


Article

The Theoretical Virtues of Theism

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Abstract: In this article, I seek to assess the extent to which a ‘trope-theoretic’ version of Theism is a better theory than that of a theory of Atheism, as posited by Graham Oppy. This end will be achieved by utilising the systemisation of the theoretical virtues proposed by Michael Keas (as further modified by an application of the work of Jonathan Schaffer), the notion of a trope, introduced by D.C. Williams, and an aspect, proposed by Donald L.M. Baxter, which will establish the basis of the trope-theoretic account of Theism that will be at the centre of our analysis. This assessment will ultimately show that Theism, rather than that of Atheism (Naturalism), can successfully achieve the trade-off between minimising theoretical commitments and maximising explanatory power. And thus, given this, the best theory of Theism—namely, that of ‘trope-theoretic Theism’—is to be privileged over that of the best theory of Atheism—namely, that of ‘Oppyian Naturalism’—and is able to provide grounds for a decisive reassessment of the cogency of Agnosticism.

Keywords: theism; atheism; naturalism; theories; theoretical virtues

1. Introduction

The Method of Theory Comparison

According to Graham Oppy ([1], p. 20), a ‘worldview’ is a system of beliefs that functions as ‘a theory of everything: a comprehensive descriptive, evaluative, and normative account of reality’. That is, all humans have a collection of beliefs that form their view of reality, which we then term their worldview. An individual’s worldview determines their actions and the manner in which they are able to live their lives, with the possession of a rational worldview enabling one to successfully fulfil their goals and live a life of great worth. Theistic and atheistic worldviews are important parts of contemporary human life, with each of these worldviews including an account of the nature of ultimate reality—with Theism being a particular worldview that posits the existence of gods (or the monotheistic ‘God’), and Atheism being a particular worldview that denies the existence of gods (or the monotheistic ‘God’) ([2]).¹ In a global context, the former worldview, Theism, is widely expressed by the devotional patterns of individuals (with over 55% of the world’s population adhering to the two largest theistic religions in the world: Christianity and Islam). The latter worldview, Atheism, is widely held in academic philosophical circles (with a recent *PhilPapers* showing that 66.95% of philosophers identified themselves as ‘atheists’ (or at least were inclined towards the worldview)).² However, despite the prevalence of these worldviews within contemporary society, an important question can be asked concerning their alethic value. At a general level, when assessing the veracity of a worldview (hereafter, ‘theory’), and establishing grounds for one privileging it over its competitors, one must achieve the following:

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| (1) (Theory Comparison) | An optimal trade-off between minimising theoretical commitments and maximising explanatory power, relative to (a certain set of) data. |
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In Oppy’s ([3]) thought, when one performs a theory comparison of Theism and Atheism by assessing and comparing the various theoretical virtues possessed by each



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theory, one has good reason to prefer Atheism to Theism, and thus take the former to be a better theory of reality. That is, the ‘best’ atheistic theories have (i) *fewer theoretical commitments* compared to the ‘best’ theistic theories, and (ii) there is *no particular data* that the theistic theories *explain better* than that of the atheistic theories. Hence, on the basis of these two claims, it follows that the best atheistic theories (i.e., the best atheistic worldviews) are superior to the best theistic theories (i.e., the best theistic worldviews), and should be privileged over them within society, within a truth-seeking context.

At a more specific level, (i) is the case, according to Oppy ([3]), due to the fact that the best atheistic theories are, first, *less ontologically committing*—by positing a fewer number of entities and kinds of entities—and, second, *less ideologically committing*, by using fewer primitive notions or predicates to develop the theory. More precisely, on the one hand, the best theistic and atheistic theories agree in their ontological and ideological commitments. That is, as noted by Oppy ([3], p. 128, square parenthesis added), the ‘Objects, ideas and principles that are required for the best formulations of the natural sciences, the human sciences, the formal sciences, the applied sciences, the humanities and the arts are common to best atheistic big pictures [theories] and best theistic big pictures [theories]’. Yet, the best theistic theories, unlike that of the best atheistic theories, require a further theoretical commitment—namely, the existence of God (and the concepts and principles that solely apply within a theistic context which are not shared by the best atheistic worldviews). Hence, the best atheistic theories, rather than that of the best theories of Theism, achieve a minimisation of theoretical commitments. Moreover, how (ii) is the case can be seen once the primary lines of ‘evidence’ for the best theistic theories are brought to the table, which, following Oppy ([4], p. 129), can be stated as follows:

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| | (i) | The existence of the global causal structure of reality |
| | (ii) | The fine-tuning of the global causal structure of reality |
| | (iii) | The irreducible complexity of biological entities. |
| | (iv) | The possibility of logical, mathematical, and statistical reasoning. |
| | (v) | The possession of moral and modal knowledge. |
| (2) | (Theistic Evidence) | (vi) The existence of conscious agents. |
| | | (vii) Various reports of divine intervention and direct experiences of the divine within reality. |
| | | (viii) The existence of scriptures that record important truths about the divine. |
| | | (ix) The capability of appreciating beauty, humour, and loving others. |
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On each of these pieces of purported evidence, the best atheistic theories, according to Oppy ([4]), explain the data as well as that of the best theistic theories, and thus the latter should not be privileged over that of the former, relative to the evidence that has been put forward. In focusing on (i) of (2): the existence of global causal reality—which we can now take as our central explanatory target—we can now begin to understand the plausibility of this position. More precisely, our explanatory target is the total aggregate and series of things that make up reality. This whole aggregate and series is a complex event of the series of causes and effects that are part of the universe—which we can thus refer to as global causal reality (hereafter, GCR). Oppy sees the best theistic theories and the best atheistic theories to give the same account of the existence of GCR—where the only disagreement is concerning the additional entities that the theist believes belong to GCR (or our operative ‘outside of’ the GCR). This point can further be emphasised by focusing on what Oppy ([3]) believes is the best theory of Atheism available—namely, that of Naturalism. Naturalism, as Oppy ([3], p. 6) writes, is a particular theory that posits the fact that ‘causal reality is natural reality: the domain of causes is nothing more nor less than the natural world’. At a more specific level, one can add additional theses to this basic statement of Naturalism

to form what is termed here ‘Oppyan Naturalism’, as the additional theses that form this version of Naturalism are favoured by Oppy (and some other adherents). Following Joseph Schmid’s helpful summarisation of Oppy’s position in ([5]), the central theses of Oppyan Naturalism (hereafter, ON) can be stated succinctly as follows:

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- (3) (Oppyan Naturalism)
- (i) *Natural reality exhausts causal reality*: Every causal entity and causal property is natural, where natural causal entities and properties are those ‘recognized in ideal, completed, true science’.
 - (ii) *Mindedness is late and local*: Minded beings are either relatively recently evolved organisms or products of such organisms.
 - (iii) *Nothing is divine*: Nothing causal is divine, sacred, or worship-worthy.
 - (iv) *Shared history*: Necessarily, any possible way causal reality could be shares an initial history (i.e., an initial world segment) with actual causal reality. In other words, for any possible causal reality, its history at some point coincides with actual history. Oppy thus affirms that ‘every possible world shares some initial history with the actual world’, which we can call natural causal reality’s ‘initial state’ or ‘initial singularity’.
 - (v) *Chance divergence*: Necessarily, the only way that possible causal histories diverge or branch from actual causal history is through objectively chancy events.
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Within ON, as with most theistic theories, GCR has specific parts that stand in a fundamental external relation—such that this relation fulfils the role of uniquely portioning causal reality into maximal parts that, as Oppy ([3], p. 48) writes, ‘(a) themselves have no parts that stand in causal relations and (b) are totally ordered under the relations of causal priority and causal anteriority’. Moreover, within ON—and not necessarily within that of most theistic theories—the notion of modality, as Oppy ([3], p. 46) further writes, is to be construed as such that ‘Wherever there was objective chance, there were alternative possibilities. Wherever there is objective chance, there are alternative possibilities. Wherever there will be objective chance, there will be alternative possibilities’. Thus, ‘possible worlds’ are simply alternative ways that the actual world could have been/could be, with all possible worlds sharing an initial history with the actual world, and thus branching from the actual world as a result of the working of objective chance ([6]). Each possible world shares the same laws, and if there was an initial state of the actual world, then all the possible worlds share that specific initial state—whereas, if there was no initial state of the actual world, then all possible worlds share some infinite initial segment of the actual world (thus any two possible worlds share the same initial segment ([3]).

On the conception of causal reality detailed above, GCR involves an infinite regress, or it has an ‘initial part’, termed the ‘initial singularity’. On the one hand, if GCR involves an infinite regress, then there is no initial part of causal reality, such that it is not the case that there is a part of the GCR which, first, has no parts that stand in causal relations, second, is not also preceded by some other part of the GCR that has no part that stands in a causal relation and, third, every possible world shares an infinite initial segment with the actual world ([4]). This view of causal reality can be illustrated in Figure 1. as follows (with the ‘oval shapes’ representing ‘infinitely regressing entities’ and the various ‘small circles’ representing the different existing entities within the subsequent states of the GCR):

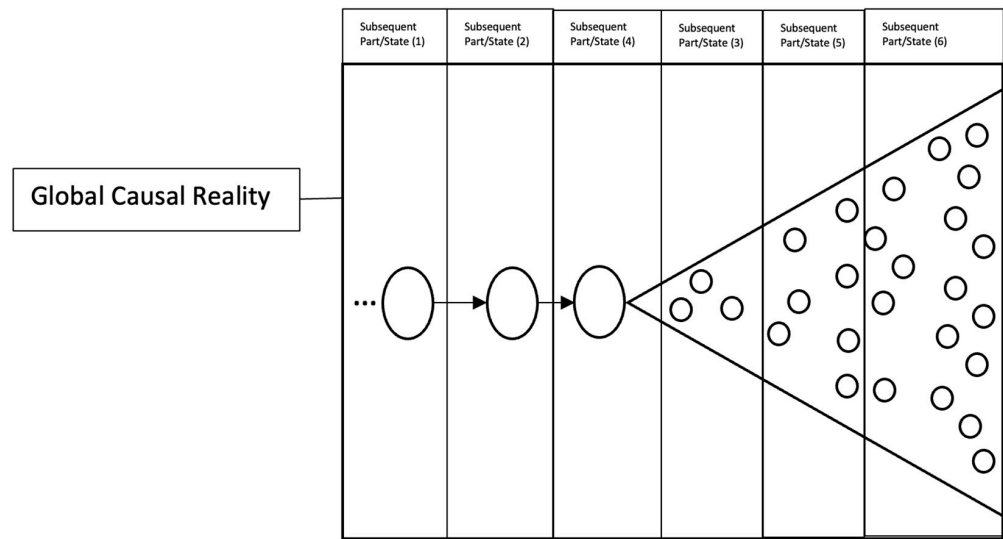


Figure 1. Global Causal Reality: Infinite Regress.

On the other hand, if GCR has an initial singularity, then it either contingently does or it necessarily does.³ For the former conception, the contingent view, it is such that it is (metaphysically) possible that causal reality had any other initial part. Whereas, for the latter conception, the necessary view, it is (metaphysically) impossible that the GCR had some other initial part. For the necessary view, on the assumption that the initial singularity involves objects, then, as Oppy ([3], p. 49) writes, ‘both the existence and the initial properties of those objects are necessary’⁴ Moreover, if there is more than one possible world, then any difference between those possible worlds and the actual world is due to the evolution of the GCR being ‘chancy’—in the sense that the laws and the initial properties of the objects that exist in the initial segment do not fully determine the subsequent states of reality ([1]). For the contingent view, and, again, on the assumption that the initial singularity involves objects, the existence of those objects and the initial properties of them are simply contingent ([3]). This view of causal reality (in its necessary or contingent versions) can also be illustrated through Figure 2. As follows (where ‘IS’ stands for ‘initial singularity’):

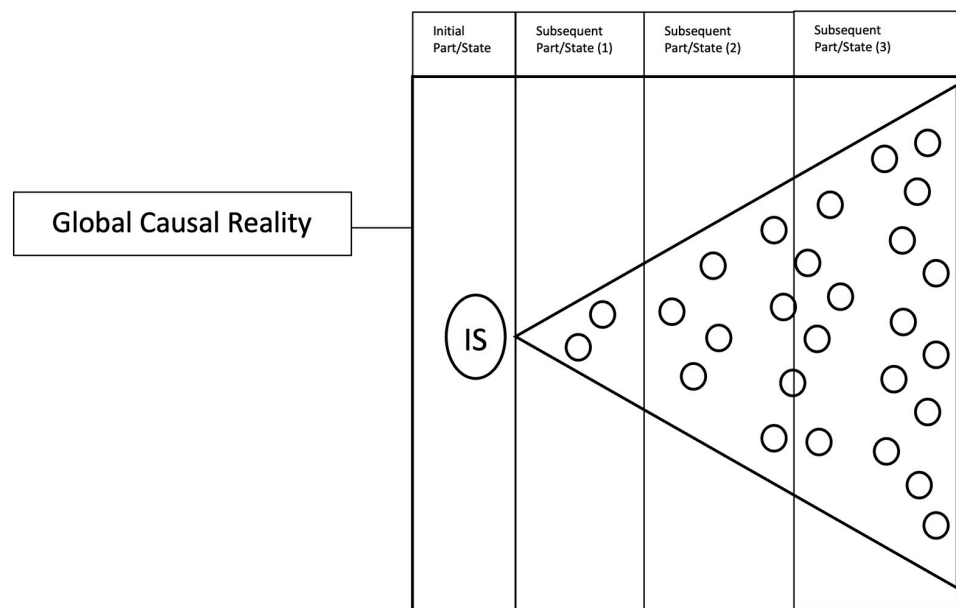


Figure 2. Global Causal Reality: Initial Singularity.

Now, suppose that the GCR involves an infinite regress, then ON takes it to be the case that there is just an infinite regress of natural (causal) reality whose state evolves without any particular input from an external reality ([7]). Theism, however, would be committed to the position that there is an external infinitely regressing entity, God, that evolves the states of an infinitely regressing natural (causal) reality—and thus there is a particular input within the causal process from an external reality. On the basis of these two theories, Theism does not score better than ON in explaining the existence of GCR. As Oppy ([1], p. 160, square parenthesis in text) writes, ‘either way, the [continuing] existence of causal reality and the [continuing] occurrence of causal processes in causal reality are explained by appeal to infinite regress on state evolution in the absence of external input’. More precisely, if the GCR involves an infinite regress, then, according to ON, there is only a regress of natural causal states, whereas, according to Theism, there is a regress of natural causal states + a regress of ‘supernatural’ causal states of an external entity (i.e., God). Thus, given the shared commitment to the existence of an infinite regress of natural causal states, there is no reason to privilege Theism over that of ON. Moreover, one can also see that ON has fewer theoretical commitments, as it has fewer ontological and ideological commitments (i.e., fewer entities, and kinds of entities committed to, and fewer primitive predicates used), in order to account for the evidence at hand—namely, that of the existence of the GCR. In summary, ON thus minimises theoretical commitments and maximises explanatory power, relative to the conception of the GCR that involves an infinite regress. The conclusion reached here concerning the (potential) explanatory burden provided by Theism within this context can be illustrated in Figure 3. As follows (where ‘G’ stands for ‘God’):

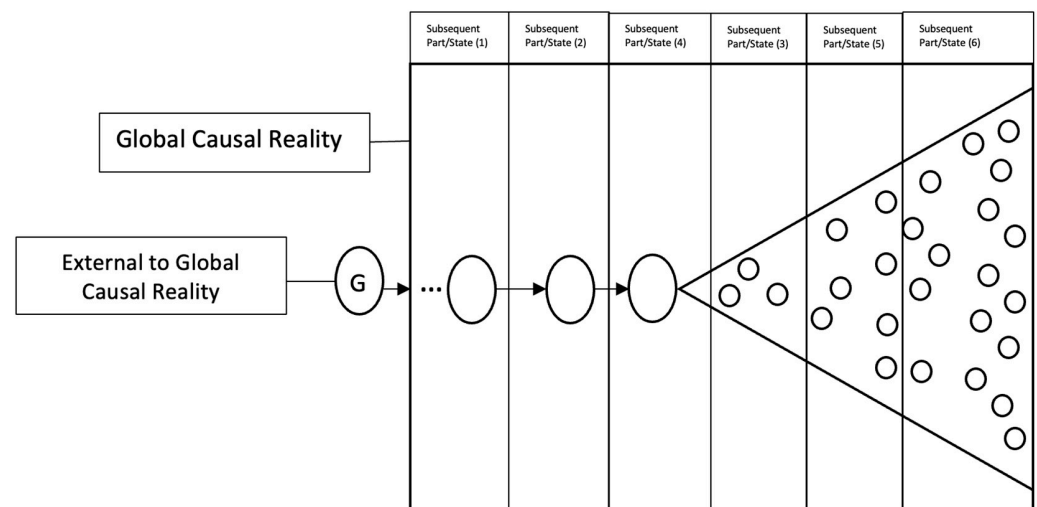


Figure 3. God and Global Causal Reality: Infinite Regress.

