are not a problem, it becomes unclear what remains of Kane's critique. One might, of course, still insist that the existence of God appears to be derived too easily within the modal ontological argument and that there is something fundamentally flawed in the use of modal logic here. However, without concrete reasons to support this claim, such objections amount to little more than vague dissatisfaction. And if an objector sees the problem with the justification of the possibility premise, then this, again, is a wholly distinct matter, which requires separate examination. In any case, it has nothing to do with the use of formal systems of modal logic within the context of the argument.

Nevertheless, there can be other attempts to argue that the use of S5 in this context is ill-founded. Sijuwade (2023: 6), for example, implies that this issue might lead some to label the argument as circular or question-begging. An objector might say that inasmuch as in S5, the notion of something being

'possibly necessary' is equivalent to its being 'necessary', someone who does not already accept the necessary existence of God cannot accept the premise regarding the possibility of God's necessary existence. In other words, a person, such as an atheist, is likely to reject the possibility of a maximally great being, 'given the close link between the possibility of this being and its actuality'.[271] Sijuwade (*ibid*.) then points out that while the objector might concede that the possibility premise is 'semantically different' from the conclusion of the argument (since it does not explicitly assert God's existence), they would still posit that the link between the premise and the conclusion is so close that accepting the former would depend on a prior acceptance of the latter. Consequently, the objector would conclude that 'in the absence of an independent argument concerning the veracity of the Possibility Premise, one is saddled with an argument that seemingly can't achieve its end of convincing others of the truth of its conclusion' (*ibid*.: 7).

Hence, this brings us back to a previously discussed issue: the challenge of justifying the possibility premise. Although this is an undeniably strenuous task, we have already scanned potential methods to address it and identified several arguments for countering the symmetry with the premise of God's non-existence. In any case, as mentioned by Sijuwade, the premise of the modal ontological argument is clearly semantically distinct from its conclusion; thus, the fallacy of circularity is avoided. The impression of circularity, of course, may arise, especially when one lacks the means to substantiate the possibility premise[272] or faces symmetrical arguments positing the impossibility of God's existence. But these are, once again, separate issues, which have already been addressed. What remains crucial here is that there is no clear ground for claiming that the argument *truly* commits

[271] Cf. William Rowe (2009: 89): 'What then do we have to know in order to know that God (a maximally great being) is a *possible* being? At a minimum, I believe, we have to *know* that an omniscient, omnipotent, morally perfect being exists in the *actual world*. For, putting aside other possible worlds, if such a being doesn't exist in the possible world that is actual, he isn't what Plantinga defines him to be: a maximally great being. Indeed, if he doesn't exist in the possible world that is *actual*, he is an *impossible* being.'

[272] In agreement with the discussion in section 3.2.2.2.4, William Vallicella (1993: 110) claims that although the coherence of the concept of God does not guarantee the real possibility of God's existence, it still provides defeasible evidence in favour of it. Hence, someone might well accept the possibility premise of the argument while remaining neutral with respect to its conclusion. If so, then it is fairly rational to believe the premise without having accepted the conclusion, *contra* the circularity objection.

the fallacy of circularity – nor that such a fallacy is attributable to the use of S5.

Therefore, I conclude that, as with the earlier objections, there appears to be no definitive evidence in support of the claim that S5, even if considered appropriate for metaphysical modalities, is unsuitable within the context of the modal ontological argument.

3.3.2. Objection 2: The Proposed Interpretation is a Step Backwards

Within the preceding sections, we have established that none of the principal charges lodged against the modal ontological argument is decisive – i.e., none has demonstrated that the argument is fatally flawed. However, certain criticisms may still be directed at my proposed modalist interpretation of this argument. That is, one might argue that even if the modal ontological argument withstands the challenges discussed, my interpretation as such remains considerably wanting.

One potential critique of this kind is that my interpretation appears to be a step backwards in moving away from possible worlds talk in favour of the modalist view. Through its role in clarifying and systematising complex modal notions, possible worlds semantics has been a major intellectual achievement and an invaluable tool in both formal and philosophical discussions of modality. Therefore, one might contend that renouncing possible worlds talk in the context of the modal ontological argument – and championing the idea that modal concepts and modal truths are primitive and unanalysable – represents a notable retreat.

Even so, I maintain that this does not constitute a critical shortcoming in my proposed interpretation. While it is undeniable that possible worlds discourse has achieved considerable formal and philosophical acclaim, various examples have shown that it is not without its challenges, especially for theists. In particular, we have seen that possible worlds talk either involves ontological commitments that pose difficulties in reconciling them with theistic metaphysics, or, as in the case of modal fictionalism, fails to validate the conclusion that God truly exists. By contrast, modalism, by treating modal truths as primitive, bypasses these obstacles and overall appears to provide a far more harmonious foundation for the theistic worldview.

This does not in any way belittle the success of possible worlds semantics but rather suggests that it may not be the optimal approach *in all contexts*, especially when combining it with theological commitments. Not to mention that modalism itself represents a thorough and solid framework for understanding modality, as evidenced in sections 3.1.3.1–3.1.3.3. Although

not the standard view within the contemporary philosophy of modality, it undoubtedly has its own strengths, including a direct and intuitive grasp of modal notions.

It is therefore far from clear that the proposed interpretation represents a theoretical regression.[273] Instead, it should be taken as a recommendation for an *alternative*: namely, that within the context of the modal ontological argument, modalism simply offers a much more fitting and coherent approach.

3.3.3. Objection 3: The Theoretical Value of the Proposed Interpretation is Highly Limited

The final objection to my proposed interpretation of the modal ontological argument I wish to bring up concerns its perceived theoretical narrowness. Specifically, one may argue that the modalist interpretation does not significantly engage with the central difficulties impacting the argument (as discussed in sections 3.3.1.1–3.3.1.5), which are, after all, the main headache for proponents of this argument. In other words, it might be claimed that for the argument to be considered successful, it is first necessary to effectively resolve these primary concerns and that only after that can one evaluate how the modal principles used in the argument fit with theism – a question that, while important, is far less immediate compared to overcoming objections such as the symmetry problem or the justification of the possibility premise. In short, it can be said that while the proposed interpretation might offer valuable insights, its overall benefit remains significantly limited.

While I agree that proponents of the modal ontological argument must carefully tackle the main objections raised against it, it is essential to distinguish between addressing these objections and evaluating the benefit of my proposed interpretation. That is, even if my interpretation cannot offer substantial help in tackling these objections, it offers a means to handle *another* very significant issue – namely, reconciling the modal principles underpinning the argument with the broader theistic framework. As I have tried to show, this reconciliation is also crucial. Now, the charge in question asserts that there are problems surrounding the modal ontological argument that are 'much more immediate' than the one addressed by my interpretation, but the basis for such an approach seems to be very shaky. Why should the issue addressed by my interpretation be considered less urgent? All issues associated with the modal ontological argument carry considerable weight, all

[273] Assuming, of course, that the very idea of theoretical progress in philosophy is not itself deeply problematic.

of them appear to deserve serious attention. If, on the other hand, the objection presupposes that a remedy should be a remedy for everything, then it must be acknowledged that such all-encompassing solutions are extremely hard to come by.

My proposed interpretation was designed with a clear objective: to provide a framework for the modal ontological argument that not only supports the derivation of the conclusion asserting the existence of a maximally great being but also possesses metaphysical compatibility with the broader theistic worldview; and it appears to have achieved this goal. Whether or not this interpretation can contribute to solving other challenges burdening the argument remains an open question, potentially for future research to explore. What remains evident is that, even if it turns out not to be helpful in this respect, its value remains in addressing the specific issue it was developed to confront. And this is already an accomplishment.

1. Possible worlds theories – modal abstractionism, modal concretism, and modal fictionalism – fail to provide suitable grounds for interpreting the modal ontological argument because:
   1.1. Even though modal abstractionism – at least in the version defended by Plantinga – supports a formal derivation of the argument's conclusion, it remains problematic in the sense that reconciling God's existence with the existence of abstract possible worlds proves to be highly challenging. The discussion covered three approaches that have been proposed to resolve this issue, all of which were assessed as problematic:
      1.1.1. The first approach is to claim that abstract possible worlds (along with other abstract objects) are identical to God's thoughts. The following difficulties impacting this stance were highlighted:
         1.1.1.1. God is commonly considered a concrete object, and it is natural to assume that his thoughts should also be treated as concrete entities. Therefore, equating abstract objects with God's thoughts undermines the very tenet that possible worlds and other similar entities are abstract – i.e., this view leads to anti-realism with respect to abstract objects themselves;
         1.1.1.2. The overall substantiation of the thesis that abstract objects are identical to God's thoughts proves problematic, especially if it is maintained that God's thought about a given abstract object is a thought *about* that object. Usually, when stating that *x* is about *y*, it is implied that *x* and *y* are *distinct* entities;
         1.1.1.3. If abstract objects are regarded as necessarily existing and viewed as God's thoughts, it follows that God cannot but possess these exact thoughts. Those in favour of this position do not provide a theological explanation for why this should be the case;
      1.1.2. The second approach posits that abstract possible worlds (and other abstracta) are God's creations. Two main versions of this position were analysed: the view that God creates abstract entities by creating the concrete world (and that abstract objects exist within it), and the claim that God brings abstract objects into existence through his intellectual activity (such that abstracta exist in God's mind, independently of the concrete world):

1.1.2.1. The first view is problematic in that it asserts that neither with regard to God nor within the context of creation do any modal facts or modal distinctions hold. This prevents the expression of the idea that the world's existence is contingent, as well as of theologically significant modal claims, such as that God exists necessarily;

1.1.2.2. The second position mentioned appears contradictory in that it implies that the creation of abstract entities is not constrained by any modal facts yet also declares that God creates abstracta out of necessity. Taken separately, these claims are also problematic. The former, once again, leads to the collapse of modal distinctions (with respect to abstract objects), while the latter seems incompatible with the Christian conception of creation, according to which God creates in a free, rather than necessary, manner;