This result can also be reached for the other possible conception of GCR, as if one was to suppose that the GCR involves a necessary initial singularity, that has its properties of necessity,⁵ then the ON takes it to be the case that there is a causally-past-infinite, necessarily existing natural reality that has states that evolve (in a ‘chancy’ manner) without any particular external input ([3]). Competing theistic theories, however, add to this picture by saying that there is an external reality, God, and that there is a causal-past-finite, necessarily existing causal reality whose state, as Oppy ([1], p. 160) writes, ‘evolves without any external input in which natural reality is a merely contingently existing sub-part whose evolution of state is, at least in part, due to causes external to it’. More specifically, if the GCR involves a necessary initial singularity, then, according to ON, there is only a necessary initial singularity that precedes a finite series of natural parts, whereas, according to Theism, there is a necessary initial part of the GCR that is natural that precedes a series of natural parts + a ‘super natural’ necessary, external initial causal entity (i.e., God). Again, on the

basis of these two theories, Theism does not score better than ON in explaining the existence of GCR, as the continuing existence of causal reality, and the continuing occurrence of the causal processes in the GCR, is explained by a certain appeal to brute necessity—either, for ON, the necessary initial singularity or, for Theism, the necessary initial singularity (i.e., the initial part of the GCR) *and* a necessary God. Thus, given that both theories affirm the existence of a necessary initial part of the GCR, there is no reason to privilege one over the other. Yet, one can also see that ON, again, has fewer theoretical commitments by requiring one to shoulder a theoretical load that is substantially lighter—namely, shouldering the initial singularity without having to shoulder the necessary being that is God. In summary, ON thus, again, minimises theoretical commitments and maximises explanatory power, relative to the conception of the GCR that involves a necessary initial singularity. The conclusion reached here concerning the (potential) explanatory burden provided by Theism within this context can be illustrated in Figure 4. As follows:

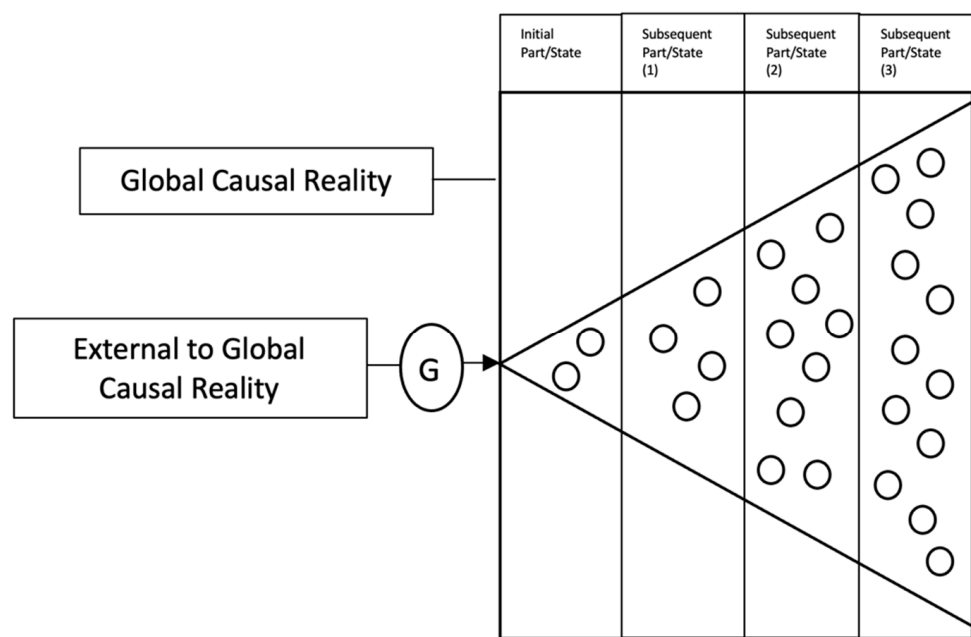


Figure 4. God and Global Causal Reality: Initial Singularity.

Taking this all into account, the existence of GCR has the same standing within ON and Theism, and thus each has explanatory power, relative to this specific evidence; however, given the overall theoretical commitments made by each theory, Atheism, and its best form of ON, achieves the needed trade-off of minimising theoretical commitments, whilst also maximising explanation of the relevant data. Atheism, as a theory, should thus be favoured over that of Theism. One could now ask, however, if there is any way to prevent this conclusion from being reached? That is, is there a way to perform a re-assessment of the theories of Theism and Atheism (i.e., ON) and show that it is, in fact, the former theory, rather than the latter, that achieves the needed trade-off for a successful theory? I believe that there is, by, first, utilising a more robust criteria for theory comparison provided by Michael Keas’ ([8]) theoretical virtues systemisation (as further modified by an application of the work of Jonathan Schaffer ([9])).⁶ And, second, by employing a specific theory of Theism: *Trope-Theoretic Theism*,⁷ which employs the notion of a ‘trope’ and an ‘aspect’ to conceptualise the nature of God as that of a ‘maximal power trope’ (that has aspects). In doing this, one would thus be able to see how Theism, under this specific conception, is, in fact, to be privileged over that of Atheism, as conceived of within ON. This result would be achieved by the former performing the task of trading off the minimisation of theoretical commitments and maximisation of explanatory power, relative to the explanatory target of (i) of (2), better than that of the latter. Theism (of the trope-theoretic kind)

would thus be shown to be a better theory than the best theory of Atheism—namely, that of ON—and should, therefore, be privileged over it within a truth-seeking context. And this has implications for the further worldview (or ‘theory’) of Agnosticism. That is, Agnosticism traditionally occupies a neutral stance on the question of God’s existence—neither affirming nor denying it. However, the introduction of trope-theoretic Theism as a compelling explanatory framework might prompt agnostics to reconsider this position. More precisely, if this form of Theism provides a more robust and satisfactory explanation for metaphysical and existential questions, the neutrality that agnosticism upholds could be called into question. A more persuasive theistic perspective might encourage agnostics to lean towards a belief system that offers clearer answers to life’s big questions. That is, one of the foundational beliefs of agnosticism is that the existence or non-existence of God is either unknown or unknowable. However, the cogency of trope-theoretic Theism could challenge this foundational belief. If this theistic approach manages to offer a more satisfactory and comprehensive explanation of the universe and our place within it, the claim that theological matters are inherently unknowable becomes less defensible. Thus, the robustness of trope-theoretic Theism, as will be demonstrated in its comparative assessment with Atheism, necessitates a revisiting of the foundational evidence and arguments that have traditionally informed agnostic beliefs—as the conclusion to be reached in our assessment is not merely about the existence or non-existence of God but about the depth and breadth of explanations provided for the nature of reality. Hence, agnostics might find themselves compelled to sift through their foundational beliefs, weighing them against the insights offered by this new theistic framework. And this introspection might lead to the adoption of trope-theoretic theism—or, if it does not result in a complete shift from agnosticism, it could lead to a more nuanced understanding of their own worldview. The following analysis thus has implications for all worldview options: Theism, Atheism, and Agnosticism all included.

Thus, the plan is as follows: in Section 2 (‘Criteria of theoretical virtues’), I provide an explication of the systemisation of the theoretical virtues proposed by Michael Keas, modified here by an application of the work of Jonathan Schaffer, which will provide robust abductive criteria for our analysis. In Section 3 (‘The nature of trope-theoretic Theism’), I provide an explication of the notion of an aspect, provided by Donald L.M. Baxter, and a trope, proposed by D.C. Williams, and I apply these theses within a theological context to provide a re-conceptualisation of the nature of God. And then, in Section 4 (‘Comparative assessment’), I assess the theories of (trope-theoretic) Theism and Oppyian Naturalism, in light of their fulfilment of the abductive criteria detailed in Section 2, with the final conclusion being that Theism, rather than Oppyian Naturalism, is the theory that best fulfils these criteria—that is, it minimises theoretical commitments and maximises explanatory power, relative to the data (whilst Oppyian Naturalism maximises theoretical commitments and minimises explanatory power, relative to the data under question). Theism is thus a better theory than (Oppyian Naturalistic) Atheism. In Section 5 (‘Theism as a naturalistic theory’) the theory of Theism, as conceived of through trope-theoretic Theism, is re-classified as a naturalistic theory, which enables individuals that are more naturalistically inclined to see Theism as a viable worldview to adopt. Finally, there will be a concluding section (‘Conclusion’) that will summarise the position that has been argued for in this article.

2. Criteria of Theoretical Virtues

2.1. Systemisation of Theoretical Virtues

In the context of determining the correct grounds for ‘theory choice’, the justificatory basis on which a theory is judged to be (probably) true centres, as emphasized by (1), on the extent to which it has, or can achieve, a ‘trade-off’ between the specific methodological virtues of minimising commitments and maximising explanatory power (i.e., explanation of the data at hand). Now, within the present context, this theoretical aim will be achieved by adopting a particular systematisation of the theoretical virtues that have been proposed by

Michael Keas ([8])—who builds on the influential work of Thomas Kuhn ([10]) and, more importantly, E. McMullin ([11]). According to Keas ([8]), the most widely held theories across various academic disciplines usually exhibit a range of twelve theoretical virtues. These theoretical virtues (hereafter, TVs) are classified into four main classes: *evidential virtues*, *coherential virtues*, *aesthetic virtues*, and *diachronic virtues*. Following Keas ([8], p. 2), the specific virtues of these virtue classes can be construed more precisely in Table 1. as follows:

Table 1. Theoretical Virtues.

Evidential Virtues	Coherential Virtues	Aesthetic Virtues	Diachronic Virtues
<p>TV1. Evidential Accuracy The theory fits the empirical evidence well (regardless of causal claims).</p> <p>TV2. Causal Adequacy The theory’s causal factors plausibly produce the effects (evidence) in need of explanation.</p> <p>TV3. Explanatory Depth The theory excels in causal history depth or in other depth measures, such as the range of counterfactual questions that its law-like generalisations answer regarding the item being explained.</p>	<p>TV4. Internal Consistency The theory’s components are not contradictory.</p> <p>TV5. Internal Coherence The theory’s components are coordinated into an intuitively plausible whole; T lacks ad hoc hypotheses—theoretical components merely tacked on to solve isolated problems.</p> <p>TV6. Universal Coherence The theory sits well with (or is not obviously contrary to) other warranted beliefs.</p>	<p>TV7. Beauty The theory evokes aesthetic pleasure in properly functioning and sufficiently informed persons.</p> <p>TV8. Simplicity The theory explains the same facts as its rivals, but with less theoretical content.</p> <p>TV9. Unification The theory explains more kinds of facts than rivals with the same amount of theoretical content.</p>	<p>TV10. Durability The theory has survived testing by successful prediction or plausible accommodation of new data.</p> <p>TV11. Fruitfulness The theory has generated additional discoveries by means such as successful novel prediction, unification, and non-<i>ad hoc</i> theoretical elaboration.</p> <p>TV12. Applicability The theory has guided strategic action or control, such as in science-based technology.</p>

Based on this general statement of the various virtues within the four main virtue classes, it will be helpful to now further explicate the nature of these classes and the virtues that reside within them, in order to for us to have a fuller understanding of the relevant virtues that will be needed to be invoked within our theory comparison.

2.1.1. The Evidential Virtues

The class of evidential virtues indicate different ways in which a theory can account for the existence, and/or occurrence, of entities, events, and regularities in the world. This class includes within it the virtues of (TV1) evidential accuracy, (TV2) causal adequacy, and (TV3) explanatory depth. First, for evidential accuracy, a theory instantiates evidential accuracy when it fits the empirical evidence well. A theory fits the empirical evidence well if the truth of the theory leads us to expect the occurrence of the evidence. In this type of scenario, however, two competing theories can each individually fit the evidence and thus be equally virtuous with respect to this specific theoretical virtue; hence, the exemplification of this specific virtue is easily had by a purported theory. Second, for causal adequacy, a theory is causally adequate if it specifies the particular causal factors that produce the phenomena in need of explanation. Unlike that of the virtue of evidential accuracy, this virtue theory expresses more than that of the theory fitting the evidence; rather, it discloses the causes that produce the phenomena or evidence that the theory is focused on explaining. That is, it provides an account of how the phenomena or evidence occurred by specifying the causal mechanism behind it, such as there being a single causal agent—such as a particular object—from which the evidence set to be explained is derivable from. Third, for explanatory depth, a theory exhibits explanatory depth when it can provide a causal history or excel in other depth measures, such as that of successfully answering a range of counterfactual questions. A theory expresses a causal history by being able to

provide an account of the sequences of causes that led to the occurrence of the phenomena or a number of different levels within the postulated causal explanation of the phenomena. A theory is successful in answering a range of counterfactual questions when it can provide a causal story about the actual state and properties possessed by the object(s) included within the phenomena, and the possible states and properties that are possessed by it (in other possible worlds).

2.1.2. The Coherential Virtues

The class of coherential virtues indicate the distinct ways in which the theoretical components of a theory should be consistent and cohere well with one another and wider theories (or beliefs). This class includes within it the virtues of (TV3) internal consistency, (TV4) internal coherence, and (TV5) universal coherence. First, internal consistency is had by a theory when its components are not contradictory. Specifically, this coherence is ‘internal’ rather than ‘external’ as it is a consistency within the theory itself. Moreover, these components are to not be contradictory in the sense of formal logical coherence—which would be that of the components not being ‘self-contradictory’ or entailing a ‘self-contradiction’. Second, internal coherence exists in a theory when it possesses components that are coordinated into an intuitively plausible whole. This specific virtue evades definition through the provision of necessary and sufficient conditions for a theory to be internally coherent. However, this virtue can be further understood through a ‘negative’ formulation that states that a theory would lack internal coherence by it incorporating ad hoc hypotheses. A component of a theory is ad hoc if it is ‘illegitimate’. More specifically, something is ‘illegitimate’ if it is so vague as to not be sufficiently testable, or, as Keas ([8], p. 13) writes, ‘it explains no other significant facts beyond the data that prompted its construction, and its “fit” within the larger theory is (to some degree) conceptually incoherent—awkward, arbitrary, or superficial’. A theory that is illegitimate in these senses is thus ad hoc by it being, as Keas ([8], p. 13) notes, ‘attached to a theory in order to solve an isolated problem’. Hence, a theory would thus exhibit internal coherence by it not including (or eliminating) any ad hoc component that it potentially could incorporate. Third, universal coherence is had by a theory if it is one that ‘fits well’ with, or is not obviously contrary to, other well-established theories or warranted beliefs. A theory that coheres well with other theories, or warranted beliefs, and/or at least is not obviously contradictory to them, would thus be one that fits well with the total knowledge of the inquirer. Moreover, the postulated theory that exhibits this virtue would be one that meshes with other theories that are rendered probable by these abductive criteria; by it postulating the existence of entities (or the occurrence of phenomena) that are similar or comparable to those entities (or phenomena) that are postulated to exist/occur (and fulfil some valuable explanatory role) within theories from other neighbouring fields.