1.1.3. The third approach suggests that abstract possible worlds (and other abstract objects) exist independently of God and that this does not conflict with theism. It is argued that abstract entities exist necessarily, and that necessity cannot be explained, nor does it somehow limit God or any other being. In this case, the following challenges come to the fore:

1.1.3.1. The aforementioned argument fails to resolve the problem because necessity as such is not the same as necessarily existing *objects*. The issue lies precisely in the assertion that there are *objects* existing independently of God;

1.1.3.2. Should abstract entities exist independently of God, this implies that God lacks ultimate supremacy over all beings, raising concerns for a theistic worldview;

1.2. Attempts to interpret the modal ontological argument through the lens of modal concretism come up against the following difficulties:

1.2.1. There are strong arguments indicating that modal concretism is incompatible with the conclusion of the modal ontological argument, which asserts the necessary existence of God. This immediately suggests that modal concretism cannot serve as a foundation for interpreting this argument. It is argued that none of the ways in which the (necessary) existence of beings is conceptualised within modal concretism is suitable for the case of God:

1.2.1.1. Analysing God's necessary existence via counterpart theory appears unlikely to succeed, given that this theory is typically employed to make claims about objects situated within space-time. Even if it is presumed that God is a spatiotemporal being, the problem persists in that God having a counterpart in every world leads to a form of polytheism;

1.2.1.2. If God's necessity is explained by suggesting that God is a composite individual made up of god-like beings existing in each world as his parts, this infringes upon the notion of God's absolute unity;

1.2.1.3. Interpreting God's necessity through the principle of transworld identity (which posits that an individual can exist in more than one possible world) also presents difficulties. Within modal concretism, this principle is used to analyse claims about objects that lack accidental intrinsic properties; however, it is debatable whether this applies to God. Furthermore, if God exists in all worlds and is causally related to each of them, all worlds become interconnected (through God as their common part), which violates one of the fundamental tenets of modal concretism, stating that there are no causal relations between worlds;

1.2.1.4. On the other hand, if God's necessity is accounted for not in terms of his existence *within* every world but in terms of his existence *from the standpoint* of every world, it follows that God cannot create or enter into any other causal relations, as modal concretism only permits such relations to hold within worlds;

1.2.2. Even if the issue discussed in point 1.2.1 were resolved, two more obstacles would persist, reinforcing the point that theism and modal concretism are deeply incompatible. The first of these is the problem of necessary creation. If we take that God is the creator of all concrete entities, we must also assume that he created the concrete possible worlds. Efforts to reconcile this with the principle of the necessary existence of worlds lead to the conclusion that God created them out of necessity. The idea of necessary creation, however, is at odds with the belief that God creates freely, i.e., maintaining the option not to create;

1.2.3. Another difficulty is that attempts to combine modal concretism with theism intensify the problem of evil. In this scenario, God is depicted not merely as the creator of one world but of many worlds teeming with suffering. This is especially hard to reconcile with the conception of God as an omnipotent and morally perfect being. The problem is further complicated by the fact that worlds are regarded as real, concrete entities, within which real individuals suffer;

1.3. Modal fictionalism fails to establish the real (i.e., non-fictional) existence of God. In this theory, modal statements are construed as statements about the fiction of possible worlds; hence, the conclusion of the modal ontological argument, asserting the necessary existence of God, is accordingly understood as the claim that, according to the fiction of possible worlds, God exists in every possible world. Such a claim is insufficient to show that God exists beyond the confines of fiction, suggesting that modal fictionalism is ill-suited for interpreting the modal ontological argument aimed at proving God's real (i.e., non-fictional) existence;

2. Modalism represents a more advantageous approach for interpreting the modal ontological argument, given that:

2.1. It supports a formal derivation of God's necessary existence through a standard syntactic proof equipped with possibility and necessity operators;

2.2. A cohesive account combining modalism with the core tenets of theism can be offered. Before elaborating on this proposal, the work presented a more detailed conception of modalism itself, based on the following claims:

2.2.1. Modalities are articulated in terms of *modal truths*. There is no commitment to the existence of abstract modal entities (such as modal facts, modal propositions, or modal properties). Modal truths are treated as true modal sentences and beliefs; it is held that they do not enjoy ontological status outside language and mind;

2.2.2. Although modal truths are not grounded in entities external to language and mind, they are claimed to be objective in the sense that they describe reality as it is, thereby conveying what is universally true;

2.3. Building on the previously outlined conception of modalism, this study has proposed a new theory – *theistic modalism* – intended to reconcile theism and modalism, wherein:

2.3.1. Modalism is integrated with theistic creationism – it is suggested that God created the world in such a way that primitive modal truths hold within it. By rejecting the assumption of independently existing modal entities – such as possible worlds, modal facts, or modal properties – the challenge of reconciling their existence with that of God is avoided;

2.3.2. It is asserted that modal truths regarding God are not within his own control. The argument follows that if God could change (modal) truths about himself, he could easily turn into, say, someone evil or irrational. Such a possibility would not only prevent a coherent concept of God from being formulated but would also run counter to the Christian portrayal of God as a being essentially characterised by rationality and moral perfection;

2.3.3. The view that (primitive) modal truths originated alongside the creation of the world is argued to present a challenge, especially with respect to mathematical and logical truths (which are usually considered necessary). It is generally assumed that such truths are not only independent of God's creative (or any other contingent) activity but also, assuming God's perfect rationality, must be part of God's own knowledge prior to and independent of the creation of the world. Therefore:

2.3.3.1. It is proposed that the thesis discussed in 2.3.1 does not require us to deny that at least some modal truths are known to God prior to and independently of the creation of the world. More specifically, it is argued that mathematical and logical truths not only characterise the world but are also essential to God's thinking as such. It is suggested that these truths necessarily reside in God's intellect, and that when creating the world, God designs it so that these truths hold in it too;

2.3.3.2. It is indicated that since mathematical and logical truths essentially reside within the intellect of the necessary being – namely, God – they hold independently of any contingent circumstances. As a result, the S5 principle of modal logic (which states that what is necessary is necessarily necessary, and what is possible is necessarily possible) is preserved in relation to these truths;

2.3.3.3. Concerning other modal truths, it is suggested that the S5 principle be maintained by adopting the position that these truths (often implicitly) follow from mathematical and logical principles (and thus also essentially reside in God's intellect). In this manner, the latter acquire the status of fundamental modal truths;

2.3.3.4. It is asserted that modal truths are not created by God, nor can God arbitrarily change their content. This allows the intuition to be upheld that modal – specifically mathematical and logical – truths shape the foundational and invariant structure of rationality. At the same time, God's supremacy is maintained in the sense that it is God who instils modal truths within the world. Furthermore, modal truths remain dependent on God, given that necessary truths are said to require a necessarily existing and perfectly rational being to apprehend them;

2.3.4. It is emphasised that, in order to sidestep the challenges associated with explicating the relationship between God and abstract objects, one should also avoid commitment to the existence of non-modal abstract objects. The claim that such a commitment is avoidable is supported by pointing out philosophical stances that allow for the rejection of the independent ontological status of abstract entities or offer reasons for not positing such entities at all;

2.3.5. It is clarified how the claim that modal truths remain significantly dependent on God does not contradict the modalist thesis regarding their primitiveness:

2.3.5.1. According to modalism, modal truths are irreducible to non-modal truths. However, this does not preclude modalists from seeking an explanation for why modal truths exist at all;

2.3.5.2. Theistic modalism posits that modal truths exist because there is a necessary being – God – whose perfectly rational intellect essentially encompasses them. This explanation of the relationship between God and modal truths is not reductive, as it merely indicates the reason for their existence without implying their reducibility to non-modal truths;

2.3.6. The question is discussed regarding how knowledge of modal truths is possible, given the assumption of their absolute primitiveness:

2.3.6.1. It is stated that within the context of theistic modalism, the issue can be addressed by appealing to mathematical and logical principles. In other words, it is suggested that knowledge of modal truths stems from the correct application of the law of non-contradiction and other fundamental principles of mathematics or logic;

2.3.6.2. Several modalism-friendly strategies are put forward for justifying the modal ontological argument's main premise, which asserts the possibility of God's existence. It is claimed that various views within the epistemology of modality, such as conceivability theories and intuition-based approaches, are well compatible with modalism. Another plausible method is said to be the study of the internal coherence of the concept of God, or a maximally great being. Although it is noted that this approach may be considered insufficient for establishing the real possibility of God's existence, it is asserted that even in this case, it still holds importance, given the principle that conceptual consistency is a necessary condition for possibility;

3. The findings of this study point to several opportunities for future research:

3.1. *Further investigation into theistic modalism*. Despite the central focus on theistic modalism in this dissertation, it is obvious that only a somewhat preliminary version of this theory has been laid out; its further development is a matter for future research. The intersection of modalism and theism, as discussed throughout this work, paves the way for numerous research possibilities, including its application to other prominent issues within the philosophy of religion, such as the nature of omniscience, divine foreknowledge, or the problem of evil, to name just a few. Future research could explore whether theistic modalism can offer fresh and promising insights into these longstanding challenges, suggesting that its relevance may reach much further than covered in this particular work;

3.2. *Comparison with other non-possible worlds theories*. Although this dissertation has been first and foremost dedicated to highlighting the many-sided strengths of modalism, there are other non-possible

worlds theories of modality on the market that may render promising perspectives on the topic at hand. Future research could take these theories – including alternative forms of modal primitivism (such as dispositions or essence-based perspectives) – into account so as to assess their potential to afford viable interpretative bases for the modal ontological argument, while also considering their broader compatibility with theistic commitments, setting aside the argument as such;

3.3. *Historical origins of modalism*. In line with customary explorations of modalism, the dissertation has emphasised the contributions of key figures such as Arthur Prior, Kit Fine, Graeme Forbes, and Christopher Peacocke. Even though modalism as a theory was mainly shaped due to their input, this should not be taken to imply that early expressions or germs of modalist ideas were absent in preceding periods. There remains significant room for future research to provide a detailed historical trajectory of these conceptual roots, aiming for a systematic track of their evolution from ancient and medieval thought up to the present.