2.1.3. The Aesthetic Virtues

The class of aesthetic virtues indicate different ways in which a theory can possess an aesthetic shape (fittingness) that is qualitatively different from the logical-conceptual fit of the coherential virtues. Each of the virtues within this class do not possess intrinsic epistemic value, unlike that of the evidential, coherential (and diachronic virtues). Rather, they possess extrinsic epistemic value.⁸ This class includes within it the virtues of (TV7) beauty, (TV8) simplicity, and (TV9) unification. First, a theory exhibits beauty if it evokes a certain aesthetic pleasure in properly functioning persons who are sufficiently informed. This aesthetic pleasure would be evoked by the theory exhibiting some form of ‘symmetry’, ‘aptness’, and some form of surprising ‘inevitability’. This virtue, however, is (as with the virtue of evidential accuracy) easily possessed by a purported theory. Second, simplicity is possessed by a theory by it being able to explain the same facts as rival theories; however, with less theoretical content. Third, a theory is unified by it being able to explain more kinds of facts than other theories with the same amount of theoretical content as them. Simplicity and unification are thus virtues that are aimed at addressing the same thing—namely, that

of 'informativeness'—from opposite complementary orientations ([8]). As Keas ([8], p. 17) writes, 'Simplicity is increased informativeness by means of a comparative reduction (relative to rival theories) of theoretical content. Unification is increased informativeness by means of a comparative increase in the different kinds of data that get explained'. Hence, a theory can be evaluated specifically for the informativeness that it provides in proportion to theoretical content in both of these manners. However, in the case of simplicity, further precisification is needed in order to find how the theoretical context of a theory can be reduced. That is, the focus of the virtue of simplicity is on assessing the theoretical commitments required by a theory, and how successful it is at minimising these.⁹ The nature of these theoretical commitments can be conceived of ontologically (i.e., ontological simplicity) and ideologically (i.e., ideological simplicity). Ontological and ideological simplicity can come in two varieties: quantitative ontological/ideological simplicity and qualitative/ideological simplicity. For the former variety, a theory is, first, quantitatively ontologically simple if it postulates the fewest number of entities (i.e., objects, properties, and relations etc.). For example, suppose one wants to assess the explanatory virtue of two physical theories that equally explain a given set of physical phenomena—yet the first theory explains the phenomena by positing the existence of a single particle (i.e., one object), while the second theory explains the phenomena by positing the existence of two particles (i.e., two objects)—then the first theory, in comparison to the second theory, would posit the existence of the fewer number of entities and thus have greater quantitative ontological simplicity. Second, a theory is quantitatively ideologically simple if it includes the fewest number of theoretical primitives (i.e., undefined terms). For example, suppose one wants to assess the explanatory virtue of two mereological theories that equally explain a given set of metaphysical data—yet the first theory utilises 'part' to provide definitions for the terms 'proper part' and 'overlap' as well as other mereological and compositional relations, whilst the second theory does not, but instead leaves the terms 'proper part' and 'overlap' undefined—then the first theory, in comparison to the second theory, would include a fewer number of theoretical primitives and thus would have greater quantitative ideological simplicity ([12]). For the second variety, a theory is, first, qualitatively ontologically simple if it postulates the fewest number of kinds (i.e., ontological categories and/or kinds of objects, properties and relations etc.). For example, in analysing the explanatory virtue of a nominalist theory and a platonic realist theory—where the former theory does not posit the existence of abstract objects but takes every existing entity to have a spatial and/or temporal location, and the latter theory does posit the existence of abstract objects—then the former theory, in comparison to the latter theory, would posit (at least) one less kind (of entity) and thus have greater qualitative ontological simplicity ([12]). Second, a theory is qualitatively ideologically simple if it includes the fewest number of kinds of theoretical primitives—which, following Peter Finocchiaro ([12], p. 618), we can individuate by topic. For example, there is an ideological kind that corresponds to colour—which would be a kind that includes colour predicates like 'red', 'green', and 'blue' etc. Similarly, there is also an ideological kind that corresponds to mereology. However, as the thesis of mereological nihilism (i.e., the thesis that there are no objects with proper parts) does not utilise mereological terminology, in comparison to other metaphysical theses, it would involve fewer kinds of theoretical primitives and thus would have greater qualitative ideological simplicity. The virtue of simplicity thus centres on the quantitative and qualitative ontological/ideological simplicity of a theory, and thus the theory that exhibits this virtue increases informativeness by reducing theoretical content in the above ways. In contrast, the exemplification of unification by a theory is by it complementing this increased informativeness provided by simplicity with an increase in the number of the kinds of phenomena that can be explained with the content that has been provided by the theory.

2.1.4. The Diachronic Virtues

The class of diachronic virtues indicates different ways in which a theory can be utilised across a distinctive temporal dimension by these virtues only being able to be instantiated by a theory after its initial formulation, which is a feature lacking in the three previous classes. This class includes within it the virtues of (TV10) durability, (TV11) fruitfulness, and (TV12) applicability. First, a theory exhibits durability by it having survived a number of tests through successful prediction, plausible accommodation of new (unanticipated) data, or both. Hence, for a theory to be durable is for it to be testable, and so if a theory's predictions are shown to be false through this, then it can be taken to be one that lacks durability. The durability of a theory is affected if one or more of its predictions are disconfirmed or if there is a modification made to the theory that includes ad hoc components. Second, fruitfulness is exhibited by a theory expanding our knowledge into new realms by generating additional discoveries over time, providing novel predictions, and/or non-ad hoc theoretical elaboration and unifying data.¹⁰ Hence, the difference between the virtues of durability and fruitfulness is that of the former focuses on 'conservation' (a given theory needing to pass a series of tests to survive) and the latter focuses on 'innovation' (a given theory needing to stimulate further discovery). A theory's power of unification in a diachronic sense is distinct from its non-diachronic (aesthetic) power as the former, rather than the latter, refers to its ability to unify over the course of time by means of surprising convergences of the data that increase over time. Third, a theory exhibits applicability by it being able to be used by individuals to guide successful action (e.g., helping to prepare for a natural disaster) or to enhance technological control (e.g., it being useful in areas such as medicine and engineering). At some subsequent point in this process of theory assessment and refinement, sufficient confidence in a certain theory might motivate one to apply it as a guide for action in the 'real world'—where if this application works (such as that of the successful development of science-based technology), then the 'applied theory' has now acquired the additional theoretical virtue of applicability.

Taking all of these things into account, the evidential virtues (TV1-TV3), which express how well theoretical components correspond to objects, events, and regularities in the world, are to be distinguished from the coherential virtues (TV4-TV6) by them pertaining to how well theoretical components fit together. And the aesthetic virtues (TV7-TV9) are to be specifically distinguished from the coherential virtue class by the former class expressing the fact of a virtuous theory's possession of an 'aesthetic shape' (fittingness), that is quite different from the 'logical-conceptual fit' of the coherential virtues. Moreover, the diachronic virtues (TV10-TV12) are then to be distinguished from the other three virtue classes by this class focusing on a theory's explanatory role being extended along a temporal dimension. Each of these virtue classes, as Keas ([8], p. 31) writes, contains at least three virtues that 'sequentially follow a repeating pattern of progressive disclosure and expansion'. First, within the evidential virtues, there is a progression from one achieving a basic evidential fit to then identifying an adequate causal story and then deepening the explanatory account of the evidence in various ways ([8]). Second, the coherential theoretical virtues focus on expressing how well the components of a given theory fit together in a progressively expansive manner: internal consistency expresses how the components correspond with logic, and then internal coherence pertains to how these components are coordinated together to form a plausible whole. Universal coherence is then how a theory corresponds to one's knowledge of the world. Third, the aesthetic virtues follow a similar pattern to this, where the basic aesthetic property of beauty is presented first, and then it is followed by two more specific, and epistemically enhanced, aesthetic properties: simplicity and unification, which refer to the inward-looking and outward-looking orientation of aesthetic relation. Lastly, the diachronic virtues build upon the three other classes of virtues in another three-stage disclosure expansion pattern that is predicated on a temporal dimension that is missing in the other classes. That is, durability, fruitfulness, and applicability provide a temporal enhancement of the theory assessment that has been provided by the non-diachronic evidential, coherential, and aesthetic properties. Amongst

these distinct theoretical virtue classes, one can draw a further distinction concerning the 'epistemic value' of the virtues within these classes. That is, the evidential and coherential virtues are taken to possess 'intrinsic epistemic value', which is that of the virtues indicating, or being the requirement for, the attainment of truth, with the evidential virtues being the class with the highest intrinsic epistemic value. However, the aesthetic and diachronic virtues are taken to possess 'extrinsic epistemic value', which is that of them promoting truth, without being an indicator or requirement of truth. Hence, this is why it is usually taken to be the case that the virtues of simplicity/unification (and beauty), can only play a decisive role in a theoretical analysis when all else is equal—which is to say that all of the other virtues are had by the theories under question.¹¹ Thus, the first three classes of theoretical virtues are arranged in order of decreasing (intrinsic) epistemic weight (with the possibility of the aesthetic and diachronic virtues possessing a certain amount of extrinsic epistemic weight), with each of the virtues within their classes bearing relation to the other virtues; the first virtues within the classes being further disclosed and expanded by the latter virtues within the class.

2.2. Assumptions and Modification via the Laser

Now, in formulating the abductive criteria that are needed to assess the theories of Theism and Naturalism, three modifications would need to be made:¹² First, as Theism and Naturalism are theories that purport to retrodictively explain the occurrence of data that occurred in the past—and thus data that we currently already possess—rather than predictively explain the occurrence of future phenomena—and thus data that we do not currently possess¹³—the diachronic virtue classes drop out of our assessment. Second, as the current analysis is between that of the virtues of Theism and 'Oppyian' Naturalism, in the theory comparison made by Oppy across his writings, the consistency and coherence, beauty, and unification of the theories are taken on as a working assumption. Hence, in the present analysis, an assumption will be made that both theories exemplify the aesthetic virtues of beauty (TV5) and unification (TV9), and that ON successfully exemplifies the virtues in the coherential virtue classes (TV4-TV6). However, Theism, due to challenges that have been raised against its coherence,¹⁴ will need to be individually assessed to see if it does indeed possess the coherential virtue classes, and thus can be taken on board (as with ON) as a coherent and workable theory. Thus, solely Theism will be assessed at a first-stage level, and if it is found to be coherent it will then be able to progress onto stage two, where the important comparison will be made with ON.¹⁵ Third, as Theism and Naturalism are purported 'metaphysical' theories, rather than that of 'scientific' theories,¹⁶ it will be important to adopt a specific conception of the virtue of simplicity (TV8) found within the aesthetic virtue class. More specifically, in a metaphysical context, the primary focus of this area of inquiry is on understanding; as E.J. Lowe ([14], p. 3, emphasis in text) notes, 'the *fundamental structure of reality as a whole*'. Whereas science, plausibly, has as its focus on a more restricted area of inquiry (such as that of biological organisms, chemical structures, or forces and laws of nature, etc.)—and thus is not necessarily focused on that of only the nature and structure of fundamental reality. Hence, it is plausible to assume that there are two different principles that are to be taken to be operative in establishing the simplicity of a theory in a scientific context—namely, that of 'Occam's Razor'—and a metaphysical context—namely, that of 'Schaffer's Laser'¹⁷—which can both be stated more succinctly as follows:

(4) (Razor)	(5) (Laser)
<p>The virtue of simplicity must be restrictive of all entities, kinds, and theoretical notions (i.e., all fundamental and non-fundamental entities, kinds, and theoretical notions), which can be specified as such:</p> <p>(i) <i>Posit the fewest number of entities, kinds, and (primitive) theoretical notions as necessary.</i></p>	<p>The virtue of simplicity must be restrictive of the fundamental (i.e., fundamental entities, kinds, and notions) and permissive of the non-fundamental (i.e., non-fundamental entities, kinds, and theoretical notions), which can be specified as such:</p> <p>(i) <i>Posit the fewest number of fundamental entities, kinds, and (primitive) theoretical notions as necessary.</i></p>

At a general level, within a scientific context, the general principle that is taken to underwrite the virtue of simplicity is that of Occam's Razor, the principle that states that one should posit the fewest number and kinds of entities (and theoretical notions) as necessary (i.e., do not multiply entities (kinds and notions) beyond necessity), and thus this principle is restrictive of all types of entities. However, the Laser states that one should posit the fewest number and kinds of fundamental entities (and theoretical notions) as necessary (i.e., do not multiply fundamental entities (kinds and notions) beyond necessity). And, thus, this principle is restrictive of fundamental entities but is permissive of non-fundamental entities—where to be fundamental is to be 'independent' (i.e., 'ungrounded', which is thus it not being the output of a 'grounding' relation (or some other metaphysically deep relation)) and to be non-fundamental is to be 'dependent' (i.e., 'grounded', which is thus it being the output of a 'grounding' relation (or some other metaphysically deep relation)).¹⁸ Hence, within a metaphysical context, it is assumed that non-fundamental entities do not count against the simplicity of a theory (equivalently, only fundamental entities count against the simplicity of a theory). That is, when comparing how simple metaphysical theories are, one should compare how much *fundamentalia* they posit, not how many entities are posited overall. Thus, as Daniel Korman ([18], p. 75–76) writes, 'The most parsimonious theory is the one that explains all that needs to be explained using the fewest resources. Since fundamental objects are those in terms of which everything is explained, it only makes sense to measure ontological parsimony in terms of which items are taken to be fundamental'. Why this is the case, at a general level, is due to the fact that individuals are intuitively committed to the position that it is in some way better for one to explain a certain phenomenon than to leave them unexplained and thus fundamental—which is perhaps a weaker variant of the 'Principle of Sufficient Reason' ([17]). This means that we would rather, as Karen Bennett ([17], p. 220, square parenthesis in text) writes, 'keep our stock of built [non-fundamental] entities and phenomena large relative to our stock of *fundamentalia*. And that, in turn, suggests that what we care about is not how many things (or kinds of things) there are, but how many fundamental things (or kinds of things) there are'. One is only focused on keeping the number of fundamental entities (kinds or notions) in one's ontology small, rather than that of any entity (kind or notion), irrespective of its ontological status.¹⁹ Two important reasons for favouring the usage of the Laser, rather than that of the Razor—in a metaphysical context—are that, first, it enables one to gain a better understanding of actual methodological practice in the field of metaphysics and, second, its helps to make sense of the notion of the 'ontological innocence' of certain entities. For the first reason, that of methodological practice within metaphysics fitting well with the employment of the Laser rather than the Razor, this can be illustrated through the following imaginary scenario where the former principle, instead of the latter, is shown to correctly account for which specific theory is better than another:²⁰

Imagine that a metaphysician, Rachel, posits a fundamental theory with 100 kinds of fundamental entities. Her theory is retrodictively excellent and is adopted by a number of metaphysicians within the philosophical community. Then along comes a metaphysician called David and, in a moment of genius, he builds on Rachel's work to discover a deeper fundamental theory with 10 kinds

of fundamental simples, which, in varying combinations, make up Rachel's 100 kinds of entities.

It appears to be the case in this scenario that it is David's theory, rather than that of Rachel's, that describes a paradigm case of progress in philosophy 'in which a deeper, more unified, and more elegant theory ought to replace a shallower, less unified, and less elegant theory' ([9], p. 648).²¹ This is due to the fact that David's theory is evidentially superior in every methodological respect; however, if one were to count by the total number of (kinds of) entities—as is required by the Razor—then one will get the cases backwards ([9]), as, within this example, it is Rachel's total ontology that is a proper subset of David's, as David is committed to everything that Rachel is (in a token and type manner). That is, David believes in Rachel's theory's properties, the particular objects that exemplify these properties, the relations that tie them to the particular objects, and the composite entities that they form, etc. Plus, David believes in more: he also believes in the simples that underly them all. Thus, by the lights of the Razor, David's theory would be more theoretically committing for positing the existence of additional simples, and thus, all else being equal, his theory should be strongly dispreferred over that of Rachel's. Yet, this is obviously incorrect at a methodological level. David's theory is not an affront to ontological economy—that is, simplicity—when it is judged purely based on explanatory virtue, as his theory is 'evidently a more economical, tighter, and more unified improvement' ([8], p. 648). Hence, when one is comparing how economical or simple a theory is, one should compare how many fundamental entities (or kinds of entities) that they posit (e.g., Rachel's 100 types of fundamental entities with that of David's 10 fundamental types of simples), and not how many entities (or kinds of entities) that are overall posited. What emerges from this is thus an overall methodological approach that is a permissive (i.e., an abundant) view of what non-fundamental entities that are postulated, coupled with a restrictive (i.e., a sparse) view of what is fundamental.

A further benefit of employing the Laser, within a metaphysical context, is that of it being able to help one to make sense of the often-uttered philosophical motif that some entities are 'nothing over and above' other entities, or are 'no addition of being' to one's ontology, and are thus 'ontologically innocent' ([17]).²² For example, assuming physicalism, as Bennett ([17], p. 222) notes, 'mental states are "nothing over and above" physical ones; assuming unrestricted composition, mereological fusions are "nothing over and above" their parts, etc.'. The use of this ontological locution is helpful but difficult to fully conceptualise. However, by utilising the Laser—the principle that only fundamental entities count against the simplicity of a theory—one is able to clarify this position. As it is non-fundamental (derivative) entities that are to be taken to be ontologically innocent (i.e., nothing over and above the fundamental entities) in the sense that the postulation of their existence does not reduce the simplicity of a theory, *in a manner that reduces the likeliness of the theory* ([17]). Though non-fundamental entities are indeed numerically distinct from the other non-fundamental (or fundamental entities) that they 'depend' on (and thus they do indeed count ontologically towards the total number of things that there are) they do not count against the simplicity of a theory in a manner that counts for likelihood—as, in this respect, one is only required to count the number of fundamental entities. This point can be further emphasised by the following Probability Analysis proposed by Bennett ([17], p. 223), which we can state succinctly as follows:

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| (6) (Probability-A) | <ul style="list-style-type: none"> (i) Assuming a theorem of probability: if $A \models B$, $\Pr(A) = \Pr(A \& B)$. (ii) Let T^- and T^+ be two theories that agree on all fundamental matters. (iii) T^- includes statements about non-fundamental entities (NF). (iv) T^+ includes NF and statements about fundamental entities (F). (v) $F \text{ in } T^+ \models NF \text{ in } T^+$ (vi) So, $\Pr(F) = \Pr(F \& NF)$ (vii) So, $\Pr(T^-) = P(T^+)$ |
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The central claim made here is that a theory that posits the existence of fundamental *and* non-fundamental entities does not count against its simplicity in a way that lowers the probability of the theory, as the extra ontological commitments made by this postulation—namely, that of there being non-fundamental entities—is *necessitated* by one’s commitment to the existence of fundamental entities. This is because to be built, as Bennett ([17], p. 223) notes, ‘is, in part, to be necessitated’. Hence, a theory that posits the existence of fundamental *and* non-fundamental entities is as probable as one that only posits the existence of solely non-fundamental entities—in short, the former’s ontological commitment does not make it less likely to be true.

Taking all of these modifications of the theoretical virtues systemisation into account concerning the methodology that will be employed in our assessment of the theoretical virtues of Theism and Naturalism, we can now progress forward with the following abductive criteria:

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| (7) (Abductive Criteria) | <ul style="list-style-type: none"> (i) The Criterion of Coherence (ii) The Criterion of Explanatory Power (iii) The Criterion of Theoretical Commitments |
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For (i): the Criterion of Coherence, this criterion assesses whether the postulated theory possesses the three coherential virtues (TV4-TV6): internal consistency, internal coherence, and universal coherence, and, therefore, can be deemed as a coherent, and thus workable, theory. A theory possesses these virtues by not having contradictory theoretical components that are internal to the theory. Moreover, the theoretical components should cohere well with one another, and thus not be grounded upon an ad hoc basis. Finally, the theory is also expected to cohere well with other warranted beliefs or theories (or at least not contradict them in some clear way). This specific criterion can now be conceived of as the ‘first stage’ theory comparison, in the sense of its fulfilment being the minimum requirement for a theory to be put forward for assessment of its truth value. For the ‘second stage’ of theory comparison we have the fulfilment of (ii) and (iii) of (6). That is, for (ii): the Criterion of Explanatory Power, this criterion assesses whether the postulated theory exemplifies the three evidential virtues (TV1-TV3): evidential accuracy, causal adequacy, and explanatory depth, and thus explains the existence of the entity, or occurrence of the event, when otherwise this entity or event would not be expected to have existed. One should thus seek to maximise the explanatory power of a theory by it successfully exhibiting each of these three virtues, relative to the phenomena under focus. For (iii): the Criterion of Theoretical Commitments, this criterion focuses on assessing whether the postulated theory exemplifies the aesthetic virtue of simplicity (TV9), and thus assessing the theoretical commitments required by a theory, and how successful it is at minimising these. The focus of this minimisation strategy—that is, the quantitative and qualitative simplicity of a theory—however, is on that of fundamental entities, kinds, or notions, etc., rather than all types of entities, kinds, or notions, etc. That is, the quantitative and qualitative simplicity of a theory is thus that of it postulating the fewest fundamental entities (i.e., fundamental objects, properties, and relations, etc.), fewest fundamental kinds, fewest fundamental theoretical primitives, and fewest fundamental kinds of theoretical primitives. Thus, if a

theory posits the existence of some new particular object, property, or kind—and involves some theoretical primitives—it is required by the Criterion of Theoretical Commitments that it should postulate as few as possible, and it should postulate no more than those that are needed to explain the data. In all, according to the abductive criteria at hand, if a theory is posited, it should, firstly, achieve a level of coherence, which is to pass the first stage of theory comparison and, secondly, it should minimise (ontological and ideological) commitments at the fundamental level and maximise explanatory power (i.e., explanation of the data under question), which is to pass the second and final stage of theory comparison. In its comparison with another theory, if the theory under focus is coherent and performs the task of trading-off this minimisation and maximisation to a greater level than that of the other theory, then it should be taken to be a better overall theory.

3. The Nature of Trope-Theoretic Theism

3.1. Trope-Theoretic Framework

The theory of Theism (hereafter, Theism) centres on the claim that ‘there is a God’. This claim seeks to provide a theory that invokes the powers, beliefs, and intentions of a personal agent, and it is a claim that is at the heart of the major theistic world religions such as Judaism, Christianity, Islam, and Sikhism. Now, there are various ways to construe this particular claim; however, the specific way that it will be construed here is as follows:

(8)	(Trope-Theoretic Theism)	There is a God, identified as a metaphysically simple, maximal power trope.
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This specific rendering of Theism, which we can term more specifically ‘Trope-Theoretic Theism’, centres around the notion of a ‘powerful module trope’ and an ‘aspect’, and so it will be important to briefly detail the nature of these concepts at a general level and then apply them within a theistic context to construct our theory. The concept of a ‘trope’, introduced by D.C. Williams ([20,21]), refers to the entities that provide the ontological basis of reality and serve the role of being the fundamental constituents of all other entities. More specifically, a trope is an abstract particular nature. In breaking this concept down in a stepwise manner, we can understand that first, a trope is abstract, not in the sense that it lacks spatio-temporality, but in the sense that it is ‘less than its content’ and does not ‘exhaust its plime’. In short, multiple tropes can be co-located together to form a compresent bundle. Second, a trope is particular in the sense that it can have a distinct duplicate; in other words, Leibniz’s Law (i.e., the identity of indiscernibles) fails to hold for it.²³ That is, for properties as universals, the Law holds, in that exactly similar entities (i.e., universals) are identical (i.e., if universal x and universal y are indiscernible, then $x = y$). Whereas for particulars (e.g., tropes), the principle does not hold, as exactly similar entities can be distinct (i.e., if trope x and trope y are indiscernible, then $x \neq y$). Third, a trope is its intrinsic (qualitative) nature, in that it does not have, or possess, a nature of its own; rather, it is combinatorially intrinsic in the sense that the nature of a trope is invariant under the scenarios in which the given trope is alone or accompanied. However, the modal invariance of a trope, unlike other entities, is not grounded upon the possession of an intrinsic nature, but that of it being its intrinsic nature; it is numerically identical to it. There is nothing more to a trope than its nature, and thus, as noted by Anna-Sofia Maurin ([22], §2.2), tropes, at a general level, ‘have no constituents, in the sense that they are not ‘made up’ or ‘built’ from entities belonging to some other category’. Tropes are thus primitively qualitative and irreducible entities; they lack proper parts,²⁴ and thus are metaphysically simple entities.²⁵ Fourth, a trope can come in two forms: as a modifier or as a module trope. That is, a trope can be ‘modular’ (i.e., a ‘module trope’)—which is a self-exemplifying, maximally thinly (or singly) characterised sui-generis ‘object’²⁶, and thus is a property in a ‘stretched’ (or analogical) sense (i.e., a property*)—or, it can be a ‘modifier’ (i.e., a ‘modifier trope’)—which is a non-self-exemplifying, maximally thinly characterising property.²⁷ In other words, a

modifier trope is a property that does not exemplify this character, but simply bestows it upon (i.e., ‘makes’) something else to be characterized in that specific way, whilst a module trope is an object that exemplifies the character that it grounds (i.e., is self-exemplifying). Thus, for example, a particular (thickly characterized) object is spherical and red in virtue of its module tropes, which are themselves spherical and red (i.e., exemplify sphericity and redness), and together (compresently) are parts (or constituents) of that object. A module tropes’ character grounding, rather than being *de novo*, can thus be taken to be some type of parthood (or constitution) relation ([23]). Furthermore, an additional distinction between modifier and module tropes is the role played by these types of tropes in causation. At a more specific level, it is solely module tropes, rather than modifier tropes, that can play any direct role in causation. Modifier tropes, in a similar manner to universals, are thus causally inert. However, the modular view does not have this issue, given that module tropes are self-exemplifying entities, resulting, in our example above, in a modular hotness trope being able to be the direct cause of the burn mark. Therefore, it is module tropes, and not modifier tropes, that are uniquely suited to be the basic terms of causation ([23]). Lastly, a trope, following George Molnar ([24]), is powerful in at least five ways: it is, first, directed—in that a powerful trope is directed towards some characteristic and distinctive manifestation.²⁸ Second, it is independent—in that, a powerful trope is ontologically independent of its manifestations; that is, it can exist when it is not being manifested. Third, it is actual—in that a powerful trope is an occurrent feature of the object that possesses it. Fourth, it is intrinsic—in that, a powerful trope is intrinsic to its bearer.²⁹ Fifth, it is objective—in that the existence of a powerful trope is not dependent on the existence of any conscious, observing minds. A trope, of a modifier or modular kind, is thus powerful in that it fulfils the roles of directedness, independence, actuality, intrinsicity, and objectivity. In addition to these five characteristics of the powerfulness of a trope, one can also conceive of a trope as ‘multi-track’, which is that of it being capable of bringing about distinct ‘manifestation types’ (i.e., different types of effects), and it often does this in conjunction with other powerful tropes. One way to understand the outworking of this is through the notion of a threshold that has been introduced by Stephen Mumford and Rani Lill Anjum ([25]), where a given effect occurs when certain powers have accumulated to reach the requisite threshold.³⁰ This accumulation can then be plotted as vectors which, according to Mumford and Anjum ([25], p. 145), ‘is a useful way of modelling powers because, like powers, they have a direction—the possible manifestation the power is for—and they have a strength or intensity, indicated by the length of the vector’. This would thus be depicted on a one-dimensional quality space with F and G representing two possible manifestation types of some accumulated powers. For example, F could be the property of being cold and G could be the property of being hot, as illustrated by Mumford and Anjum ([25], p. 146) in Figure 5. as follows (where ‘T’ is the threshold and ‘R’ is the resultant effect):

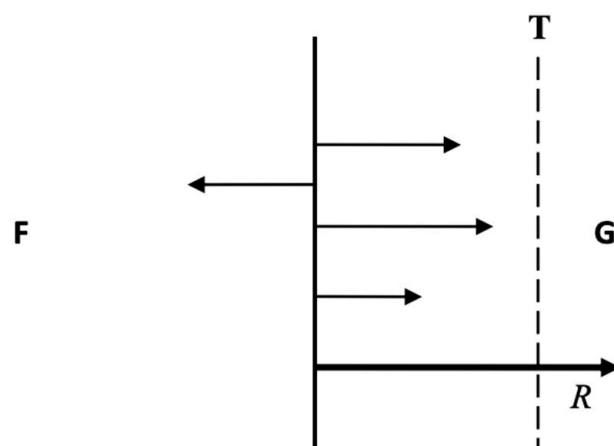


Figure 5. Powers Modelled as Vectors.

In this illustration, for one to calculate the final effect, one has to take into account the strength and direction of each individual vector with the resultant vector R , representing the fact that an effect is caused when the powers under question have accumulated to reach a certain point at which that effect is triggered ([25]). In sum, a trope, of a modifier or modular kind, is thus powerful in that it fulfils the roles of directedness, independence, actuality, intrinsicality, and objectivity. And one can understand the effects of a multi-track powerful trope, in a 'fine-grained' manner, through the utilisation of the notion of a threshold and plotting vectors.

Turning our attention now to the concept of an 'aspect', this notion was introduced by Donald L.M. Baxter ([26,27]) in order to provide a coherent conceptual foundation for the further notion of 'qualitative self-differing'. In further understanding the nature of an aspect within this context one can elucidate the notion at two levels: the semantic level and the ontological level. At the semantic level, aspects are expressed through 'nominal qualifiers' such as 'insofar as' (or 'in some respect' and to a lesser extent 'as' and 'qua'). Nominal qualifiers serve a special role of referring to aspects; they are specifically present within self-differing cases, where the same entity can be discernible from itself. Furthermore, the use of a nominal qualifier in these cases (and other cases like them) can be further precisified via formalisation, where one takes ' α ' as a regular term and ' $\varphi(y)$ ' as any formula open in y , and thus we can introduce a term to refer to aspects, namely an aspect term, written as such: ' $\alpha_y[\varphi(y)]$ '. From this semantic basis, and with the notion of an aspect term to hand, we can now progress onto the ontological level, which will allow us to further elucidate the nature of an aspect. At the ontological level, according to Baxter [26], aspects are difficult to distinguish from other entities.³¹ However, we can begin to acquire an understanding of their nature by describing their functional role and the relationship to the individuals that bear them. Primarily, the aspects of an individual function as the particular ways of being of that individual. A way of being is a conceptually primitive notion that, as noted previously, can be glossed in part by taking it to be the way or manner in which an entity exists. Thus, aspects function as the particular ways in which individuals are. However, as ways of being of an individual, aspects are not qualities (or properties) as they themselves can possess qualities (or properties) due to their numerical identity to the individuals that bear them. Aspects, however, do not possess all of the qualities that the particular individuals that they are aspects of possess. Moreover, in a similar manner to their bearers, they are particular entities, rather than universals, through Leibniz's Law (in an unrestricted sense) failing to hold for them. Secondly, despite the numerical identity between individuals and their aspects, aspects are not 'complete individuals' due to the fact that complete individuals are entities that can exist independently. Instead, according to Baxter [27], aspects are 'incomplete entities' due to them 'having fewer properties than it takes to exist on one's own' ([27], p. 916). Aspects are thus incomplete in the sense of them being dependent upon the complete individuals that they are numerically identical to.³² The nature of a complete individual determines the aspects that they have, in that they depend entirely upon what that individual entity is; once we have the individual, we also have its ways of being. Thirdly, aspects are not mereological parts of the individuals that they are aspects of, as, again, they are numerically identical to, rather than a 'part' of, these individuals ([27]). Lastly, aspects are not mental abstractions. That is, even though a complete individual's aspects are abstract entities (through them failing to exhaust the content or plume that they are aspects of),³³ that can be considered by means of abstraction (where one abstracts a way that an individual is), it is important to note, as Baxter ([26], p. 169) writes, that the difference between a complete individual and their aspects is 'a less-than-numerical distinction but more than a mere distinction of reason'. Baxter terms this distinction an aspectual distinction, which results in the aspects of an individual only ever being two (or more) in a 'loose' sense, when they are counted based on qualitative distinction. However, in a 'strict' sense—when the aspects are counted based on a numerical distinction—they are only ever one. Thus, aspects, as Baxter notes, provide a 'complexity to the simple, i.e., a qualitative complexity to the quantitatively simple' ([26], p. 178). At a prima facie

level, Leibniz's Law (the indiscernibility of identicals) seems to be transgressed within an aspectual framework, as the existence of aspects allows for there to be numerically identical entities that do not share the same qualities. That is, an individual can differ from itself by having aspects that differ, yet without this requiring that the individuals are numerically distinct. Identicals that are considered unqualifiedly are indiscernible, but identicals that are considered qualifiedly may be discernible; that is, something may qualitatively differ from itself. Yet, despite this appearance the non-contradictory internal negation in cases of aspectual reference seem to suggest that Leibniz's Law does not apply to aspects. That is, as Baxter ([27], p. 907) notes, it is vital that one is sensitive to 'aspectual reference', which refers to aspects and is distinguishable from singular reference, which refers to complete entities. Singular reference, according to Baxter, is not sensitive to the aspectual distinction, whilst the former is. And once we are sensitive to this distinction, we can realise that the domain of quantification for Leibniz's Law, in its original sense, as Baxter ([26], p. 104) writes, 'includes all the complete entities, but does not include the incomplete entities numerically identical to some of them'. That is, Leibniz's Law solely applies to individuals (i.e., complete/independent entities) and thus does not generalise over to aspects (i.e., incomplete/dependent entities). More fully, Baxter ([27]) suggests that Leibniz's Law does not universally apply, distinguishing between versions for complete and incomplete entities—with aspects only challenging the latter, and thus commitment to aspects requires a nuanced view of Leibniz's Law. This nuanced view allows a distinction to be drawn between the 'Indiscernibility of Identical Individuals' (i.e., if x is numerically identical with y , then for any quality F , F is possessed by x if and only if it is possessed by y) and the 'Indiscernibility of Identical Aspects' (i.e., if x is numerically identical with y , then for any quality F , an aspect numerically identical with x has it if and only if an aspect numerically identical with y has it). Aspects do not oppose the *Indiscernibility of Identical Individuals*, which remains silent on aspects. Thus, it follows that Leibniz's Law does not preclude the numerically identical aspects of an individual from being qualitatively different from each other and the individual themselves. The reality of aspects thus does not lead to a complete denial of Leibniz's Law. Instead, there is only a denial of an *unrestricted* understanding of Leibniz's Law that includes all complete and incomplete entities within its domain. More can indeed be said here concerning the nature of a trope and aspect; however, doing so will indeed take us too far afield.³⁴ Nevertheless, we can take the central components of the notion of a trope and an aspect to have been laid out and ready to be applied to the issue at hand.

Thus, in applying the concepts of a trope and aspect now within a theistic context, we can posit that God is a module trope, which is that he is an abstract particular nature that is a maximally thinly charactered (*sui generis*) object (a property in an analogous sense (i.e., a property*)), that is self-exemplifying, and thus he is identical to his qualitative nature—namely, he is the specific character that he has, which is that of him being maximally powerful. God's nature is thus intrinsic to him, not in the sense of him possessing a further intrinsic 'property', but simply that of him being numerically identical to this nature. Moreover, since God is a trope of a modular kind, he plays a direct role in causation and is thus a basic term of a causal relation. God is thus identical to a single module trope.