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SANTRAUKA

ĮVADAS

Dvidešimtajame amžiuje buvo suformuluotos įtakingos ontologinio Dievo buvimo įrodymo versijos, pagrįstos eksplicitišku modalinių sąvokų vartojimu ir (ar) šiuolaikinės modalinės logikos principais. Tai vadinamieji modaliniai ontologiniai įrodymai, kurių autoriai – tokie mąstytojai kaip Normanas Malcolmas, Charlesas Hartshorne'as, Alvinas Plantinga bei Kurtas Gödelis. Pagrindinė jų ginta mintis yra ta, kad jei Dievo egzistavimas yra *galimas*, tuomet jis turi būti *būtinas* (ir todėl *aktualus*). Šioje disertacijoje išskirtinis dėmesys skiriamas būtent Plantingos pasiūlytam modaliniam ontologiniam įrodymui. Jis laikytinas pamatiniu darbo objektu.

Šiaip ar taip, ontologinių įrodymų ištakos siekia kur kas senesnius laikus. Dar vienuoliktajame amžiuje Anzelmas Kenterberietis veikale *Proslogionas* pateikė samprotavimą, kuriuo siekiama išvesti būtybės, už kurią nieko tobulesnio negalima pamąstyti, egzistavimą. Anzelmas įrodinėjo, jog jei tokia būtybė neegzistuotų, tuomet būtų įmanoma pamąstyti dar tobulesnę būtybę – būtent tokią, už kurią negalima pamąstyti tobulesnės ir kuri *egzistuoja*, – kas yra absurdas. Vadinasi, darytina išvada, jog būtybė, už kurią tobulesnės neįmanoma pamąstyti, turi egzistuoti tikrovėje. Septynioliktajame amžiuje grupę panašių samprotavimų pasiūlė René Descartesas. Penktojoje *Metafizinių apmąstymų* dalyje jis tvirtino, kad mąstyti neegzistuojančią tobuliausią būtybę yra tiek pat prieštaringa kaip įsivaizduoti kalną be slėnio ar trikampį, kurio vidinių kampų suma nėra lygi 180 laipsnių. Šių analogijų tikslas – sutvirtinti tą pačią fundamentalią mintį, jog idėja apie tobuliausią būtybę pati savaime, kai ją nuodugniai apmąstome, yra visiškai pakankama įrodyti tokios būtybės egzistavimą. Kitas svarbus etapas ontologinių įrodymų raidos kontekste sietinas su Gottfriedu Leibnizu, siekusiu patobulinti Descarteso išsakytą požiūrį: Leibnizas pabrėžė, kad pirmausia reikia pademonstruoti pačią tobuliausios būtybės egzistavimo galimybę.

Kertinis visų ontologinių įrodymų metodas yra Dievo egzistavimo grindimas remiantis išimtinai loginiais principais ar konceptualine analize, nesiremiant empiriniais duomenimis. Šiuo atžvilgiu ontologiniai įrodymai atsiskleidžia kaip itin ambicingas filosofinis sumanymas – t. y. įrodyti fundamentaliausios būtybės – Dievo – egzistavimą remiantis vien tik protu, – kuris priskirtinas platesnei racionalizmo tradicijai. Nepaisant įvairios kritikos, išsakytos į empirizmą linkusių mąstytojų, šis metodas ligi šiol išliko vienu pagrindinių Dievo buvimo įrodinėjimo būdų. Kitas svarbus ontologinių įrodymų bruožas yra siekis parodyti būtent tai, kad Dievo, arba tobuliausios

būtybės, buvimo neigimas atveda į prieštaravimus. Kitaip tariant, ontologiniais įrodymais tokios būtybės egzistavimą mėginama įtvirtinti kaip būtiną tiesą. Galiausiai, kaip jau buvo galima suprasti, ontologiniai įrodymai paprastai yra pagrįsti Dievo kaip tobuliausios įmanomos būtybės, arba būtybės, pasižyminčios visais tobulumais, samprata.

Nuo pat tada, kai buvo pirmą kartą preciziškai suformuluotas Anzelmo Kenterberiečio, ontologinis įrodymas tapo didžiulių diskusijų bei ginčų objektu. Kritikos strėlės šį įrodymą pasiekė dar iš Anzelmo amžininko Gaunilono, kuris parodijavo Anzelmo samprotavimą norėdamas parodyti, jog analogiškas mąstymas gali būti pasitelktas įrodinėjant įvairių neegzistuojančių objektų tikrumą. Tomas Akvinietis savo ruožtu atmetė patį principą, jog Dievo egzistavimą įmanoma išvesti iš sąvokos. Immanuelis Kantas, kuris pirmasis pavartojo terminą „ontologinis“ šiam įrodymui apibūdinti, tvirtino, jog tokie įrodymai yra netinkami dėl rėmimosi prielaida, kad egzistavimas yra realus predikatas. Kanto kritika tapo tokia įtakinga, jog daugelį privertė manyti, kad šis įrodymas buvo galutinai įveiktas.

Tačiau tai pasirodė esą netiesa, mat ontologiniai įrodymai niekada taip ir neišnyko iš filosofinio mąstymo lauko, o dvidešimtajame amžiuje įvykusi formaliosios, ypač modalinės, logikos pažanga drauge su galimų pasaulių semantikos išplėtojimu paskatino reikšmingų modalinių ontologinio įrodymo versijų atsiradimą. Pavyzdžiui, remdamasis abstrakčių galimų pasaulių ontologija grįsta modalumų teorija, Plantinga (1974a, 1974b) pasiūlė įrodymą, paremtą prielaida, jog Dievas (arba maksimaliai didi būtybė) egzistuoja bent viename iš galimų pasaulių. Priėmus šią prielaidą ir remiantis įsitvirtinusiais modalinės logikos principais, darytina išvada, kad Dievas egzistuoja visuose galimuose pasauliuose, įskaitant šį, aktualų, pasaulį.

Mąstymo apie modalumus pažanga, kurią leido pasiekti būtent galimų pasaulių semantikos išplėtojimas, galėjo paskatinti daugelį manyti, jog šia semantika grįstos teorinės prieigos yra pranašiausios modalinio ontologinio įrodymo kontekste. Kitaip tariant, būtent tai galėjo nulemti, jog klausimas, kokios modalumų teorijos pagrindu vertėtų interpretuoti šį įrodymą, iš esmės pasiliko diskusijų užribyje. Ši disertacija kaip tik ir yra mėginimas prisidėti prie šios spragos užpildymo bei paliudyti, jog minėtas klausimas nėra nei trivialus, nei juo labiau išspręstas. Šiuo darbu bandoma parodyti, kad tinkamiausia teorija modaliniam ontologiniam įrodymui interpretuoti nėra nei toji, kurią pasirinko pats Plantinga, nei kitos plačiai paplitusios galimų pasaulių teorijos – t. y. modalinis konkretizmas ir modalinis fikcionalizmas. Teigtina, kad kur kas perspektyvesnę alternatyvą šiuo požiūriu siūlo modalizmas – teorija, galimų pasaulių semantikos viešpatavimo laikais palikta modalinės logikos ir modalumų filosofijos užribiuose. Esminis modalizmo

principas yra tas, kad modaliniai operatoriai, tokie kaip „būtina“ ir „galima“, nėra analizuotini remiantis galimų pasaulių semantika; čia laikomasi nuostatos, kad šių operatorių analizė apskritai yra negalima – lygiai kaip ir pačių modalinių tiesų, išreiškiamų pasitelkiant šiuos operatorius. Šioje disertacijoje įrodinėjama, kad nors galimų pasaulių semantika yra plačiai naudojama modalinių sąvokų ir modalinių tiesų raiškai (taip pat ir religijos filosofijos kontekste), modalizmas gali pasiūlyti ženkliai intuityvesnį bei teologiniu požiūriu pranašesnį modalinio ontologinio įrodymo aiškinimo pagrindą.

Nepaisant to, jog čia iškeltas klausimas kol kas nesulaukė itin didelio mokslininkų dėmesio, tvirtintina, jog jo reikšmė svarstomame kontekste yra milžiniška. Jeigu daroma prielaida, kad modalinis ontologinis įrodymas yra patikimas (*sound*), kyla reikmė ištirti, koks yra Dievo egzistavimo santykis su modalumų teorijos, pasirinktos įrodymui formuluoti, principais. Tiksliau tariant, tampa svarbu įvertinti, ar teorinis pagrindas, kuriuo grindžiamas šis įrodymas, yra suderinamas su pamatiniais paties teizmo teiginiais, mat jei įrodymas yra iš tiesų patikimas ir Dievas egzistuoja, įrodymo kontekste pasitelktas modalumų aiškinimas neturėtų prieštarauti jokioms iš Dievo egzistavimo išplaukiančioms išvadoms. Jei tokio pobūdžio dermės užtikrinti neįmanoma, tuomet modalinis ontologinis įrodymas vargiai gali būti laikomas sėkmingu. Būtina ieškoti teorijos, kuri grakščiausiai tenkintų šiuos kriterijus: formaliai grįstų būtiną Dievo egzistavimą bei būtų suderinama su platesniu teistiniu pasaulėvaizdžiu. Ši disertacija visų pirma skirta išryškinti šio anksčiau nepakankamai įvertinto klausimo svarbą.

Darbo tikslas

Šioje disertacijoje nesiekiama atsakyti į klausimą, ar Plantingos modalinio ontologinio įrodymo prielaidos ir todėl (priimant, kad įrodymas pagrįstas (*valid*)) išvada yra teisinga. Tarp pagrindinių disertacijos tikslų nėra ir siekio apginti įrodymą nuo svarbiausios jo požiūriu išsakytos kritikos. Darbe daugiausia remiamasi prielaida, jog įrodymas yra patikimas ir kad Dievas, arba maksimaliai didi būtybė, iš tiesų egzistuoja. Būtent tokios perspektyvos pasirinkimas leidžia atverti kai kuriuos esminius klausimus, tokius kaip tinkamiausios modalumų teorijos šio įrodymo kontekste pasirinkimas.