Moreover, as a module trope, God is powerful in five ways: He is, first, directed—in that God (or his action) is directed towards some characteristic and distinctive manifestations, such as that of creating or sustaining the universe. Second, he is independent—in that God is ontologically independent of his manifestations; that is, he exists when his power is not manifested.³⁵ Third, he is actual—in that God is an occurrent feature of the object that possesses him: the Trinity. Fourth, he is intrinsic—God is intrinsic to his bearer, which is, again, the Trinity. Fifth, he is objective—in that the existence of God is not dependent upon the existence of any conscious, observing minds. God, as a module trope, is thus powerful in that he fulfils the roles of directedness, independence, actuality, intrinsicity, and objectivity. However, he does this without any of the limitations that certain other powerful module tropes may have. In other words, God is an unlimited powerful trope,

in that he is multi-track—he is cable of producing distinct manifestation types—yet he can do this without any limitation except for logic. One way in which one can further understand the limitlessness of the powerfulness of God is through the utilisation of the notion of a threshold and a vector depicted on a one-dimensional quality space with F and G representing two possible manifestation types stemming from God’s action. For example, F could be the property of resting on the ground and G could be the property of being suspended in the air, which can be illustrated in Figure 6. as follows (where ‘T’ is the threshold and ‘R’ is the resultant effect):

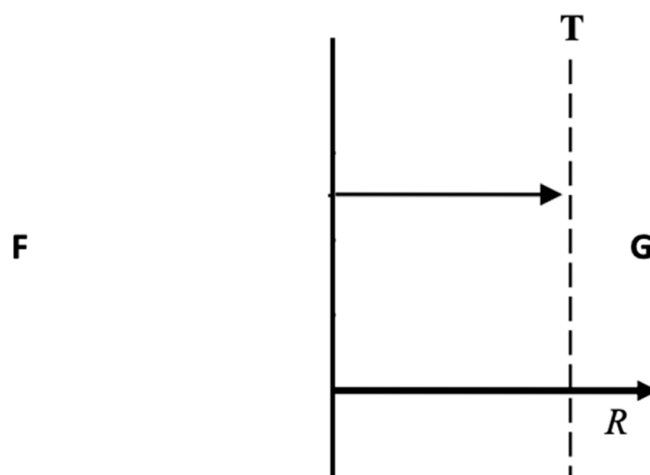


Figure 6. God’s Powerfulness Modelled as a Vector.

In this illustration, for one to understand the effect brought about by God—which, in this case, is to cause something to be suspended in the air—it is important to understand that this is not produced by an aggregation of operative dispositions that have reached a certain threshold for the effect. Rather, God, in all cases when he exercises his power, is unopposed and does not require other powers to reach a threshold. In short, God can bring about any effect—and thus reach the needed threshold for the occurrence of a given manifestation type—without limitations from anything, aside from logic. God is thus a single maximal power (module) trope, which we can term a ‘maximal power-trope’ (or m-power trope) for short.

Though God is identified as a maximally powerful entity, he would also have further attributes that are rightly predicated of him.³⁶ In following Yujin Nagasawa ([29]),³⁷ we can conceive of God as an entity that possesses these attributes as a maximally consistent set of great-making attributes—and, by his specific possession of this set of attributes, God is extensively and intensively superior to all other entities. More specifically, the attributes that God possesses are rightly conceived of as ‘great making attributes’—where a great-making attribute, as noted by Nagasawa ([29], p. 65), is one that ‘if, all else being equal. . .contributes to the greatness of its possessor’. A great-making attribute is thus an intrinsic attribute that improves (and thus in no way diminishes) the greatness of its possessor. In other words, a great-making attribute is whatever attribute that is intrinsically better for one to possess than not, which would (plausibly) be that of the attributes of power, knowledge, freedom, goodness, personhood, etc. God would thus have his attributes in such a manner that he is ‘extensively superior’ and ‘intensively superior’ to all other existing (or possibly existing) beings. Now, a being *x* is extensively superior to some being *y*, according to Nagasawa ([29], p. 56), if *x* has all the great-making attributes that *y* has, and ‘*x* has some great-making properties that *y* does not have’, whereas a being *x* is intensively superior to some being *y*, as also noted by Nagasawa ([29], p. 57), if *x* has some of the attributes that *y* has, but they are ‘present in *x* at a higher degree of intensity than in *y*’. The extensive superiority of a being thus centres on the possession of a wide range of great-making attributes, and the intensive superiority of a being centres on the degree

of intensity of each of the great-making attributes. Thus, in the case of God, this type of entity, has all of the compossible great-making attributes to a maximal degree of intensity (i.e., each of the attributes is at an intrinsic maximum)and, therefore, given this, God is extensively and intensively superior to any other possible being.

Now, concerning the specific attributes that would be part of God’s nature as an m-power-trope, one can follow Richard Swinburne ([30]) and adopt the following definitions for a range of these attributes as stated in Table 2. as follows:³⁸

Table 2. Great Making Attributes.

Attributes	Attributes Definition
Maximal Power	x is maximally powerful = df x is able to cause any event M that it is logically possible that he could cause.
Personhood	x is personal = df x is a substance that essentially has a mental attribute (i.e., an attribute in which one has privileged access to its instantiation).
Maximal Knowledge	x is maximally knowledgeable = df x knows of all true propositions that they are true.
Maximal Presence	x is maximally present = x is cognisant of, and causally active at, every point of space.
Maximal Freedom	x is maximally free = df x does not have any non-rational causal influence determining the formation of their purposes.
Maximal Goodness	x is maximally good = df x performs the best action/kind of action, if there is one, many good actions and no bad actions.

As an m-power-trope, God is a personal entity—a personal module trope—due to the fact that for him to exercise his maximal power, he must be an entity that has a rich form of consciousness that enables him to perform a range of actions that are solely limited by logic. Thus, to ward off a potential objection that can be raised here, conceiving of God as a trope does not rob him of this personhood, given that he is a trope of a modular nature (i.e., a property*). Furthermore, given his maximal power, God would be an entity that is unlimited in knowledge, presence, freedom, and goodness. That is, it follows from his maximal power that God would, firstly, be maximally knowledgeable—he would know of all true propositions (concerning the past and present) that they are true—as, if he is to be able to exercise his maximal power, he would need to know the nature of the alternative actions that are dependent upon what occurred in the past and what is presently occurring. Secondly, being maximally powerful and also maximally knowledgeable, God would be maximally present—he would be cognisant of, and causally active at, every point of space—and thus would be present to all existing things through his knowledge concerning them and his power to act upon them. Thirdly, being an m-power-trope, he would also be maximally free—he would be free from any non-rational influence determining the choices that he makes—as, if he is to be able to exercise his power in any logically possible way, then his power must operate without any causal limitation or hindrance. Fourthly, being maximally knowledgeable and maximally free, God would also be maximally good; he will always perform the best action (or kind of action) if there is one, many good actions and no bad actions. That is, given God’s maximal knowledge, he would know the nature of each available action that he can choose from and thus would possess knowledge of whether each action is good or bad, or is better than some incompatible action. Moreover, in recognising an action as good, God would have some motivation to perform that action, and in recognising an action as being better than another action, God would have an even greater motivation to perform it ([30]). Hence, given his maximal freedom, if God is situated in a scenario in which there is the best possible action (or best kind of action) for him to perform, then God will always perform that action (or kind of action), and if there is no best action (or kind of action), then God will perform a good action and no bad actions.³⁹

3.2. The Axiological Principles and Aspectival Framework

In identifying God's intentions, and thus the types of actions that will be performed by him, we can utilise two principles: the Diffusiveness Principle and the Principle of Plenitude, which, brought together, we can call the 'Axiological Principles' and state them as follows:

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- | | | | |
|-----|---------------|-----|---|
| (9) | (Axiological) | (a) | Diffusiveness: Goodness is necessarily diffusive of itself. |
| | | (b) | Plenitude: No genuine potentiality can remain unfulfilled. |
-

For (a) of the Axiological Principles,⁴⁰ at a general level, goodness requires something other than itself as a manifestation of itself. Hence, a good being will inevitably bring about other good things. Thus, as it is better to exist than not to exist—existence is a good thing—God, as Norman Kretzmann ([26], p. 223) writes, 'necessarily (though with the freedom associated with counterfactual choice) wills the being of something other than himself'. In other words, as maximal goodness is an essential attribute of God and self-diffusiveness is essential to goodness itself, the existence of other entities outside of God will be an inevitable consequence of God's nature. Restating this within our metaphysical context, God—who is maximally good—must diffuse his goodness by 'causing' and 'grounding' the existence of all things outside of himself.⁴¹ The existence of other entities will be the necessary result of God's intention to produce good things. Thus, God's action of grounding/causing the existence of other entities is a product of his nature that stems from him necessarily, yet wilfully, spreading his goodness in this creative act.⁴² However, with (b) of the Axiological Principles, we see that this diffusion of God's goodness will not be achieved by him simply causing/grounding a limited range of possible entities; rather, Diffusiveness requires that God cause and ground other entities outside of himself, and Plenitude tells us what (number and variety of) entities God would cause and ground. As this principle requires that no possible entity can remain as a potentiality, as Arthur Lovejoy ([32], p. 50) notes in expressing this principle:

not only the thesis that the universe is a plenum formarum in which the range of conceivable diversity of kinds of living things is exhaustively exemplified, but also any other deductions from the assumption that no genuine potentiality of being can remain unfulfilled, that the extent and the abundance of the creation must be as great as the possibility of existence and commensurate with the productive capacity of a 'perfect' and inexhaustible Source, and that the world is the better the more things it contains.. the existence of all possible beings at all times is...an implication of the divine nature.

In line with Lovejoy, we can take there to be a specific metaphysical relationship between value and plenitude—namely, whatever exists (i.e., the number, variety, and diversity of kinds of possible entities) must be proportionate to the value of the source of their existence, with a maximally valuable source leading to a maximisation of the number, variety, and diversity of kinds of possible entities. Hence, as God is the maximal (perfect) source of whatever exists, God's existence entails the fact that no potentiality (in logical space) will be left unfulfilled. That is, as Michael Almeida ([34], p. 8) writes, it is the case that, given God's existence (and maximal), 'every possible object, kind of object, event, kind of event, state of affairs and so on exists at some time or other'. Hence, given the working of these principles and the maximal goodness of God, one can expect God to have the intention to necessarily bring about (i.e., cause and ground) a wide variety of entities.

Returning to our explication of the nature of God within trope-theoretic Theism, these are the attributes—maximal knowledge, presence, freedom, and goodness—that are derivable from the supposition that God is an m-power-trope. However, in construing God as a module-trope, we can also take him to be metaphysically simple, given the non-composite and irreducibility of a trope.⁴³ And so, in conceptualising God in this particular way, we can see that the derivable attributes of God—unlike Swinburne ([30]), who takes

these attributes to be related to God (and each other) by an ‘entailment relation’—are, in fact, related to God (and each other) by a relation of ‘numerical identity’. More specifically, according to the notion of metaphysical simplicity, God is non-composite and irreducible in the sense of him lacking proper parts, where a proper part is a portion of an entity that is numerically distinct from it. Thus, by taking God to be metaphysically simple, there is no portion of God that is numerically distinct from him. God is a being who intrinsically within himself does not have any division or ontological composition—be it spatial, temporal, or metaphysical composition—God must be such that he does not have any sort of complexity involving composition. So, the denial of metaphysical complexity in God is thus also a denial of him possessing any properties as well. More specifically, God does not exemplify any numerically distinct properties (i.e., proper metaphysical parts). Since if God were to exemplify these properties, he would be dependent upon them in order to be what he is. Yet, as God cannot be dependent in this specific way—given that he is maximally powerful—he thus must not be the bearer of any properties. Rather, any intrinsic property ‘attributable’ to God must be numerically identical to him. For example, if the intrinsic property of goodness is attributed to God, then one is not properly attributing to him an ontologically distinct property that he exemplifies. Rather, God is instead taken to be identical with his goodness (and all the other properties that are attributed to him as well). Moreover, given that God is identical to each of his attributes, one must also infer that his attributes are identical to each other due to the transitivity of identity. Thus, God’s identity with his goodness and his power entails the fact of his goodness being identical to his power (and, again, for all of the other properties that are attributed to him). Therefore, on the basis of God’s metaphysical simplicity, there is, firstly, no numerical distinction between God and his attributes and, secondly, there is no numerical distinction between each of God’s attributes as well.

Hence, in construing God as a module-trope, we can see that the derivable attributes of God, which are normally taken to be attributes that are related to God (and each other) by an ‘entailment relation’ are, in fact, now within the aspectual framework, related to God (and each other) by a relation of ‘numerical identity’. More specifically, God does not exemplify any numerically distinct properties; rather, any intrinsic characteristic ‘attributable’ to God must be numerically identical to him. For example, if the intrinsic property of goodness is attributed to God, then one is not properly attributing to him an ontologically distinct property that he exemplifies. Rather, God is instead taken to be identical with his goodness (and all the other properties that are attributed to him as well). Moreover, given that God is identical to each of his attributes, one must also infer that his attributes are identical to each other due to the transitivity of identity. Thus, God’s identity with his goodness and his power entails the fact of his goodness being identical to his power (and, again, for all of the other properties that are attributed to him). Now, the manner in which we can best understand this is by taking God to possess aspects rather than properties. That is, instead of the m-power trope that God is possessing properties through the entailment of these properties from his maximal power, we can now ‘convert’ these properties into aspects, which will also result in the entailment relation being converted into a relation of numerical identity.

Given these conversions, one can now further understand the nature of these ‘aspects of maximal power’ by focusing on their functional role and the relationship that they have to the m-power trope, which allows us to say that they are not properties, complete entities, or mereological parts. Rather, they are incomplete abstract particular entities that are numerically identical to a specific complete individual and function as his ways of being. More fully, each of the aspects of maximal power is numerically identical to the m-power trope, yet they do not possess the same characteristics as it; they are each not the ability to perform any logically possible action. Lacking this characteristic, the aspects of maximal power are thus incomplete entities, in that they are dependent on the m-power trope, which exists as a complete entity (i.e., an independently existing entity). These aspects of maximal power do not exhaust the content or plume that they are aspects of (i.e., they each do not

exhaust the m-power trope), and they each function as ways that the m-power trope exists, which we can consider through a process of abstraction. This aspectual construal of the divine properties thus allows us to re-define the traditional set of divine properties as such, where our focus will now be on four of the central attributes that are related to maximal power, which can be stated through Table 3. as follows:

Table 3. Great Making Aspects Conversion.

Attributes	Attributes Definition	Aspects	Aspects Definition
Maximal Knowledge	Knowing of all true propositions and believing no false proposition	Aspect of Maximal Power: Knowledge-Aspect Aspect Term: Maximal Power _y [y is knowledge]	Maximal power <i>insofar as</i> it is the ability to know of all true propositions and believing no false proposition (i.e., be maximally knowledgeable).
Maximal Presence	Being cognisant of, and causally active at, every point of space.	Aspect of Maximal Power: Presence-Aspect Aspect Term: Maximal Power _y [y is presence]	Maximal power <i>insofar as</i> it is the ability to be cognisant of, and causally active at, every point of space (i.e., be maximally present).
Maximal Freedom	Having no non-rational causal influence determining one’s choices	Aspect of Maximal Power: Freedom-Aspect Aspect Term: Maximal Power _y [y is freedom]	Maximal power <i>insofar as</i> it is the ability to have no non-rational causal influence determining one’s choices (i.e., be maximally free).
Maximal Goodness	Performing the best action/kind of action, if there is one, many good actions and no bad actions	Aspect of Maximal Power: Goodness-Aspect Aspect Term: Maximal Power _y [y is goodness]	Maximal power <i>insofar as</i> it is the ability to perform the best action/kind of action (if there is one), many good actions and no bad actions (i.e., be maximally good).

At a specific level, these aspects of maximal power are focused on the different particular ways in which the m-power trope is. That is, by this module trope having (or, more specifically, being) the singular character of maximal power, it would exist in a particular manner and have certain limitless abilities that enable it to fulfil different roles. This functional role fulfilled by maximal power allows one to establish an aspectual distinction that takes these ways to be aspects of this specific trope. Therefore, as was seen in our previous example, we have a case of self-differing here. The subjects of this differing would be the aspects of the m-power trope, with each aspect possessing a ‘quality’ that each of the other aspects lacks; yet, despite their differing, these entities are numerically identical to the one m-power trope and thus each other as well. That is, within an aspectual context, the same thing, the m-power trope, which is numerically identical to God, is discerned in multiple ways without absurdity. More specifically, within this aspectual framework, there is one property*, the m-power trope, that is identical to multiple aspects, which are, in turn, identical to one another. In short, God is the m-power trope, the m-power trope is the qualitatively differing aspects of maximal power, and the qualitatively differing aspects of maximal power are one another. The traditional understanding of the possession of ‘many qualities’ by God is thus, in fact, the possession of many qualitatively differing, yet numerically identical aspects. The aspects of maximal power provide a certain ‘complexity to the simple’—a qualitative complexity to the quantitatively simple m-power trope which God is. Thus, by utilising an aspectual distinction here, in a ‘loose’ sense, focused on qualitative distinctiveness, we can indeed count a multiplicity of aspects within God. Yet, in a strict sense, focused on numerical distinctiveness, there is solely one self-same property*, the m-power trope, which is differently considered. So construed, God is rightly taken to be a fundamental entity, by his metaphysical simplicity and maximal power

rendering him as an explanatory stopping point. His non-compositeness and irreducibility would thus not require him to be an output of a ‘grounding relation’, and by him possessing the ability to perform any logically possible action, anything that exists will be by him willing or permitting it to exist. Therefore, if God exists, he is rightly understood as a metaphysically simple, m-power trope that exists fundamentally.