Nors pats Plantinga savo įrodymą suformulavo remdamasis modalinio abstrakcionizmo – požiūrio, kad galimi pasauliai egzistuoja ir yra abstrakčios prigimties objektai – principais, šioje disertacijoje bus teigiama, kad modalinio ontologinio įrodymo interpretavimas per galimų pasaulių teorijų prizmę kelia sudėtingų iššūkių, ypač siekiant suderinti galimų pasaulių

ontologiją su teistine ontologija. Pagrindinis tikslas bus pagrįsti pastarąjį teiginį bei pasiūlyti alternatyvią įrodymo interpretaciją, grįstą modalizmu. Tikslo bus siekiama šiais pagrindiniais žingsniais:

1. Atlikti išsamią modalinio ontologinio įrodymo interpretacijų, grįstų pagrindinėmis galimų pasaulių teorijomis – modaliniu abstrakcionizmu, modaliniu konkretizmu bei modaliniu fikcionalizmu – analizę. Bus siekiama parodyti, kad kiekviena iš šių teorijų pasižymi vidiniais keblumais ir yra problemiška modalinio ontologinio įrodymo kontekste, nes arba yra sunkiai suderinama su teizmo pasaulėvaizdžiu, arba net ir formaliai negrindžia įrodymo išvados.
2. Kaip alternatyvą pasiūlyti modalizmu paremtą modalinio ontologinio įrodymo interpretaciją. Pirmiausia bus nusakytos kertinės modalizmo teorinės gairės ir trumpai apžvelgtas jo vystymasis. Toliau bus išnagrinėti svarbiausi šiai teorijai keliami priekaištai bei parodyta, jog nei vienas iš jų nėra neginčijamas. Tai padarius, bus pereita prie modalizmu grįstos modalinio ontologinio įrodymo interpretacijos pateikties. Parodžius, kaip įrodymas gali būti formaliai išdėstytas modalizmo teorijos kontekste, bus pateiktas paaiškinimas, kaip ši teorija derintina su teistine metafizika. Šie svarstymai atves prie *teistinio modalizmo* teorijos, iliustruosiančios teizmo ir modalizmo dermės galimybę, sukūrimo.

Ginami teiginiai

Disertacijoje įrodinėjama, kad modalizmas ne tik formaliai grindžia būtiną Dievo egzistavimą, bet ir yra suderinamas su esminiais teizmo principais (tokiais kaip Dievo laisvė, savarankiškas ir nuo nieko nepriklausomas egzistavimas bei viršenybė visų esinių atžvilgiu), kas liudija šios teorijos tinkamumą būti interpretaciniu modalinio ontologinio įrodymo pagrindu bei rodo, jog šiuo atžvilgiu ji pranašesnė prieš galimų pasaulių teorijas – modalinį abstrakcionizmą, modalinį konkretizmą ir modalinį fikcionalizmą, – iš kurių kiekviena netenkina bent vieno iš nurodytų kriterijų (t. y. formaliai grįsti būtiną Dievo egzistavimą bei derėti su esminiais teizmo principais).

Tiksliau tariant, siekiama pagrįsti šiuos teiginius:

1. Galimų pasaulių teorijos – modalinis abstrakcionizmas, modalinis konkretizmas ir modalinis fikcionalizmas – yra netinkamos modaliniam ontologiniam įrodymui interpretuoti, nes:
    1.1. Nors modalinis abstrakcionizmas – bent jau Plantingos ginama jo versija – formaliai grindžia įrodymo išvadą, jis išlieka problemiškas tuo požiūriu, jog abstrakčių galimų pasaulių egzistavimą sunku sutaikyti su Dievo egzistavimu;

1.2. Esama pagrindo manyti, jog modalinis konkretizmas yra nesuderinamas su modalinio ontologinio įrodymo išvada, teigiančia būtiną Dievo egzistavimą. Negana to, mėginimai susieti modalinį konkretizmą su teistine metafizika susiduria su būtino kūrimo problema bei dar labiau pagilina blogio problemą;

1.3. Modalinis fikcionalizmas negrindžia tikro (t. y. nefikcinio) Dievo egzistavimo. Ši teorija parodo tik tai, kad Dievas egzistuoja galimų pasaulių fikcijos rėmuose.

2. Modalizmas yra tinkamesnė teorija modalinio ontologinio įrodymo interpretavimui, nes:

2.1. Ši teorija įgalina formalų Dievo būtino egzistavimo grindimą naudojantis sintaksinėmis modalinės logikos taisyklėmis, kur pasitelkiami galimybės ir būtinybės operatoriai;

2.2. Įmanoma pasiūlyti nuoseklų modalizmo ir teizmo suderinamumo aiškinimą. Čia siūloma *teistinio modalizmo* teorija, kurioje:

2.2.1. Modalizmas susiejamas su teistiniu kreacionizmu – keliamas teiginys, jog Dievas sukūrė pasaulį taip, jog jame galioja neredukuojamos modalinės tiesos;

2.2.2. Pamatinis modalinės logikos S5 principas yra išlaikomas priimant nuostatą, kad modalinės tiesos yra ne tik būdingos pasauliui, bet ir esmingos būtinos būtybės – Dievo – mąstymui;

2.2.3. Nors teigiama, kad modalinės tiesos nėra sukurtos Dievo ir kad Dievas negali savavališkai pakeisti jų turinio, Dievo viršenybė išsaugoma tuo požiūriu, jog būtent Dievas užtikrina modalinių tiesų galiojimą pasaulyje, be to, jų egzistavimas išlieka fundamentaliai susijęs su tobulai racionaliu Dievo intelektu;

2.2.4. Nesiūloma priimti daug ir sudėtingų ontologinių įsipareigojimų. Nereikalaujamas nei modalinių, nei nemodalinių abstrakčių objektų egzistavimas.

Tyrimo metodas

Disertacijoje remiamasi vyraujančia krikščioniškąja Dievo samprata, atspindinčia tradicinę ir plačiai priimtą interpretaciją krikščioniškojoje teologijoje. Čia esminė yra vieno Dievo, kuris yra visagalis, visažinis, visur esantis, moraliai tobulas, nematerialus, amžinas, transcendentiškas pasaulio atžvilgiu, visiškai laisvas, sau pakankamas, niekam nepavaldus ir valdantis visa, kas egzistuoja, asmuo, samprata. Taip pat laikoma, kad Dievas negali

egzistuoti atsitiktinai, o tik būtinai. Šioje disertacijoje ypatingas dėmesys skiriamas Plantingos pateiktam dieviškųjų atributų aiškinimui.[274]

Kalbant apie modalumų tyrimą, reikia pasakyti, kad disertacijoje domimasi išimtinai aletiniais modalumais. Aletiniai modalumai išreiškia objektyvias tiesas apie tai, kas yra galima arba būtina. Episteminiai ar deontiniai modalumai, atitinkamai susiję su žinojimu bei privalėjimu, yra už šio tyrimo ribų. Aletinių modalumų kontekste ypatingas dėmesys skiriamas loginiams (susijusiems su tuo, kas yra galima arba būtina pagal logikos principus) ir metafiziniams (nagrinėjantiems tai, kas yra galima arba būtina pačia plačiausia ir fundamentaliausia prasme) modalumams. Apskritai kalbant, disertacijoje laikomasi standartinio aletinių modalumų skirstymo į loginius, fizinius bei metafizinius, dėl jų aktualumo modalinio ontologinio įrodymo kontekste ypač susitelkiant į pastaruosius.

Disertacijoje taip pat taikomas metodologinis principas, integruojantis analitinę bei istorinę perspektyvas. Tai reiškia, jog svarstymai remiasi ne tik šiuolaikinės analitinės filosofijos darbais (ypač religijos bei modalumų srityse), bet ir Viduramžių mąstytojų įžvalgomis. Darbe vystoma teistinio modalizmo teorija yra tiesiogiai paveikta šio filosofinio palikimo: pavyzdžiui, plėtojama dar Augustino formuluota nuostata, jog būtinos tiesos privalo glūdėti tobulos būtybės – Dievo – intelekte. Teigiama, kad būtinoms tiesoms reikia būtinai egzistuojančios ir tobulai racionalios būtybės tam, kad jas mąstytų, ir kad tokia būtybe gali būti tik Dievas. Atkartojama tokių mąstytojų kaip Tomas Akvinietis filosofijai būdinga Dievo kaip esmingai racionalios būtybės, savo ruožtu užtikrinančios ir paties pasaulio principinį protingumą, idėja.

Kritikuojant modalinio ontologinio įrodymo interpretacijas, grįstas modaliniu abstrakcionizmu, disertacijoje nuosekliai remiamasi Williamo Craigo (2014b, 2016b) veikalais. Pritaikomi Craigo argumentai, grindžiantys mintį, jog abstraktūs esiniai nėra tapatintini su Dievo mintimis ar jo kūriniais, taip pat įžvalgos, atskleidžiančios tezės apie nuo Dievo nepriklausomą abstrakčių objektų egzistavimą problemiškumą. Įrodinėjant modalinio konkretizmo netinkamumą būti interpretaciniu modalinio ontologinio įrodymo pagrindu reikšmingiausi yra Paulo Sheehy (2006, 2009), Richardo Daviso (2008, 2009), Chado Vance'o (2016) ir Matthew Collier (2019) darbai; juose parodomi esminiai iššūkiai, kuriuos kelia mėginimai suderinti Dievo egzistavimą su konkrečių galimų pasaulių egzistavimu. Būtina pažymėti, kad esminį vaidmenį kritikuojant modaliniu fikcionalizmu paremtą

[274] 1.1.1.1 disertacijos dalyje pateikiamas išsamesnis Dievo sampratos, kuria remiamasi šiame darbe, išdėstymas.

modalinio ontologinio įrodymo interpretaciją atlieka Tedo Parento (2016) tyrimas: būtent jame pirmą kartą buvo suformuluota tezė, jog, kada yra interpretuojamas modalinio fikcionalizmo perspektyvoje, modalinis ontologinis įrodymas negrindžia realaus (t. y. nefikcinio) Dievo egzistavimo. Šios nuostatos laikomasi ir šioje disertacijoje.

Darbo aktualumas

Jau buvo sakyta, kad modalinio ontologinio įrodymo interpretacijai tinkam(iausi)os modalumų teorijos pasirinkimo problema ligi šiol buvo veikiau apleista. Tačiau čia esama išimčių, tarp kurių paminėtini Daviso (2008), Parento (2016) bei Joshua Sijuwade'ės (2023) darbai. Daviso tyrime šios problemos svarba netiesiogiai iškeliama parodant, kad modalinis ontologinis įrodymas vargiai gali būti grįstas modalinio konkretizmo postulatais. Parento darbe savo ruožtu pastebima, kad jei įrodymas interpretuojamas per modalinio fikcionalizmo prizmę, tuomet Dievo egzistavimas gali būti grindžiamas nebent fikcinėje (galimų pasaulių) struktūroje. Sijuwade'ė, kita vertus, įrodinėja, kad modalinis konkretizmas gali pasiūlyti perspektyvų modalinio ontologinio įrodymo perinterpretavimą.

Svarbu tai, kad nors klausimas apie tai, kokia modalumų teorija yra tinkamiausia minėto įrodymo kontekste, nebuvo nagrinėtas plačiai, tai nereiškia, kad nebuvo kelta bendresnė teizmo bei šiuolaikinių modalumų teorijų dermės problema. Šiuo atžvilgiu ypač svarbus yra Sarah Adams (2015) tyrimas: jame aiškinamasi, kaip su teistiniu pasaulėvaizdžiu suderinami šie požiūriai: 1) teiginys, jog galimi pasauliai egzistuoja Dievo sąmonėje, 2) modalinis konkretizmas ir 3) Simono Blackburne'o (1984: 5–7 sk.; 1993: 52–74) ginama modalinio projektyvizmo – teorijos, teigiančios, jog modalinės tiesos neegzistuoja nepriklausomai nuo mūsų sąmonių ir atspindi mūsų subjektyvias nuostatas, – forma.

Sprendžiant metafizines problemas, iškylančias mėginant suderinti teizmą su galimų pasaulių teorijomis, aktualūs tampa įvairūs specifiniai klausimai, tokie kaip Dievo santykis su abstrakčiais galimais pasauliais (bei kitais abstrakčiais esiniais). Dievo ir abstrakčių objektų santykio problema visapusiškai nagrinėjama Paulo Gouldo sudarytame rinkinyje *Beyond the Control of God? Six Views on the Problem of God and Abstract Objects* (2014), kur pateikiamas išsamus konkuruojančių pozicijų pristatymas bei kritinė jų analizė. Šiame kontekste taip pat itin reikšmingi Craigo (2016b, 2017) darbai, kuriuose nagrinėjami iššūkiai, kylantys bandant suderinti Dievo egzistavimą su abstrakčių objektų egzistavimu. Pakankamai išsamiai tirtas principinio teizmo ir modalinio konkretizmo suderinamumo klausimas; čia

paminėtina autorių, teigiančių, jog šios pozicijos yra suderinamos (Oppy 1993; Cameron 2009; Almeida 2017a, 2017b; Collier 2021), ir jų kritikų (Sheehy 2006, 2009; Davis 2008, 2009; Vance 2016; Collier 2019) kontroversija.

Pats Plantingos modalinis ontologinis įrodymas taip pat yra tebevykstančių filosofinių debatų objektas. Tarp įrodymą kritikuojančių darbų paminėtini van Inwagen 1977, 2009, 2018; Friedman 1980; Grim 1981; Tooley 1981; Mackie 1982; Kane 1984; McGrath 1990; Forgie 1991; Sennett 1991; Chandler 1993; Oppy 1995; Harwood 1999; Rowe 2009; Sobel 2009; Chlastawa 2012; Engel 2020; Schmid 2023. Priešingą požiūrį šioje kontroversijoje atspindi tyrimai, kuriuose siekiama sustiprinti modalinį ontologinį įrodymą arba apginti jį nuo kritikos: Morris 1985; Vallicella 1993; Pruss 2010; Pruss, Rasmussen 2018; Rasmussen 2018; Collin 2022; Updike 2024.

Ši disertacija reikšminga ne tik religijos filosofijos, bet ir analitinės modalumų filosofijos kontekste. Šiandien modalumų – ypač metafizinės jų interpretacijos – tyrimai atlieka vieną svarbiausių vaidmenų metafizinių diskusijų plotmėje. Gerai žinoma tai, kad praėjusiame amžiuje susidomėjimas filosofine modalumų analize buvo ženkliai sumažėjęs dėl Willardo Van Ormano Quine'o įtakos. Quine'o skeptiškas požiūris į modalines sąvokas lėmė bendresnį skeptišką ir atsargų analitikų požiūrį. Vis dėlto netrukus po to filosofinis susidomėjimas modalumais ženkliai išaugo: Saulo Kripke'ės ir kitų logikų pastangomis sukurta galimų pasaulių semantika pasiūlė aiškų ir galingą įrankį modaliniams teiginiams suprasti ir analizuoti. Šie teoriniai laimėjimai ne tik leido didele dalimi atremti Quine'o išsakytą kritiką, bet ir atvėrė daugybę naujų kelių nagrinėti modalinių sąvokų prigimtį. Šiandieną modalumų analizė neabejotinai yra klestinti ir įtakinga metafizinių tyrimų sritis.[275]

Nors disertacijoje galimų pasaulių teorijos – konkrečiai modalinio ontologinio įrodymo kontekste – vertinamos kritiškai, šiuo darbu vis tiek įsitraukiama į su jomis susijusius svarstymus. Tuo pat metu disertacija išsamiai nagrinėja teorinius modalizmo principus. Nepaisant to, jog šiandien tai – veikiau mažumos pozicija, modalizmas aiškiai yra pripažįstamas kaip reikšminga modalumų aiškinimo teorija, ką iliustruoja jam skirti apžvalginiai skyriai tokiuose tyrimuose kaip Andrea Borghini *A Critical Introduction to*

[275] Tai žymi reikšmingą pokytį pačioje analitinėje filosofijoje: užuot buvusi nustumta į svarstomų problemų užribį, metafizinė problematika dabar tapo analitikų pripažintu tyrimų lauku (žr. Christias 2018: 125).

the Metaphysics of Modality (2016) bei Otávio Bueno ir Scotto A. Shalkowskio sudarytas rinkinys *The Routledge Handbook of Modality* (2021).

Kalbant apie Lietuvos autorių mokslinius darbus, juose analitinės filosofijos tyrimai pirmiausia apima logikos ir kalbos filosofijos problemas. Šioje srityje reikšmingi Rolando Pavilionio (1975, 1976, 1981) darbai. Logikos istorijos klausimus nagrinėja Romanas Plečkaitis (1965), o logikos mokslo raida Lietuvoje aptariama kituose šio mokslininko darbuose (1962, 1963b, 2007). Modalinei logikai skirtas Plečkaičio (1963a) tyrimas yra vienas pirmųjų šioje srityje Lietuvoje. Analitinės filosofijos vystymąsi Lietuvoje apžvelgė Jonas Dagys ir Evaldas Nekrašas (2010). Dauguma analitinės filosofijos tematikos darbų Lietuvoje yra būtent Dagio (2006a, 2006b, 2007, 2008a, 2008b, 2010, 2012) tyrimai. Tarp kitų reikšmingų indėlių minėtini Mindaugo Gilaičio (2015, 2017, 2022) darbai. Dagys (2020b) taip pat analizavo ankstyvosios krikščionybės santykį su logikos istorija. Gottlobo Frege's filosofiją nagrinėjo Dagys (2020a) bei Albinas A. Plėšnys ir Marius Povilas Šaulauskas (2017). Jeano Buridano modalinę silogistiką tyrė Dagys, Živilė Pabijutaitė ir Haroldas Giedra (2022a, 2022b). Kai kuriuos svarbius krikščioniškosios filosofijos aspektus, susijusius su kūno ir sielos dualumu, svarstė Jonas Čiurlionis (2016).

Tiek klasikinės, tiek modalinės ontologinio įrodymo versijos aptariamos Naglio Kardelio veikale *Pažinti ar suprasti? Humanistikos ir gamtotyros akiračiai* (2008). Konkrečiai Anzelmo Kenterberiečio formuluotė buvo nagrinėta Dalios Marijos Stančienės (2007), Audronės Dumčienės (2012) bei Tomo Sauliaus (2012) darbuose. Descarteso ontologinis įrodymas analizuojamas Skirmanto Jankausko (2004) tyrime, o Gödelio modalinė versija – šio darbo autorės bei Pabijutaitės (2024) bendrame straipsnyje. Tarp naujausių tyrimų, susijusių su šiuolaikine modaline logika ir (arba) analitine modalumų filosofija, paminėtini Pranciškaus Griciaus (2021, 2022) ir disertacijos autorės (2022, 2024) darbai. Daugelis esminių modalinės logikos sintaksės bei galimų pasaulių semantikos bruožų – tiesa, temporaliniame kontekste – yra nagrinėjimai Pabijutaitės daktaro disertacijoje (2021). Visai neseniai Gricius (2023) pateikė Kripke'ės veikalo „Semantical Considerations on Modal Logic" vertimą į lietuvių kalbą.

Darbo naujumas

Egzistuojančius mokslinius tyrimus ši disertacija praturtina trimis pagrindiniais aspektais. Pirma, pats keliamas klausimas – t. y. kokios modalumų teorijos pagrindu derėtų interpretuoti modalinį ontologinį įrodymą – yra sąlyginai naujas ir menkai tyrinėtas. Nors dėmesys į šią problemą jau

buvo atkreiptas Daviso (2008), Parento (2016) ir Sijuwade'ės (2023) straipsniuose, tokio tipo darbų vis dar yra labai mažai. Be to, kiekviename iš minėtų tyrimų analizuojamas tik vienos modalumų teorijos ryšys su modaliniu ontologiniu įrodymu, tačiau bendresnis klausimas apie tai, kaip skirtingos prieigos prie modalumų klausimo gali paveikti šį įrodymą, tinkamai išnagrinėtas nebuvo. Pateikdama išsamią pagrindinių galimų pasaulių teorijų (modalinio abstrakcionizmo, modalinio konkretizmo ir modalinio fikcionalizmo) analizę bei pasiūlydama modalizmu grįstą alternatyvą, ši disertacija pirmą kartą sistemingai sprendžia šią problemą.