Taking all of these things into account, this is thus the conception of God that is affirmed within a trope-theoretic theistic context and will now be a candidate theory that will be compared with ON to see which particular theory achieves the needed trade-off of minimising theoretical commitments and maximising explanatory power, relative to our explanatory target—namely, the existence of GCR.

4. Comparative Assessment

4.1. Preliminary Assessment: Criterion of Coherence

For Criterion (i): Criterion of Coherence, Theism is a coherent, and thus workable theory, by it, firstly, being an internally consistent theory, as each of the attributes had by God—such as his maximal power, maximal knowledge, maximal freedom, maximal goodness, and maximal presence, which do not involve a contradiction or entail a contradiction—can be seen in analysing the definitions provided for these attributes (i.e., aspects) earlier. Moreover, as God also possesses his attributes (i.e., aspects of maximal power) in a manner that forms a ‘maximally consistent set’ this enables one to affirm the fact of these attributes, and the set itself, not to be subject to charges of incoherence (e.g., the ‘omnipotence paradox’),⁴⁴ mutual inconsistency (e.g., the attributes conflicting with each other), and inconsistency with reality (e.g., evil),⁴⁵ given the fact that, if a particular definition of the attributes turns out to be incoherent, or if the set of attributes is inconsistent with each other or with reality, then—on the basis of the requirement for the attributes to form a *maximally* consistent set—God would possess a nature that has attributes with a coherent conception and one that avoids inconsistency.⁴⁶ Secondly, and in building on this, Theism is also an internally coherent theory as each of the attributes of God—as aspects of him—are numerically identical to him and each other; hence, there is unity established based on God’s nature being reducible to qualitatively differing but numerically identical aspects. In addition to this, there is an internal coherence to be found in the attributes of God all being ‘qualitatively derivable’ from maximal power; that is, they are simply *qualitative ways in which maximal power is*. So, for example, as noted previously, in focusing on the derivability of the aspect of maximal knowledge from maximal power, for God to be maximally powerful, that is him having the ability to perform any logically possible action, then he must, at the minimum, possess knowledge of what occurred in the past (and what is occurring now in the present) in order for him to know of (and believe no false propositions about) what actions are logically possible for him to perform at any given point in time. Thus, to be maximally powerful, God must also have the ability to know of all true propositions, which is to say that he is maximally knowledgeable—in short, *if* God is maximally powerful, then he must be maximally knowledgeable (with this requirement holding for all of the other divine attributes above as well). Given the relationship between God’s attributes (i.e., that of identity and (qualitative) derivability), the divine attributes fit together so as to form a unified nature—rather than exemplifying any form of adhocness.⁴⁷ Lastly, Theism is a theory that has universal coherence, as we can see that the central claim provided by the theory of Theism—that there is a God (a metaphysically simple m-power trope)—fits very well with our warranted beliefs as it posits the existence of certain a type of entity—a trope—that is at the foundation of contemporary metaphysics, or at least a “major concern of metaphysics”. Specifically, tropes are a standard feature of most current day ontologies, where influential metaphysicians such as D.C. Williams ([20,21]), Keith Campbell ([35]), Jonathan Schaffer ([36]), Peter Simons ([37]), Anna-Sofia Maurin ([22,38]), Douglas Ehring ([39]), Kris McDaniel ([40]), and Michael Loux ([41]) have all utilised the concept of a trope within their ontological systems. Moreover, tropes do not only feature in the ontological systems of various metaphysicians, but are also plausible options for

dealing with various issues within contemporary philosophy. That is, tropes, amongst other things, find their use in the metaphysics of properties by providing a means for one to affirm a form of realism ([42]), or in the metaphysics of persistence and identity by providing a basis for the notions of endurance and perdurance ([43]), or in the philosophy of physics by providing a philosophical basis for quantum theory and the Standard Model of elementary particles ([44]). Plausibly, the belief in the existence of tropes is widespread in contemporary metaphysics, and thus the postulation of the existence of God, identified as a (module) trope, meshes well with other theories from the neighbouring fields within contemporary metaphysics.⁴⁸ The nature of God is thus one that is mutually coherent, internally coherent, and unified, and the type of entity that he is, is one that coinheres with the warranted beliefs and theories in wider fields of inquiry.⁴⁹ Thus, by possessing the needed virtues, Theism is a coherent and workable theory that can proceed (along with ON) onto the next, and more important, stage of our analysis.⁵⁰

4.2. Primary Assessment (i): Criterion of Explanatory Power

For Criterion (ii): Criterion of Explanatory Power, Theism allows one to *maximise power*, relative to the data at hand. Firstly, Theism has evidential accuracy, relative to the evidence at hand (i.e., the existence of the GCR), primarily on the basis of the Axiological Principles—namely, that of plenitude and the self-diffusiveness of goodness—and the fact that maximal goodness is possessed by (i.e., is an aspect of) God, as one can then conceive of God as having reason to bring about every possibility that is consistent with his nature, which would include that of the GCR. More specifically, God—who is maximally good—must diffuse his goodness, in a plenitudinous manner, by bringing into existence (i.e., causing and grounding) all things outside of himself. The existence of other entities will thus be the necessary result of God’s intention to produce good things. Hence, God’s action of ‘bringing’ into existence other entities is a product of his nature that stems from him necessarily, yet wilfully, spreading his goodness in this creative act. That is, the existence of a potentially infinite amount other entities outside of God will be an inevitable consequence of God’s nature. Thus, within the current context, every entity that makes up the global causal structure of reality (and all the possible entities that make up other possible causal realities) exists as a result of being caused and grounded by God. In short, God necessarily causes and grounds the GCR, and thus one can affirm the evidential accuracy of Theism, as, given that God’s (maximally good) intentions are always realised, *if* there is a God, we can expect (with a level of certainty) that there would also be GCR as well. Moreover, Theism also has causal adequacy and explanatory depth relative to our explanatory target as, firstly, it is able to disclose the causes that produce the existence of GCR and, secondly, it is able to provide a causal history of GCR, as it can either provide an account of the sequence of causes that led to the occurrence of it or it can answer a range of counterfactual questions concerning it. For the former, causal adequacy, the cause that is disclosed to us is that of God, an m-power-trope, that, motivated by his goodness, necessarily exercises his power to bring about all of causal reality. And, for the latter, explanatory depth, the causal history that is provided is that of (i) the working of the Axiological Principles, (ii) the existence of God, (iii) his possession of maximal goodness, (iv) the formation of an intention to diffuse his goodness in various ways, and (v) his exercise of his power to necessarily bring about all of causal reality, which all lead to there being GCR. And for an answer to counterfactual questions, God’s maximality (i.e., his goodness for Diffusiveness and his general maximality for Plenitude) necessarily requires him to perform the specific creative act of bringing about all of the entities that make up causal reality; hence, any counterfactual question concerning the existence and the properties of (or could possibly be had by) GCR would have a dependence-link to God in terms of counterfactual variation, such that if you were to ‘wobble’ the existence of God this would also ‘wobble’ the existence of (and the properties possessed by) GCR.⁵¹ Theism thus possesses the explanatory virtues of evidential accuracy, causal adequacy and explanatory depth, relative to the evidence

provided by GCR, which is to say that it is a theory that maximises explanatory power relative to the evidence at hand.

For ON, one can now see that this theory actually minimises, rather than maximises, explanatory power relative to this same evidence. This can be seen as follows: As noted previously, if one is to conceive of GCR as involving an infinite regress, then what is posited by the theory of ON is solely that of an infinite regress of natural (causal) reality whose state evolves without any input from any external reality. However, if one is to conceive of GCR as including an 'initial part'—that is, an initial singularity—then all that is posited by the theory of ON is that there being in existence a causally-past-infinite, (necessarily existing) natural reality has states that evolve (in a 'chancy' manner) without any external input. There is thus certain evidential accuracy for these two conceptions of ON, as, *if* ON is true (under one of the conceptions), then we can expect with a level of certainty that there would also be GCR. Hence, ON fits the data—that of there being a GCR—exceptionally well. However, where an issue can be raised with this theory is concerning its causal adequacy and explanatory depth. As, if one is to assume ON and take GCR to either involve an infinite regress or a (necessary) initial singularity, there is no particular disclosure within ON, under both conceptions, of the specific causes that produce the existence of GCR. Moreover, there is no detailed causal history or the provision of an answer to certain counterfactual questions concerning GCR. More specifically, one can ask the question of what are the causal agents (or entities) that are either members of the infinite series of natural reality or included within the initial singularity? Do the entities have the required causal powers to enable them to stand in a causal (or grounding) relation with the rest of natural reality that makes up GCR? It is assumed within the theory that they do, such that the infinite regress of entities and initial singularity bring about (in a 'chancy' manner) the subsequent states of GCR; however, as no specific causal entities (such as an object or an event etc.) have been taken to be the entities that stand in this infinite series, or are included within the initial singularity, no good reason has been provided for why one should take this to be the case. ON thus seems to lack causal adequacy. In addition to this, it is also safe to say that ON lacks explanatory depth as well, as one is not able to provide a detailed causal history by stating the *specific* causal entities that are part of the sequence of causes that led to the occurrence of the other contingent parts of the GCR. Neither are they able to provide answers to needed counterfactual questions concerning this phenomenon—as, in terms of counterfactual variation, what specific entity must one 'wiggle' *within* the infinite series or initial singularity that will also 'wiggle' the existence of GCR. Hence, by Oppy ([4]) assuming a non-committed approach to the nature of natural reality (as he leaves this to the natural scientists, or, more specifically, well-established scientific research), one is presented with a theory in ON that has evidential accuracy, but lacks the more significant virtues of causal adequacy and explanatory depth.⁵²

Now, one way out of this issue is to call into question the cogency of our entire analysis here—and thus one being able to ward off the task of having to deal with this problem directly. How this can be done is by considering an important assumption that is at the heart of ON, which seems to show that our entire analysis is wrongheaded. That is, if the GCR involves a necessary initial singularity (as it is within a specific conception of ON), then it does not require any external explanation for its existence. This is due to the fact that, according to Oppy [7], *things that are necessary do not require explanation*. And thus, even if ON has the issues stated above, Theism is not to be affirmed over it—on the basis that the existence of the GCR and its initial singularity is inexplicable, given its necessity. Hence, as Oppy ([6], p. 113) emphatically states, when it is to do with its existence, 'explanation does and must terminate'. On the basis of all of this one is thus presented with a challenge to the foundational assumptions of our analysis, which does, in fact, assume that there is something that requires explanation—and that Theism is a theory that provides the best explanation of it. However, in response to this challenge (and this potential escape route for the adherent of ON), one can now focus on an overlooked issue in discussions about the necessity of explanations for certain types of entities or facts. That is, even if Oppy [6]

argues that necessities do not require an explanation, one could also argue that this claim is indeed mistaken, as the real issue concerning the explanatory stopping point of something is not whether it is *necessary or contingent*, but whether it is *independent or dependent*. That is, an independent entity, in this context, can be understood as something that exists in its own right, not depending on anything else for its existence—and it is such entities that do not require an external explanation for their existence, as they either have a brute existence, or their existence is self-sufficient or it is self-explanatory. Importantly, this is true irrespective of whether the entity is necessary or contingent. And we can see this to be the case through viewing, first, a clarificatory example and, second, three counterexamples to Oppy's thesis, that also serve as examples supporting our thesis—namely, that of necessary entities indeed requiring explanation based on their level of dependency, and not that of their modal status.

First, consider the case of a necessary mathematical truth, such as ' $2 + 2 = 4$ '. Oppy might argue that this truth does not require an explanation because it is necessary—it could not possibly be otherwise. However, one could counter that the real reason this mathematical truth does not require an explanation is not because it is necessary, but because it is an independent fact. Its truth does not depend on anything else; it is simply a fact about the nature of numbers and arithmetic. On the other hand, let's consider now three counterexamples to Oppy's thesis—which also serve as supporting examples of the thesis argued here—one concerning a general necessary entity, and two more specific necessary entities (i.e., mathematical and logical entities). First, consider, a hypothetical necessary being, a being that exists necessarily and could not possibly fail to exist. Even though this being is necessary, one could argue that it still requires an explanation if it is not independent—if its existence depends on something else. As, for example, if this necessary being's existence depended on certain laws of nature (assuming 'modal necessitarianism') or other external factors, then we would still seek an explanation for why those laws of nature or factors are such that they necessarily give rise to this being. One would thus be right to ask an explanatory question concerning *why* that entity necessarily exists, and a deeper answer for its necessary existence would be able to be provided *in virtue* of those laws of nature or factors. Second, consider mathematics again and the sum $S = x + 5$, where x represents any real number. The value of S is directly dependent upon the value assigned to x —as when x is 3, S becomes 8, and when x is -2, S becomes 3. In this scenario, S exemplifies a dependent mathematical entity, as its value is not independently determined and relies entirely on the value of x . And thus, this dependency highlights the fact that S requires external input (the value of x) for its value to be established. Despite this dependency, the relationship $S = x + 5$ itself is a necessary mathematical truth, as it holds in all possible worlds given the rules of arithmetic; however, it still requires an explanation in terms of the value assigned to x to determine the specific value of S . One would thus be right to ask an explanatory question concerning *why* that mathematical sum has that value of necessity (in every possible world), and a deeper answer for its necessity would be able to be provided in virtue of the value of x (in all of those possible worlds). Third, consider the conditional statement 'If P , then Q ' ($P \rightarrow Q$), where P and Q represent distinct propositions. The truth of 'If P , then Q ' is dependent on the truth values of P and Q themselves. Specifically, the statement 'If P , then Q ' is only false when P is true and Q is false; in all other scenarios, it holds true. Therefore, the truth of the conditional statement is not an independent entity, as without clear information on whether P and Q are true or false, we cannot be certain about the truth of 'If P , then Q '. Hence, despite its dependence on the truth of P and Q , the conditional statement is a necessary logical entity because its truth value necessarily holds strictly due to the existence of P and Q and the established rules of classical logic. One would thus be right to ask an explanatory question concerning *why* that conditional statement has that truth value of necessity (i.e., in every possible world), and a deeper answer for its necessity would be able to be provided *in virtue* of the existence of P and Q and the holding of the rules of classical logic (in all of those possible worlds). Taking this all into account, these examples all serve to illustrate that, while some necessary

mathematical truths are independent and hold universally (such as $2 + 2 = 4$), there are also necessary entities, mathematical expressions and logical truths, that are dependent on specific values or conditions, and thus require an explanation for why this is the case. This thus shows, that while Oppy [6], and thus ON, does indeed take onboard the assumption that necessities do not require explanations, this is indeed an error as one could rightly argue that the real issue is not necessity versus contingency, but independence versus dependence. Independent entities, whether necessary or contingent, do not require an external explanation for their existence, while dependent entities do, *regardless of their modal status*. Hence, the part of our analysis that takes the initial singularity to be necessary, and yet it requiring an explanation, is indeed not mistaken—unless one can show it also to be independent, which has not been done—and thus one cannot take this route out of the issues presented to ON concerning our analysis of its explanatory power.

Another way out of this issue is to focus on directly dealing with the issue by taking one of Oppy's suggestions concerning the nature of the initial singularity with ontological seriousness. This is, as noted previously, that Oppy ([3], p. 49, square parenthesis added) states that 'on the assumption that the initial maximal part [initial singularity] involves objects, both the existence and the initial properties of those objects are necessary'. Or one could also take as our starting point the suggested description that Pearce and Oppy ([6], p., 103, emphasis added) provide for the entities that exist within the GCR, and then read this back into the initial singularity, as for them, 'causal reality is the sum of causally related objects; and natural reality is the sum of natural objects'. Thus, one could extract from this the conception of the initial singularity as one that includes within it objects and properties. And, in extending this to the infinite regress, one could take the entities within these series to also be property-bearing objects. In doing this, one thus can disclose the causes within the infinite regress and initial singularity, provide a causal history, and answer the needed counterfactual question, by stating that it is a certain set of objects within the former, or each of the objects within the infinite series in the latter, that produce GCR, with these objects having the needed causal powers as they bear the properties that enable them to bring about effects. Hence, in terms of counterfactual variation, if one was to 'wiggle' the existence of this set or series of objects, then one would also 'wiggle' the existence of the GCR. Thus, ON, so construed, is now able to have causal adequacy and explanatory depth. Therefore, as with Theism, ON, in its now more developed form, seems to thus have explanatory power by exhibiting the necessary virtues. It will be important now to turn our attention to the second criterion and the potential dilemma that is presented to an adherent of ON under this specific form.