Antra, disertacijoje pateikiamos originalios įžvalgos arba sustiprinamos ir toliau vystomos jau egzistuojančios samprotavimų kryptys, reikšmingos bent keliose srityse – pavyzdžiui, svarstant Dievo ir abstrakčių objektų santykio arba teizmo ir modalinio konkretizmo dermės klausimus. Nuodugniai ir visapusiškai ginamas modalizmas, plėtojami mėginimai atremti pagrindinius šiai teorijai keliamus priekaištus. Kritikuodamas tris minėtas galimų pasaulių teorijas bei siūlydamas modalizmą kaip priimtiną alternatyvą, šis darbas stiprina bendresnę tezę, jog modalizmas pateikia intuityvų ir pagrįstą galimybės bei būtinybės aiškinimą.

Galiausiai, esminis disertacijos indėlis yra naujos teorijos – *teistinio modalizmo* – sukūrimas, žymintis pirmąjį mėginimą derinti teizmo ir modalizmo teorines prielaidas.[276] Modalizmo tezė, jog modalinės tiesos (išreiškiamos per frazes „Galima, kad...“ ir „Būtina, kad...“) turi savarankišką prigimtį ir yra neredukuojamos (t. y. nesuvedamos į jokias kitas tiesas), čia susiejama su teistiniu kreaconizmu: teigiama, kad Dievas sukūrė pasaulį taip, jog jame galioja būtent tokios, t. y. neredukuojamos, modalinės tiesos. Modalinės logikos S5 principas, teigiantis, kad tai, kas būtina, yra būtinai būtina, o tai, kas galima – būtinai galima, išsaugomas laikantis nuostatos, jog tiesos apie galimybę ir būtinybę ne tik yra būdingos pasauliui, bet ir esmingai glūdi būtinos būtybės – Dievo – intelekte. Tai leidžia tvirtinti, jog modalinės tiesos galioja nepriklausomai nuo jokių atsitiktinių aplinkybių. Nors teigiama, jog Dievas nekuria modalinių tiesų ir negali pakeisti jų turinio, Dievo viršenybė yra išsaugoma tuo požiūriu, kad būtent Dievas užtikrina šių tiesų galiojimą pasaulyje ir kad jos išlieka pamatiškai surištos su Dievo intelektu; vadovaujamasi principu, kad būtinoms tiesoms reikia būtinai egzistuojančios ir tobulai racionalios būtybės tam, kad jas mąstytų. Žinoma, ši teorija

[276] Nors panašus terminas – „teistinis modalistas“ – jau buvo pavartotas Grahamo Oppy (1993: 19) tyrime, ten jis vartojamas kita prasme. Oppy straipsnyje šis terminas nesiejamas su teizmo ir modalizmo derinimu. Atrodo, jog Oppy vartoja šį terminą apibūdinti teistui, kuris pasitelkia modalinės logikos priemones Dievo būtinybei išreikšti, tačiau neįsipareigoja nei vienai konkrečiai modalumų teorijai.

neabejotinai turi savo idėjinius pirmtakus. Kaip jau buvo sakyta, ji yra tiesiogiai paveikta, pavyzdžiui, dar Augustino formuluotos nuostatos, jog būtinos tiesos privalo glūdėti tobulos būtybės, arba Dievo, intelekte. Vis dėlto pats sumanymas derinti modalizmą su teizmu yra naujas. Kaip nurodoma Borghini 2016: 75, modalizmas kaip teorija aiškiai susiformavo tik sulig kvantorinės modalinės logikos atsiradimu. Nuo to laiko užmojų susieti šią teoriją su teistine metafizika nebuvo. Taigi šiuo požiūriu modalizmo derinimas su teistine metafizika siūlomas pirmą kartą.

Disertacijos struktūra

Disertaciją sudaro trys skyriai. Kiekvienas iš jų prisideda prie darbo tezės pagrindimo:

1. Pirmasis skyrius skirtas platesniam disertacijoje svarstomos problemos išaiškinimui. Pirmiausia čia nuskaidrinamos esminės sąvokos ir teoriniai tyrimo pagrindai. Aptariama Dievo samprata, skirtingi modalumų tipai bei pamatiniai galimų pasaulių semantikos principai. Vėliau analizuojama šia semantika pagrįsta Plantingos modalumų teorija bei išsamiai pristatomas modalinis ontologinis įrodymas. Skyrius užbaigiamas aiškiai suformuluojant problemą, kurios sprendimui skirta disertacija.
2. Antrajame skyriuje pateikiama išsami galimų pasaulių teorijomis grįstų modalinio ontologinio įrodymo interpretacijų kritika. Nagrinėjamos trys pagrindinės galimų pasaulių teorijos: modalinis abstrakcionizmas, modalinis konkretizmas ir modalinis fikcionalizmas. Pirmiausia apžvelgiami pamatiniai kiekvienos teorijos bruožai bei trūkumai. Tuomet įvertinama, kodėl šios teorijos nėra tinkamos modalinio ontologinio įrodymo interpretavimui.
3. Trečiajame ir paskutiniame darbo skyriuje pristatoma modalizmu grįsta modalinio ontologinio įrodymo versija. Čia pirmiausia detaliai aptariami kertiniai modalizmo bruožai ir atsakoma į svarbiausią šios teorijos atžvilgiu išsakomą kritiką. Vėliau pasiūloma modalizmo principais paremta formali modalinio ontologinio įrodymo pateiktis. Galiausiai tiriama, kaip modalizmas gali būti derinamas su esminiais teistinės metafizikos teiginiais, taip suformuluojama teistinio modalizmo teorija. Dėstymas užbaigiamas atsakymu į keletą siūlomai interpretacijai numatomų priekaištų.

IŠVADOS

1. Galimų pasaulių teorijos – modalinis abstrakcionizmas, modalinis konkretizmas ir modalinis fikcionalizmas – yra netinkamos modaliniam ontologiniam įrodymui interpretuoti, nes:
   1.1. Nors modalinis abstrakcionizmas – bent jau Plantingos ginama jo versija – formaliai grindžia įrodymo išvadą, jis išlieka problemiškas tuo požiūriu, jog abstrakčių galimų pasaulių egzistavimą sunku sutaikyti su Dievo egzistavimu. Darbe aptarti trys būdai, kuriais mėginama tai padaryti, ir visi trys įvertinti kaip problemiški:
      1.1.1. Pirmasis būdas – tai teigti, jog abstraktūs galimi pasauliai (ir kiti abstraktūs objektai) yra tapatūs Dievo mintims. Čia išskirti tokie pagrindiniai iššūkiai:
         1.1.1.1. Dievas paprastai laikomas konkrečiu objektu ir natūralu manyti, jog jo mintys taip pat turėtų būti traktuojamos kaip konkretūs esiniai. Vadinasi, sutapatinant abstrakčius objektus su Dievo mintimis, paneigiamas pats principas, jog galimi pasauliai ir kiti panašūs esiniai yra abstraktūs, – t. y. toks požiūris atveda į antirealizmą pačių abstrakčių objektų atžvilgiu;
         1.1.1.2. Sudėtinga pagrįsti patį principą, kaip abstraktūs objektai gali būti tapatinami su Dievo mintimis, ypač jei laikomasi nuostatos, kad Dievo mintis apie tam tikrą abstraktų objektą yra mintis *apie* jį. Įprastai teigiant, kad *x* yra apie *y*, numanoma, kad *x* ir *y* yra *skirtingi* objektai;
         1.1.1.3. Jeigu abstraktūs esiniai laikomi būtinai egzistuojančiais ir tapatinami su Dievo mintimis, tai atveda prie požiūrio, jog mąstyti šias mintis Dievui privalu. Šios pozicijos šalininkai nepateikia teologinio paaiškinimo, kodėl taip turėtų būti;
      1.1.2. Antrasis būdas yra teigti, kad abstraktūs galimi pasauliai (ir kiti abstraktūs objektai) yra Dievo kūriniai. Čia išanalizuotos dvi pagrindinės tokio požiūrio variacijos – nuostata, kad Dievas sukuria abstrakčius esinius per konkretaus pasaulio sukūrimą (ir kad abstraktūs objektai egzistuoja jame), bei manymas, kad Dievas sukuria abstrakčius objektus per savo intelekto veiklą (ir kad

abstraktūs objektai egzistuoja Dievo sąmonėje, nepriklausomai nuo konkretaus pasaulio):

1.1.2.1. Pirmasis požiūris problemiškas tuo, kad teigia, jog tiek Dievo atžvilgiu, tiek kūrimo kontekste neegzistuoja jokie modaliniai faktai ir modalinės skirtys. Tai neleidžia išreikšti ne tik minties, jog pasaulio egzistavimas yra atsitiktinis, bet ir tokių teologiškai reikšmingų modalinių teiginių kaip tas, kad Dievas yra būtinai egzistuojanti būtybė;

1.1.2.2. Antroji minėta pozicija atrodo vidujai prieštaringa tuo požiūriu, jog implikuoja, kad abstrakčių esinių kūrimas yra nesaistomas modalinių faktų, bet kartu deklaruoja, jog šiuos esinius Dievas kuria būtinai. Paskirai šie teiginiai taip pat problemiški. Pirmasis iš jų, vėlgi, veda į modalinių skirčių (abstrakčių objektų kontekste) griūtį, o antrasis atrodo nesuderinamas su krikščioniškąja kūrimo samprata, pagal kurią Dievas kuria laisvai, t. y. nesaistomas būtinybės;

1.1.3. Trečiasis būdas – tai teigti, kad abstraktūs galimi pasauliai (ir kiti abstraktūs objektai) egzistuoja nepriklausomai nuo Dievo ir kad tai neprieštarauja teizmui, nes abstraktūs esiniai egzistuoja būtinai, o būtinybė iš principo negali būti paaiškinta ir nevaržo nei Dievo, nei jokios kitos būtybės. Tokiu atveju susiduriama su šiais esminiais iššūkiais:

1.1.3.1. Nurodytas argumentas neišsprendžia problemos, nes būtinybė kaip tokia nėra tapati būtinai egzistuojantiems *objektams*. Problemą kelia būtent teiginys, kad esama *objektų*, egzistuojančių nepriklausomai nuo Dievo;

1.1.3.2. Jei abstraktūs objektai egzistuoja nepriklausomai nuo Dievo, tai reiškia, jog Dievas neturi viršenybės visų esinių atžvilgiu, kas sudaro keblumų teistiniam pasaulėvaizdžiui;

1.2. Mėginant interpretuoti modalinį ontologinį įrodymą modalinio konkretizmo perspektyvoje, susiduriama su šiomis problemomis:

1.2.1. Esama pagrindo manyti, jog modalinis konkretizmas yra nesuderinamas su modalinio ontologinio įrodymo išvada, teigiančia būtiną Dievo egzistavimą, kas išsyk liudija modalinio konkretizmo netinkamumą būti interpretaciniu modalinio ontologinio įrodymo pagrindu. Tai grindžiama

tuo, kad nei vienas iš būdų, kuriais modalinio konkretizmo kontekste interpretuojamas esinių (būtinas) egzistavimas, neatrodo tinkamas Dievo atveju:

1.2.1.1. Mėginimai aiškinti Dievo būtiną egzistavimą per antrininkų teoriją atrodo neperspektyvūs, nes ši teorija paprastai pasitelkiama formuluoti teiginiams apie erdvėlaikyje egzistuojančius objektus. Net jei priimama prielaida, jog Dievas yra vienas iš tokių objektų, problema išlieka: teiginys, kad kiekviename pasaulyje Dievas turi po antrininką, veda į politeizmą;

1.2.1.2. Jeigu Dievo būtinumas aiškinamas per nuostatą, kad Dievas yra sudėtinė būtybė, sudaryta iš kiekviename pasaulyje egzistuojančių dieviškų būtybių, tai pažeidžia Dievo vientisumo principą;

1.2.1.3. Dievo būtinumo interpretavimas pasitelkiant tarppasaulinės tapatybės principą (nuostatą, jog vienas ir tas pats individas gali egzistuoti daugiau nei viename galimame pasaulyje) taip pat susiduria su sunkumais. Modalinio konkretizmo kontekste šis principas taikomas analizuoti teiginiams apie objektus, neturinčius vidinių savybių, kurios jiems būtų atsitiktinės. Tačiau nėra akivaidu, kad Dievas neturi tokių savybių. Be to, jei Dievas egzistuoja visuose pasauliuose ir yra priežastiniais ryšiais saistomas su kiekvienu iš jų, visi pasauliai tampa tarpusavyje susieti (per Dievą kaip bendrą jų dalį), kas pažeidžia vieną pamatinių modalino konkretizmo nuostatų, jog priežastiniai ryšiai pasaulių tarpusavyje nesieja;

1.2.1.4. Kita vertus, jeigu Dievo būtinumas aiškinamas ne per jo egzistavimą kiekvieno iš pasaulių viduje, o per jo egzistavimą kiekvieno iš pasaulių požiūriu (*from the standpoint of every world*), tai implikuoja, jog Dievas negali kurti ar dalyvauti jokiuose kituose priežastiniuose ryšiuose (mat modalinio konkretizmo kontekste priežastiniai ryšiai galioja tik pasaulių viduje);

1.2.2. Net jeigu pavyktų išspręsti 1.2.1 punkte minėtą problemą, išliktų dar du keblumai, grindžiantys principinį teizmo ir

modalinio konkretizmo nesuderinamumą. Pirmasis iš jų yra būtino kūrimo problema. Laikantis nuostatos, jog Dievas yra visų konkrečių esinių kūrėjas, tenka manyti, kad jis sukūrė ir konkrečius galimus pasaulius. Bandymas suderinti tai su būtino šių pasaulių egzistavimo principu veda į manymą, jog Dievas juos sukūrė būtinai. Tačiau idėja apie būtiną kūrimą prieštarauja tezei, jog Dievas kuria laisvai, t. y. turėdamas pasirinkimą nekurti;

1.2.3. Dar vienas keblumas yra tas, kad mėginimai susieti modalinį konkretizmą su teizmu pagilina blogio problemą. Dievas čia yra ne vieno, o daugybės pasaulių, kuriuose gausu kančios, kūrėjas. Tai itin sunku suderinti su Dievo kaip visagalės ir moraliai tobulos būtybės samprata. Problemą dar labiau gilina faktas, kad pasauliai čia traktuojami kaip realūs, konkretūs esiniai, kuriuose kenčia realūs individai;

1.3. Modalinis fikcionalizmas negrindžia tikro (t. y. nefikcinio) Dievo egzistavimo. Kadangi šioje teorijoje modaliniai teiginiai interpretuojami kaip teiginiai apie galimų pasaulių fikciją, modalinio ontologinio įrodymo išvada, teigianti būtiną Dievo egzistavimą, atitinkamai suprantama kaip teiginys, jog, anot galimų pasaulių fikcijos, Dievas egzistuoja visuose galimuose pasauliuose. Toks teiginys negrindžia, jog Dievas egzistuoja už fikcijos ribų, kas rodo, jog modalinis fikcionalizmas yra netinkamas modalinio ontologinio įrodymo, siekiančio įrodyti realų (t. y. nefikcinį) Dievo buvimą, interpretavimui;

2. Modalizmas yra tinkamesnė teorija modalinio ontologinio įrodymo interpretavimui, nes:

2.1. Ši teorija įgalina formalų Dievo būtino egzistavimo grindimą naudojantis sintaksinėmis modalinės logikos taisyklėmis, kur pasitelkiami galimybės ir būtinybės operatoriai;

2.2. Įmanoma pateikti nuoseklų modalizmo ir teizmo suderinamumo aiškinimą. Prieš išskleidžiant šį sumanymą, darbe pirmiausiai pasiūlyta detalesnė paties modalizmo koncepcija, grindžiama tokiais teiginiais:

2.2.1. Modalumai aiškinami per *modalines tiesas*. Neįsipareigojama abstrakčių modalinių esinių (tokių kaip modaliniai faktai, modaliniai teiginiai ar modalinės savybės) egzistavimui. Modalinės tiesos traktuojamos kaip teisingi modaliniai sakiniai ir įsitikinimai; laikoma,

kad jos neturi ontologinio statuso už kalbos ir sąmonės ribų;

2.2.2. Nors modalinės tiesos nėra grindžiamos kalbai ir sąmonei išoriniais esiniais, teigiama, jog jos yra objektyvios ta prasme, kad apibūdina tikrovę tokią, kokia ji yra, ir tokiu būdu išreiškia universaliai galiojančius principus;

2.3. Remiantis nurodyta modalizmo koncepcija, darbe suformuluota nauja teorija – *teistinis modalizmas*, – kuria siekiama suderinti teizmo ir modalizmo principus ir kurioje:

2.3.1. Modalizmas susiejamas su teistiniu kreacionizmu – keliamas teiginys, jog Dievas sukūrė pasaulį taip, jog jame galioja neredukuojamos modalinės tiesos. Kadangi atsisakoma prielaidos apie savarankiškai egzistuojančius modalinius esinius, tokius kaip galimi pasauliai, modaliniai faktai ar modalinės savybės, išvengiama iššūkio, kaip suderinti šių esinių egzistavimą su Dievo egzistavimu;

2.3.2. Laikoma, kad modalinės tiesos apie Dievą negali būti keičiamos jo paties noru. Argumentuojama, kad jeigu Dievas galėtų keisti (modalines) tiesas apie save, jis galėtų lengvai tapti, tarkime, moraliai bloga ar neracionalia būtybe. Tokia galimybė ne tik neleistų suformuluoti nuoseklios Dievo sąvokos, bet ir prieštarautų krikščioniškajam supratimui apie Dievą kaip būtybę, esmingai pasižyminčią racionalumu bei moraliniu tobulumu;

2.3.3. Teigiama, kad principas, jog (neredukuojamos) modalinės tiesos atsirado ryšium su pasaulio sukūrimu, kelia iššūkį – visų pirma matematikos ir logikos tiesų (kurias įprasta traktuoti kaip būtinas) kontekste. Paprastai manoma, kad tokios tiesos ne tik yra nepriklausomos nuo Dievo kuriančiosios (ar bet kokios kitos atsitiktinės) veiklos, bet ir, priimant prielaidą apie tobulą Dievo racionalumą, yra būdingos paties Dievo intelektui dar prieš pasaulio sukūrimą ir nepriklausomai nuo jo. Todėl:

2.3.3.1. Siūloma laikytis nuostatos, jog 2.3.1 punkte nurodyta teistinio modalizmo tezė nereiškia, kad bent jau kai kurios iš modalinių tiesų nėra žinomos Dievui dar prieš pasaulio sukūrimą ir nepriklausomai nuo jo. Tiksliau tariant, siūloma manyti, jog konkrečiai

matematikos ir logikos tiesos yra ne tik būdingos pasauliui, bet ir esmingos paties Dievo mąstymui. Laikoma, kad minėtos tiesos būtinai glūdi Dievo intelekte, o, kurdamas pasaulį, Dievas pasirenka šias tiesas įdiegti ir į jį;

2.3.3.2. Nurodoma, jog kadangi matematikos ir logikos tiesos esmingai glūdi būtinos būtybės – Dievo – intelekte, taigi galioja nepriklausomai nuo jokių atsitiktinių veiksnių, šių tiesų kontekste išsaugomas modalinės logikos S5 principas (teigiantis, kad tai, kas būtina, yra būtinai būtina, o tai, kas galima, – būtinai galima);