4.3. Primary Assessment (ii): Criterion of Theoretical Commitments

For Criterion (iii): Criterion of Theoretical Commitments, Theism allows one to minimise (ontological and ideological) commitments, which is to say that it is a very simple theory. This can be seen as follows: the various phenomena of reality that make up the GCR are taken to be accounted for, according to Theism, in terms of the powerful action of one 'personal entity', God, rather than many fundamental personal entities, and thus it is a theory that is quantitatively ontologically simple. It is more simple than any other polytheistic-based theory as it postulates the fewest number of fundamental entities: one. Moreover, as God is metaphysically simple, and thus lacks proper parts,⁵³ God has the fewest number of fundamental properties possible: zero. As instead of possessing properties, each attribution made of God is numerically identical to him. God's attributes are God himself through being aspects of him. There is thus no further explanation that is needed to be provided for why God has the properties that he does, as he does not have any properties. Furthermore, Theism is also qualitatively ideologically simple as it includes the fewest number of theoretical primitives. That is, in fact, it does not have any primitives, as each of God's attributes is explicitly defined (without needing to use any form of analogy), and thus, it includes the fewest number of fundamental ideological primitives: zero. However, Theism is not only quantitatively ontologically/ideologically

simple, but it is also qualitatively ontologically/ideologically simple, in the sense that it postulates the existence of the simplest kind of personal fundamental entity, without one needing to utilise different kinds of fundamental theoretical primitives to conceptualise his nature. More precisely, as Theism identifies God as a trope (of a modular kind), it posits the existence of an entity of the fewest number of fundamental kinds (zero) due to the fact that, in following E.J. Lowe ([45]), kinds are correctly conceived of as universals that are instantiated by particular objects, which is in line with Aristotle, who introduced in his *Categories* the distinction between two types of universals—namely, (substantial) kinds and (non-substantial) attributes. Yet, in assuming ‘Classical Trope Theory’—which is the metaphysical theory that grounds this conception of God—one will disaffirm the existence of universals and the (problematic) instantiation relation that ties particular objects to these universals, in a manner that actually reduces the category of universals to tropes fulfilling certain roles. Hence, as Lowe ([45], p. 11) writes, trope theorists are motivated ‘by a strong desire for ontological economy and a radically empiricist stance in epistemology, inspiring frequent appeals to Occam’s Razor and a nominalistic hostility to belief in the existence of universals’. Thus, because of this, one will then be able to deny the existence of kinds (within this particular trope-theoretic framework), as tropes are not instances of any kind (and do not instantiate anything, but are instead simply identical to their nature).⁵⁴ That is, due to the fact of a trope being able to play the role of an object, through forming a compresent bundle with other tropes, and universal through, on the one hand, forming a natural resemblance class and, on the other hand, by the process of abstraction enabling one to fictionally treat a class of trope as universal-like entities.⁵⁵ Against this conclusion, however, one could say that, though tropes do not instantiate substantial kinds, they are definitely denizens of ontological categories, as being a type of entity—trope—they must be a member of the ontological category of ‘property’, ‘object’, or ‘trope’ (if there is this category). Hence, as God is a module trope, one would thus indeed be committed to the existence of kinds, understood as that of an ontological category, rather than as a substantial kind (which is a universal). Against this, however, one does not have to be committed to the existence of ontological categories within the present account. As, in following Otávio Bueno et al. ([49]), one could instead affirm a no-category ontology, where there are no existing ontological categories within reality. That is, as Bueno et al. ([49], p. 243) note, in responding to Lowe’s four-category ontology:⁵⁶

In contrast with Lowe, we fail to see the force of positing ontological categories. All the work Lowe intends to obtain with these categories can be achieved by introducing concepts. We do need to categorize, not only to do metaphysics, but as part of the investigation of the world. However, nothing in either practice demands a reification of the conceptual apparatus involved in the process.

Within this ontology, for one to have a concept is for them to be able to distinguish entities that fall under the concept and entities that do not fall under the concept. Now, one can take a realist interpretation within the framework by taking the entities that fall under those concepts to exist, and the concepts to be some type of abstract objects; however, this is not a necessary requirement within a trope-theoretic context, as tropes, through being able to play the role of universals (through forming a natural resemblance class) and objects (by forming a compresent bundle) one could adopt a nominalist understanding of concepts, in which these concepts are simply literary devices that enable one to categorise objects and universals, with, on the one hand, one only being committed to the existence of tropes, and, on the other hand, it being an open question whether the concepts themselves exist. Hence, the picture that results from this is that of there being no ontological categories that need to be posited within this worldview, since no reifying of categories has been made. In short, tropes, (possibly non-reified) concepts, and the categorisation that these concepts allow, is all that is needed to be affirmed to get the job done. Thus, there are no kinds, conceived of as ontological categories, that one needs to be committed to within a trope-theoretic theistic context. In other words, by Theism positing the existence of God, one is

not required to be committed to the existence of any kinds (substantial kinds or ontological categories) that he instantiates or is a part of; that is, God is of *zero* kinds.⁵⁷ Furthermore, as there are no theoretical primitives used in conceptualising God, one can eschew any kind of theoretical primitives, and thus, this type of theory allows one to continue to have a very ideologically simple ontology. Theism is thus quantitatively and qualitatively (ontologically/ideologically) a very simple theory, due to the fact that it postulates the fewest number of entities (one entity (sui generic object)); zero properties; the fewest kinds (zero kinds (i.e., substantial kinds or ontological categories)); and the fewest number and kind of theoretical primitives (zero for both). Theism thus possesses the explanatory virtue of simplicity, relative to the evidence provided by GCR—which is to say that it is a theory that minimises all commitments, relative to the evidence at hand. Can the same be said for ON?

If one conceives of ON in its less developed form, then if GCR involves an infinite regress, then there is a maximisation of ontological and ideological quantitative simplicity. The reason for this is due to the fact of there being a postulation of the existence of an *infinite* number of fundamental entities—namely, the entities that are members of the infinite series that bring about, and ultimately make up, the subsequent states of GCR. Thus, if counting by entity tokens, there is an infinite number of entity tokens posited. Moreover, one is also saddled with a vast number of theoretical primitives, as the nature of each of these entities has been left undefined. Hence, this all reveals that the combination of ON (in its less developed form) and the infinite regress of the GRC posits the existence of *many* fundamental entities rather than the fewest within its ontological framework, and includes *many* theoretical primitives, rather than the fewest within its ideological framework. Now, if one was to take ON, in its less developed form, to be combined with the conception of GCR that includes a (necessary) initial singularity, one would not, in fact, be saddled with this problem at an ontological level. As there is only one entity posited here, the initial singularity, and as there is no further specification of the entities that exist within the initial singularity, one is only really committed to *one* initial thing. Furthermore, as there are not a number of primitive terms that are left undefined, one is not also saddled with a large amount of ideology. Hence, the ON (in its less developed), and the initial singularity of the GRC, posits the existence of one entity, and no (or very few) theoretical primitives. One might thus believe that ON in this specific conception achieves the goal of minimising theoretical commitments; however, the issue that one is now presented with is that of there being a failure to achieve the goal of establishing the needed *trade-off* between minimisation of commitments and explanatory power, as if one affirms the veracity of ON, in its less developed form, and GCI includes a (necessary) initial singularity, then one would face a dilemma: affirm this theory, and you would be able to minimise theoretical commitments (to a greater extent than the conception of this theory with GCR involving an infinite regress, and to a same level as that of Theism). However, in doing this, you would also affirm a theory that minimises explanatory power, by it only being evidentially accurate, but not causally adequate and having explanatory depth. ON would thus not be able to have a theory that achieves the needed trade-off of minimising and maximising, whereas if one affirms the veracity of the theory of Theism, one would, in fact, be able to achieve this end. A potential way out of this dilemma for the adherent of ON would be to conceive of ON through its more developed form, which, as noted previously, allows one to maximise explanatory power. However, in doing this, one would also realise again that the needed trade-offs still cannot be made. As in maximising explanatory power, one would now have to also maximise their theoretical commitments. That is, if we take GCR to have a (necessary) initial singularity that includes within it property-bearing objects (for charity's sake, let us take this initial singularity to include only one object), then one would have to take on a number of theoretical commitments. First, concerning ontological quantitative simplicity, ON would now not posit the fewest number of fundamental entities, as it commits one to a number of objects, properties, and relations. That is, one must now be committed to the existence of one fundamental object (that is included within the initial

singularity), that has (at least) two fundamental intrinsic properties: being an object and being physical, and (at least) two fundamental extrinsic properties: being a part of the initial singularity and being the cause of the subsequent states of the GCR. Moreover, one would also have to be committed to the existence of relations—such as that of an instantiation or exemplification relation—that tie this object to its properties, which would thus require there to be a commitment to (at least) four relational instances for each of the properties. There is thus a commitment that needs to be made concerning the existence of (at least) nine entities: one object, four properties, and four relational instances. Concerning ontological qualitative simplicity, ON would also now not posit the fewest number of fundamental kinds (of entities), as one must now be committed to the existence of kinds (i.e., substantial kinds or ontological categories) for this one object, its properties, and the relations that tie them together. That is, one must now be committed to the existence of (at least) three kinds: (the substantial) kind object (or ontological category of objects), (the substantial) kind properties (or ontological category of properties), and (the substantial) kind relations (or ontological category of relations). There is thus a maximisation of commitments at an ontologically quantitative and qualitative level. Furthermore, as this object, its properties, and their relations are not defined (but only assumed to exist and stated as such), there is an inclusion of a number of theoretical primitives (and kinds of theoretical primitives) within this ideological framework. Hence, one also has a maximisation of commitments at an ideological level. Thus, one is presented with a further dilemma: affirm this version of the theory, and you would be able to maximise explanatory power (to a greater extent than the conception of this theory in its less developed form, and to the same level as that of Theism). However, this would also affirm a theory that maximises theoretical commitments, by it positing the existence of an object, a number of properties and relations, a number of kinds, and some number of theoretical primitives. ON would thus, again, not be a theory that achieves the needed trade-off, whereas if one affirms the veracity of the theory of Theism, one would, in fact, be able to achieve this end. It thus seems as if it is Theism, and not that ON, that is able to maximise explanatory power, whilst also minimising theoretical commitments. In reaching this conclusion we now have the grounds to deal with an important issue raised earlier. This issue, which can be further developed now, is that of the theoretical commitments made by Theism being problematic; not necessarily because of the entity that is at the centre of the theory—namely, God—but because of one being committed to the existence of God in addition to the GCR. That is, even though one is required to only make minimal theoretical commitments when it comes to affirming the existence of God, due to the fact that God is taken on as an ‘additional’ explanation of GCR, a theist is committed within their worldview to not only that of God, but that of the GCR as well. As Schmid ([5], p. 4) notes in further emphasising this type of issue:⁵⁸

in terms of overall quantitative simplicity... Oppy’s naturalism seems clearly superior to classical Theism. For Oppy’s entities are a proper subset of the classical theist’s. The classical theist, no less than Oppy, thinks that the natural world exists. For Oppy, that’s all. But for the classical theist, that’s not all; there’s also... God. Oppy’s naturalism, therefore, seems to enjoy an edge in terms of the quantitative simplicity element of Ockham’s Razor.

Thus, unlike the naturalist, the theist is committed to the existence of two entities: God, and the rest of the causal order, which could be that of the (necessary) initial singularity + the subsequent states of the GCR, or the infinite series of entities that make up the GCR. Hence, Theism is less simple, and, thus, more theoretically committing, than ON. Against this issue, however—and in focusing on the GCR that includes the initial singularity, one can also re-emphasise two important points.⁵⁹ First, that one’s commitments are based on the simplicity of a theory, which is the postulation of the fewest number of fundamental entities (i.e., fundamental objects, properties, and relations etc.), fewest number of fundamental kinds, fewest number of fundamental theoretical primitives, and fewest number of fundamental kinds of theoretical primitives. Hence, there is a focusing of one’s commitments solely on what entities, kinds, or theoretical primitives are being posited at the fundamental level.

Thus, even if ‘Oppy’s entities are a proper subset’ of Theism—that is, the GCR (and its initial singularity or infinite series of entities)—these entities (or subset) are not taken by the theory of Theism to be fundamental. Hence, one is not required to count these entities as a commitment, as one is restricted in this analysis to count commitments according to how many fundamental entities, kinds, and primitive notions are posited. In Theism, there is one entity and zero kinds, whilst, within ON, there is more than one entity and more than one kind. Therefore, Theism wins out on this account. That is, given that Theism and ON are metaphysical theories, there are grounds to employ the Laser over the Razor (as was mistakenly done), which allows us to ‘isolate the fundamental level’ by filtering out the non-fundamental entities—namely, that of the subsequent states (or parts) of the GCR—and restrict our focus to that of the fundamental entities, kinds, and primitive notions that are postulated by both theories—and in this case, Theism shows itself to be victorious. We can illustrate the position that has been reached here through Figure 7. as follows:

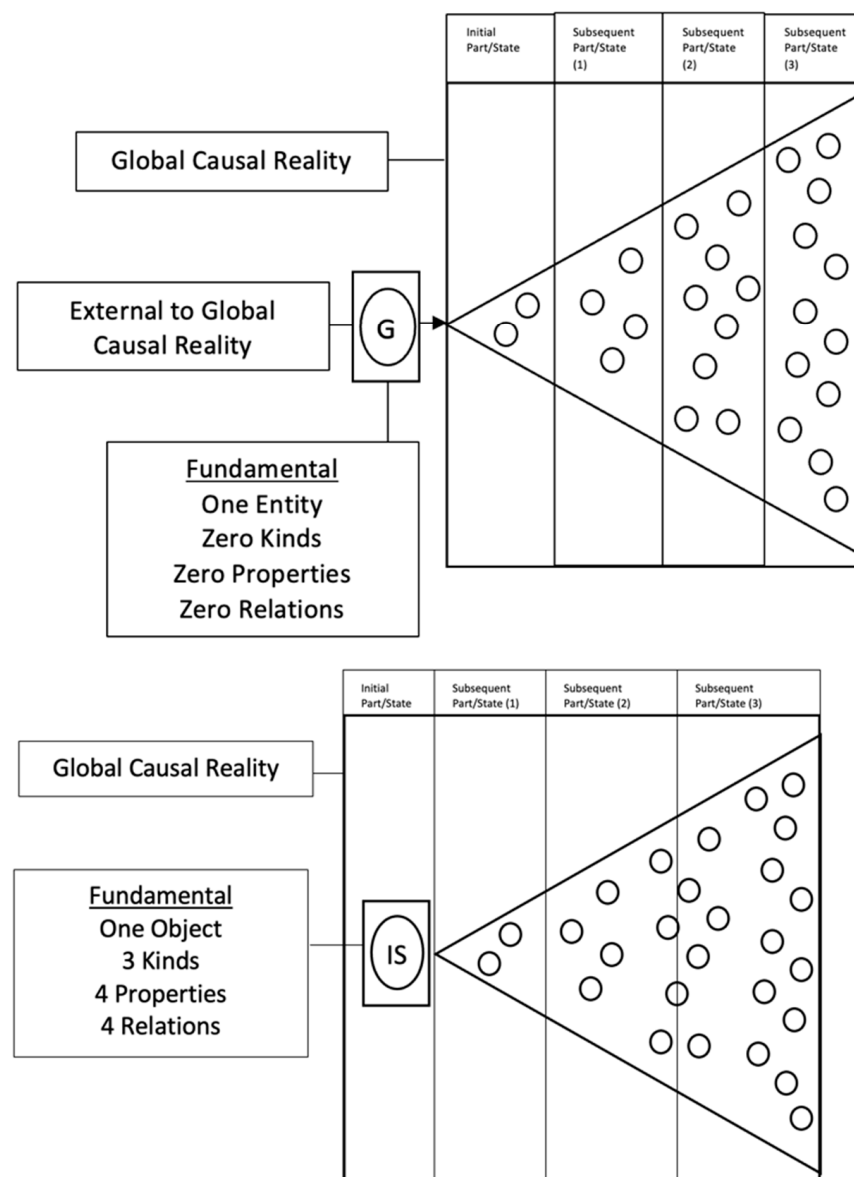


Figure 7. God and Initial Singularity: Fundamentality Assessment.

Now, a potential pushback against this could be that of raising an issue with the employment of the Laser in our analysis, with one requiring the Razor instead to be operative within a scientific context and metaphysical context as well. And thus, if this is the case, then one would be expected to count all entities that are posited (and not only that

of the fundamental entities), which gives an edge to ON over that of Theism. However, again, against this issue, one could now re-emphasise not the holding of the Laser, but instead the probability implications of a theory that have a bearing on this issue. That is, even though the GCR is numerically distinct from the theistic God who ‘brings it about’ (i.e., causes and grounds it), this does not count against the simplicity of the theory in a manner that counts for its likelihood. We can see this through focusing again on the probability analysis proposed by Bennett ([17]), and re-situating it within the following context:

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| | (i) | Assuming a theorem of probability: if $A \models B$, $\Pr(A) = \Pr(A \& B)$. |
| | (ii) | Let T be the theory of Theism and ON be the theory of Oppyian Naturalism. |
| (10) (Probability-A*) | (iii) | ON includes statements about GCR. |
| | (iv) | T includes states about GCR and statements about G. |
| | (v) | $G \text{ in } T \models \text{GCR in ON}$. |
| | (vi) | So, $\Pr(G) = \Pr(G \& \text{GCR})$. |
| | (vii) | So, $\Pr(T) = \Pr(\text{ON})$. |
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Thus, the positing of the existence of God (i.e., the fundamental entity) and GCR (i.e., the non-fundamental entity) does not count against Theism’s simplicity in a way that lowers the probability of the theory, as the extra ontological commitments made by this additional postulation—namely, that of the existence of God and the existence of the GCR—are necessitated by one’s commitment to the existence of God, due to the fact of his maximal goodness and the working of the Axiological Principles. Hence, the theory of Theism that posits the existence of God *and* GCR is as simple as ON, which solely posits the existence of the GCR. That is, the GCR is *nothing over and above* God, and, thus, is not a commitment that affects simplicity (in a manner that affects likelihood). This, however, cannot be said for ON, as the subsequent states of the GCR are *not* necessitated by the initial singularity, but are instead the result of ‘chancy’ processes in the sense that the laws and initial properties of the object within the initial segment of the GCR do not determine its subsequent states. Given this, then, the ontological commitment of the initial singularity is, in fact, an additional commitment to that of the subsequent states of the GCR (and entities that would come into existence within it), as there is no entailment of the truth of the latter from the truth of the former. An adherent of ON, unlike that of the adherent of Theism, must take (parts of) GCR to be *something over and above* the initial singularity, and thus one must count the initial singularity + the subsequent states of the GCR, which results in *two* commitments, rather than one. In short, ON, unlike Theism, requires one to make commitments that affect simplicity (in a manner that also affects likelihood).