2.3.3.3. Kitų modalinių tiesų kontekste šį principą išlaikyti siūloma priimant poziciją, kad jos (dažnu atveju implicitiškai) išplaukia iš matematikos ir logikos tiesų (ir taip pat esmingai glūdi Dievo intelekte). Tokiu būdu pastarosios įgyja fundamentalių modalinių tiesų statusą;

2.3.3.4. Priimamas požiūris, kad modalinės tiesos nėra sukurtos Dievo ir kad Dievas negali savavališkai pakeisti jų turinio. Tai leidžia išsaugoti intuiciją apie tai, kad modalinės – konkrečiai matematikos ir logikos – tiesos steigia racionalumo standartus, kurie yra pamatiniai ir pastovūs. Antra vertus, Dievo viršenybė išsaugoma tuo požiūriu, jog būtent Dievas užtikrina modalinių tiesų galiojimą pasaulyje. Be to, modalinės tiesos išlieka priklausomos nuo Dievo ta prasme, jog, kaip teigiama, būtinoms tiesoms reikia būtinai egzistuojančios ir tobulai racionalios būtybės tam, kad jas mąstytų;

2.3.4. Pabrėžiama, kad, siekiant nesusidurti su Dievo ir abstrakčių objektų santykio problema, vengtinas įsipareigojimas ir nemodalinių abstrakčių objektų egzistavimui. Nuostata, jog šio įsipareigojimo išvengti įmanoma, motyvuojama nurodant, jog esama filosofinių pozicijų, siūlančių tokias įprastai abstrakčiais laikomų esinių traktuotes, kurios leidžia atsisakyti prielaidos apie jų savarankišką ontologinį statusą, arba rodančių, kad esama pagrindo tokių esinių apskritai nepostuluoti;

2.3.5. Išskleidžiama, kodėl nuostata apie tai, jog modalinės tiesos išlieka reikšmingai priklausomos nuo Dievo, neprieštarauja modalizmo tezei apie šių tiesų neredukuojamumą:

2.3.5.1. Modalizmas teigia, kad modalinės tiesos yra neredukuojamos į nemodalines tiesas. Tačiau tai netrukdo modalistams ieškoti paaiškinimo, kodėl modalinės tiesos apskritai egzistuoja;

2.3.5.2. Anot teistinio modalizmo, modalinės tiesos egzistuoja todėl, kad egzistuoja būtina būtybė – Dievas, kurio tobulai racionalus intelektas jas esmingai aprėpia. Šis ryšio tarp Dievo ir modalinių tiesų aiškinimas nėra reduktyvus, nes jis tik nurodo pastarųjų egzistavimo pagrindą, bet nenumano jų suvedamumo į nemodalines tiesas;

2.3.6. Aptariamas klausimas, kaip įmanomas modalinių tiesų žinojimas, laikantis prielaidos apie principinį šių tiesų neredukuojamumą:

2.3.6.1. Teigiama, kad teistinio modalizmo kontekste į šį klausimą galima atsakyti apeliuojant į rėmimąsi matematikos ir logikos principais. Kitaip sakant, siūloma manyti, jog apie modalinių tiesų teisingumą sprendžiama pasitelkiant neprieštaravimo ir kitus esminius matematikos arba logikos dėsnius;

2.3.6.2. Siūlomi keli būdai, kaip, priėmus modalizmo prielaidą apie modalinių tiesų neredukuojamumą, būtų galima pagrįsti modalinio ontologinio įrodymo prielaidą, teigiančią Dievo egzistavimo galimumą. Teigiama, kad su modalizmu lengvai suderinamos įvairios epistemologinės pozicijos, tokios kaip pamanomumo (*conceivability*) teorijos arba kliovimasis intuicijomis. Dar vienas svarstomas metodas yra Dievo, arba maksimaliai didžios būtybės, sąvokos tyrimas, siekiant įvertinti, ar ši sąvoka nepasižymi vidiniais prieštaravimais. Nors pažymima, kad šis kelias gali būti traktuojamas kaip nepakankamas nustatyti realiam Dievo egzistavimo galimumui, tvirtinama, kad net ir tokiu atveju ši prieiga išlieka svarbi, priėmus nuostatą, jog

konceptualinis neprieštaringumas yra būtina galimybės sąlyga;

3. Darbo rezultatai nurodo keletą ateities tyrimų krypčių:
   3.1. *Tolesnis teistinio modalizmo tyrimas*. Nors teistiniam modalizmui šioje disertacijoje tenka pagrindinis vaidmuo, akvaizdu, jog pasiūlyta tik pirminė šios teorijos versija; tolesnė šio požiūrio teorinė plėtotė yra ateities tyrimų reikalas. Manytina, kad disertacijoje aptarta modalizmo ir teizmo sąveika atveria įvairias tyrimų galimybes, tokias kaip šios teorijos taikymas kitoms svarbioms religijos filosofijos problemoms spręsti. Pavyzdžiui, ji galėtų būti pasitelkta svarstymų apie visažinystę, Dievo išankstinį žinojimą ar blogio problemą kontekstuose. Ateities darbuose reikėtų aiškintis, ar modalizmas gali pasiūlyti vertingų įžvalgų sprendžiant šiuos fundamentalius iššūkius; tai leidžia spėti, jog jo reikšmė gali būti daug platesnė nei aptarta šiame tyrime;
   3.2. *Palyginimas su kitomis modalumų teorijomis, negrįstomis galimų pasaulių semantika*. Nors ši disertacija pirmiausia buvo skirta modalizmo pranašumų išryškinimui, esama ir kitų modalumų teorijų, sudarančių alternatyvą galimų pasaulių semantika grįstiems požiūriems (pavyzdžiui, dispozicijomis ar esmėmis paremti aiškinimai); šios teorijos taip pat galėtų būti tiriamos modalinio ontologinio įrodymo kontekste. Nagrinėtinas ir platesnis jų suderinamumas su teizmu;
   3.3. *Istorinių modalizmo ištakų tyrimas*. Įprastai modalizmas aptariamas atsižvelgiant į tokių jo plėtotojų kaip Arthuras Prioras, Kit Fine'as, Graeme Forbesas bei Christopheris Peacocke'as indėlį. Taip buvo elgiamasi ir čia. Tačiau nors modalizmas kaip teorija iš esmės gimė būtent šių mąstytojų dėka, tai nereiškia, kad idėjinės šios teorijos užuomazgos buvo visiškai nebūdingos ankstesniems laikotarpiams. Svarbi užduotis ateities tyrimams yra gilinimasis į šių konceptualinių pradmenų raidą, sekant jų vystymąsi nuo pat Antikos ir Viduramžių iki šių dienų.

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1. Morkūnaitė, M., 2024. Modalism Revisited: A Defence. *Problemos*, Suppl: 45–57. https://doi.org/10.15388/Problemos.Priedas.24.4
2. Morkūnaitė, M., Pabijutaitė, Ž., 2024. Towards an Applied Semantics for K. Gödel's Ontological Proof: A Russellian Perspective. *Problemos*, 106: 185–200. https://doi.org/10.15388/Problemos.2024.106.14
3. Morkūnaitė, M., 2022. Apie priekaištą dėl nerelevantiškumo D. Lewiso modaliniam realizmui. *Problemos*, 101: 52–65. https://doi.org/10.15388/Problemos.101.5

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Disertantė gimė 1995 m. Utenoje. 2018 m. Vilniaus universitete baigė politikos mokslų bakalauro studijų programą, 2020 m. tame pačiame universitete įgijo filosofijos magistro laipsnį.

Doktorantūros studijų metu disertantė dalyvavo mokslo organizacinėje veikloje: buvo 2024 m. gegužės 24–25 d. Vilniaus universitete vykusios tarptautinės konferencijos „Logic and Philosophy: Historical and Contemporary Issues“ organizacinio komiteto narė, taip pat viena iš 2024 m. birželio 25 d. vykuso Filosofijos fakulteto doktorantų simpoziumo „Tai, kas netelpa į disertaciją“ organizatorių.

2024 m. kovą dalyvavo mokslo komunikacijos konkurse „Trijų minučių disertacija“.

Studijų metu žinias papildomai gilino užsienyje. 2023 m. birželį buvo išvykusi į Miuncheno universitetą, kur dalyvavo Oksfordo universiteto profesoriaus Alexander Paseau vestose paskaitose ir seminaruose apie logikos ir matematikos filosofiją.

Doktorantūros studijų metu publikuoti trys straipsniai disertacijos tema: „Apie priekaištą dėl nerelevantiškumo D. Lewiso modaliniam realizmui“ (*Problemos*), „Towards an Applied Semantics for K. Gödel’s Ontological Proof: A Russellian Perspective“ (*Problemos*) bei „Modalism Revisited: A Defence“ (*Problemos*).

Disertacijos tyrimų rezultatai taip pat buvo paskelbti tarptautinėse mokslinėse konferencijose. 2022 m. pranešimas „Developing a Theism-Friendly Modal Metaphysics in the Context of A. Plantinga’s Modal Ontological Argument“ skaitytas Vilniaus universitete vykusioje konferencijoje „Logic and Philosophy: Historical and Contemporary Issues“. 2024 m. Vilniaus universitete antrą kartą surengus šią konferenciją, joje skaitytas pranešimas pavadinimu „On the Side of Modalism“. 2023 m. dalyvauta 11-ajame Europos analitinės filosofijos kongrese Vienoje; ten pristatytas pranešimas „A Modalist Interpretation of the Modal Ontological Argument“, kurio pagrindu parengta galutinė disertacijos versija. 2024 m. pranešimas panašia tematika („The Prospects of Theistic Modalism“) skaitytas Slovakijos mokslų akademijos Filosofijos institute surengtoje konferencijoje „Modal Metaphysics: Issues on the (Im)Possible X“. Dar vienas pranešimas („Unveiling the All-Knowing: A Novel Response to P. Grim’s Cantorian Argument Against Omniscience“) tais pačiais metais pristatytas 25-ajame pasauliniame filosofijos kongrese, vykusiame Romoje.

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