Taking all of this into account, within our context of analysis, Theism is a theory that enables one to minimise (ontological and ideological) commitments at the fundamental level, while maximising explanatory power (i.e., explanation of our explanatory target). More precisely, Theism exemplifies, first, the explanatory virtues of evidential accuracy, causal adequacy, and explanatory depth, as, *if* God exists, we do have good reason to expect the existence of the GCR, based on the fact of God being maximal and the holding of the Axiological Principles, which thus serve as the cause of its occurrence and the ground for its counterfactual variations. And second, Theism also exemplifies the aesthetic virtue of simplicity by positing the existence of one fundamental entity: God. This single fundamental entity is a metaphysically simple m-power trope (who is identical to each of the attributes ascribed to him) and thus instantiates *zero* properties and *zero* kinds. Theism, therefore, postulates, first, the fewest number of fundamental entities: one module trope, rather than many. Second, the fewest fundamental kinds of entities: *zero* kinds (i.e., substantial kinds and ontological categories), rather than many. Third, the fewest number and kind of properties: *zero* properties, rather than many. And fourth, the fewest number and kind of fundamental theoretical primitives: *zero* theoretical primitives.⁶⁰ Theism thus

fulfils all of the relevant components of our abductive criteria. However, what we find with ON, is that, on the one hand, not fully exemplifying the set of explanatory virtues as, if the GCR involves an infinite regress, it does *not* exhibit the virtues of causal adequacy and explanatory depth (by there not being any cause, causal history or counterfactual variation being disclosed), and it does not exemplify the aesthetic virtue of simplicity (by there being an infinite number of entities posited). And, if the GCR includes a (necessary) initial singularity, then it does exemplify the aesthetic virtue of simplicity, but it fails to exhibit the full set of explanatory virtues (by there again not being disclosed any cause, causal history, or counterfactual variation). If one has an issue with this result, one could further precisify ON, where if the GCR includes a (necessary) initial singularity, then it will now be able to fully exemplify the set of explanatory virtues: yet, in doing this, it would now *not* be able to exhibit the aesthetic virtue of simplicity (by positing a number of entities (i.e., objects, properties and relations), kind of entities, and theoretical primitives). Thus, in comparison to ON, Theism is a simpler and more explanatorily powerful theory, which is to say that it is more successful in achieving the trade-off between minimising theoretical commitments and maximising explanatory power. In other words, the best theistic theory—trope-theoretic Theism—is a better theory than the best atheistic theory—Oppyian Naturalism—and thus should be privileged as such in society, within a truth-seeking context.

5. Theism as a Naturalistic Theory

5.1. *The Varieties of Naturalism*

On the basis of the conclusion that has now been reached, one final, but important, question can now be asked concerning the classification of the theory of Theism that has been argued for here: is the God of trope-theoretic Theism a ‘natural’ entity or a ‘supernatural’ entity? At a more general level, Oppy and others make an assumption that all theories of Theism conceive of God as a supernatural entity, which is warranted given the conceptualisation of God provided in the influential work of individuals such as Richard Swinburne ([30]), that conceives of God as an ‘omnipresent spirit’, which is clearly not a ‘natural’ entity. However, as this conception of God is not carried over into trope-theoretic Theism, one does not have to make the assumption that Theism is a supernaturalist theory over that of it being a naturalist theory. More specifically, one can, firstly, extract a general theory of Naturalism from the worldview category of Atheism, and take it to be a thesis that limits the existence of entities to only those entities that are part of the ‘natural world’, which will render it as a neutral thesis concerning the Theism and Atheism divide. That is, one can affirm a naturalistic conception of reality within Theism or Atheism. Secondly, one can then, in following Felipe Leon ([53], p. 91), further divide this general theory of Naturalism into three forms: First, conservative Naturalism, which is a form of Naturalism that takes there to only be physical entities within the ontology of the natural world, where the physical ‘is characterized by all and only the properties of a completed physics’. Within contemporary metaphysics, this form of Naturalism is found in the work of David Armstrong ([19]). Second, moderate Naturalism, which allows an expansion of the ontology of the natural world to include that of abstract objects (such as that of propositions, mathematical objects, properties, and states of affairs etc.). Within contemporary metaphysics, this form of Naturalism is found in the work of W.V. Quine ([54]). And third, liberal Naturalism, which allows a further expansion of the ontology of the natural world to include not only that of physical entities and abstract objects, but also that of concrete objects that possess representational properties and mental properties. Within contemporary metaphysics, this form of Naturalism is found in the work of David Chalmers ([55]). Hence, the general thesis of Naturalism can come in three different varieties based on the ontological commitments that are made within the naturalistic boundaries that have been established.

5.2. Liberal Naturalism and Trope-Theoretic Theism

Now, on the basis of this precisification of the thesis of Naturalism, one can then take ON to be a form of conservative Naturalism because of its strong link with the physical sciences, its nominalist view towards abstract objects, and its identification of mental properties with physical properties. However, one can now also bring Theism into the naturalist family by taking trope-theoretic Theism to be a form of liberal Naturalism. This is due to the fact that tropes are regularly taken within metaphysics to be entities that fulfil a fundamental role in the *natural world*. More specifically, as noted previously, tropes are a standard feature of most current day ontologies, where influential ‘naturalist’ (or, at least, ‘naturalistically-leaning’) metaphysicians from Williams and Campbell, through Schaffer, Simons and Maurin, all the way to Ehring, McDaniel, and Loux have featured these entities in their ontologies. Moreover, as also noted previously, tropes have played a role in conceptualising the fundamental structure of natural reality, with them, for example, playing a role in grounding issues within the metaphysics of persistence and identity, quantum theory, and property realism etc. Plausibly, the belief in the existence of tropes is widespread in contemporary metaphysics, and they are taken to be denizens of various ontologies of the natural world. Hence, the type of entity that a trope is would fit with a general conception of Naturalism. However, as God is a trope that, on the basis of his maximal power (that is, his lack of limit to his power), he has the ability to perform intentional actions, and thus have mental states, which would render the thesis of trope-theoretic Theism to be on the more liberal end of the spectrum of Naturalism. Hence, in affirming the veracity of trope-theoretical Theism, one is able to not only have a theory that achieves the needed trade-off to be a successful theory, but also, in affirming this theory, one can still hold tightly onto their Naturalism card as well. In short, the best theory is a theistic theory, and the best theistic theory is the naturalistic theory of trope-theoretic Theism.

6. Conclusions

In conclusion, in Section 1, the challenge of Atheism, and more specifically, Naturalism, was posed against the theory of Theism, with the former, rather than the latter, being taken to have fewer theoretical commitments, whilst still maintaining the same amount of explanatory power, relative to the data that were brought forward. In Section 2, an explication of a specific (modified) systematisation of the theoretical virtues was made, which provided the needed tools: abductive criteria, to assess the potential worth of a given theory. Thus, in Section 3, a different theory of Theism was introduced (trope-theoretic Theism) and a comparative assessment was made between that and the best theory of Atheism: Oppyian Naturalism. In this assessment, Theism was shown to be a theory that fulfils the abductive criteria to a greater level than that of Oppyian Naturalism. And thus, Theism should be privileged over this specific theory of Atheism, given that it is a coherent theory that is able to successfully maintain the trade-off between minimising theoretical commitments and maximising explanatory power, relative to the global causal structure of reality. The best theory of Theism—namely, that of the naturalistic theory of trope-theoretic Theism—is better than the best theory of Atheism—namely, that of Oppyian Naturalism. On top of all of this, with the emergence of trope-theoretic theism—with its compelling explanatory power—one is also able to challenge Agnosticism’s foundational beliefs and neutrality on God’s existence, potentially requiring a decisive re-evaluation towards a more nuanced or shifted worldview.

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Notes

- 1 For the rest of this article, the focus will be on the monotheistic conception of Theism (and its denial by Atheism).
- 2 With the latest version of the PhilPapers study being conducted in 2020, for this, see [2]. Interestingly, the previous study that was conducted in 2009 had a percentage of those accepting or leaning towards atheism being slightly higher at 72.8%.
- 3 Given the theory of modality assumed by ON, if there is an initial part to the GCR, then it must be necessary. However, in order to retain an amount of flexibility, one can follow Oppy ([3], p. 50) and forgo this implication of the theory of modality assumed by ON, which will allow for the initial singularity to be contingent.
- 4 This assumption concerning the nature of the initial singularity will be shown to be important below.
- 5 So, from now on we will keep the contingent version of this thesis to the side (especially as the necessary version is favoured by Oppy).
- 6 This is not to say that Schaffer himself has provided this modification; rather, the modification that will be made to Keas' systemisation will be that of an application of various aspects of Schaffer's work to this issue, which will be original to this article.
- 7 I would like to thank Tim Howard and Kyle Alandar for the labelling of this theory.
- 8 More on this distinction below.
- 9 The following goes beyond that of Keas' work.
- 10 A theory can be fruitful by it exemplifying either one or more of these features. Moreover, given the emphasis on diachronic virtues, particularly durability and testability, one is reminded of Karl Popper's seminal contribution to the philosophy of science: the criterion of falsifiability. Popper contended that a theory's scientific merit is contingent upon its susceptibility to empirical refutation. This aligns well with the delineated virtue of durability, wherein a theory's endurance is continually assessed against emergent data, underscoring its epistemological basis and veracity within the scientific discourse.
- 11 Despite the disparity in epistemic value between the evidential virtues (high intrinsic value) and the aesthetic virtues (zero intrinsic but high extrinsic value), the aesthetic virtues, as noted by Keas ([8], p. 30), 'are complementary artistic styles of how theoretical content relates to evidence, and thus are significantly entangled with the evidential virtues.'
- 12 Abductive reasoning is a form of reasoning that typically starts with a set of data and proceeds from this set, to the 'best' explanation for it, in accordance with certain explanatory criteria. Thus, the type of argument that will be formulated in this article is of this kind—though it will be stated at an informal level. For a further explanation of the nature of abductive reasoning, and a comparison of this type of reasoning with that of deductive and inductive reasoning.
- 13 Where to 'retrodict' is to explain already obtained data, whereas to 'predict' is to lead one to expect data that is to be obtained in the future.
- 14 For these challenges against the coherence of Theism, see ([13], pp. 95–119).
- 15 A full assessment of Theism's (and other competing metaphysical hypotheses') virtues (which would include the virtues of beauty and unification etc.) will be made in a forthcoming monograph.
- 16 I leave it open to how one is to further demarcate the difference between metaphysical and scientific theories.
- 17 Schaffer ([9]) does not himself take the Laser to be only operative within a metaphysical context; this assumption is original to this article. However, in doing this, one does not have to take the Laser to be a principle that replaces the Razor but is solely one that is needed in a specific context—that of metaphysics. In making this distinction one can thus ward off the important objections that have been raised against the Laser, focused on Schaffer's replacement strategy. For these objections, see ([15]).
- 18 Grounding is an asymmetric, necessitating dependence relation that links the more fundamental entities to the less fundamental entities, and is best conceptualised as a relation that is distinct from, but analogous to, causation. For more on the notion of grounding, see ([16]). Now, even though I assume a 'ground-theoretic' conception of fundamentality here, any other 'metaphysically deep' relation can be slotted in here in conceiving of the notion of fundamentality. For a further unpacking of the nature of fundamentality, see ([17]).
- 19 At times, I will interchange between the term entity(ies), in reference to any class of existing things (e.g., objects, properties, relations, kinds, notions etc.) and the narrower phrase of entity(ies) that will refer to objects, properties, relations, etc., and be distinct from kinds and notions.
- 20 This example is a variation of that of Schaffer's ([9], pp. 648–659), which puts forward an example of the working of this within an imaginary scientific scenario. However, as the Laser is restricted in its application within this article to that of a metaphysical context, this example has been adapted accordingly.
- 21 Again, this statement is slightly modified to be applicable within a metaphysical context.
- 22 This language being utilised frequently by leading metaphysicians such as David Armstrong ([19]), concerning supervenient entities.
- 23 Leibniz's Law, which is often conceptualised as the principle of the indiscernibility of identicals, is conceived of here as its converse—the principle of the identity of indiscernibles, which can be stated formally as such: $\forall \varphi (\varphi(x) \leftrightarrow \varphi(y) \rightarrow x = y)$.
- 24 More on the nature of a proper part below.
- 25 More on the nature of metaphysical simplicity below.

- 26 A module trope would be a sui generis object as it does not fulfil the criteria of being an ordinary object, where an ordinary object is one that is a property-bearing particular that have determinate existence and identity conditions ([23]). However, as a trope is self-exemplifying, and thus identical to the character that it has, it would not bear any properties, and thus be rightly classed as an object (of the ordinary kind).
- 27 I leave the account of analogy here undefined.
- 28 An assumption is made here concerning a powerful trope being multi-track, rather than single-track.
- 29 We can assume the notion of intrinsicity noted above.
- 30 In contradistinction to this, one could hold (as some philosophers do) to the conception of the powerfulness of a trope as 'single-track'—which is that of a given trope only having one manifestation type.
- 31 As Baxter writes, 'aspects should not be confused with Casteneda's guises, or Fine's qua-objects, or other such attenuated entities' (Baxter, [27], p. 914).
- 32 In motivating aspects, Baxter believes that the clearest cases, as in the example in the main text, are those of the internal psychological conflict of a person. However, self-differing, according to Baxter, is not only confined to these psychological conflicts but, as Baxter ([27]) notes, cases of one being torn give us the experiences by which we know that there are numerically identical, qualitatively differing aspects—that is because we *feel* them. Self-differing is present in any case where an entity has a property and lacks it at the same time, in the virtue of playing different roles ([27]).
- 33 Thus, the abstractness and particularity of an aspect fit neatly with that of a trope's abstractness and particularity that was noted above.
- 34 For more on the nature of an aspect, and a more fleshed out discussion concerning the manner in which they do not present counterexamples to Leibniz's Law, see ([28]) where an in-depth analysis of this issue is provided.
- 35 Though in bringing about the existence of the GCR, God's power will not move from inactivity to activity but, instead, would always be manifested, given that this creative act will be a necessary action that stems from God's maximal goodness. More on this below.
- 36 I will be conceiving of the term 'attribute' in a 'metaphysically-lightweight' fashion, which allows for an entity to possess an attribute, without being composed by them (and thus it being able to be metaphysically simple)—with these attributes being later understood to be 'aspects' of God.
- 37 In previous writing, I have referred to God as an 'omnipotence-trope'; however, due to the vagueness of the term 'omnipotence', and in order to ward off certain consistency issues regarding this notion, I now will refer to this entity going forward as a 'maximal power trope'.
- 38 The specific set of great making attributes would include more than what is included here. However, for brevity's sake, we will focus on these five specific properties. Furthermore, this specific set of properties and their definitions are derived from the work ([30]).
- 39 Whereas in recognising an action as bad, God would have no motivation to perform it
- 40 In previous work, I have referred to these principles together as the 'Goodness Principle'; however, going forward I will now refer to these principles as the 'Axiological Principles'. Moreover, though the Diffusiveness Principle and the Principle of Plenitude are not currently guiding principles within contemporary metaphysics, they have a storied history—as shown by Kretzmann ([31]) and Lovejoy ([32]) that, for the former principle, we have them stemming from the work of Plato, through Augustine and Aquinas, and culminating in the work of Bonaventure, and, for the latter principle, we have it stemming from the work of Epicurus and Augustine, through Aquinas, Spinoza and Kant, and culminating in the work of Leibniz—and so, given the weight of tradition, they should not be dismissed without argument. A recent defender of this principle is that of David Lewis ([33]). Furthermore, unlike some other prominent principles within the field of contemporary metaphysics (such as that of the principle of unrestricted composition), these principles do not clash with our intuitions and do not entail some further problematic metaphysical theses. Hence, one should adopt these principles unless there are good reasons not to—note, the lack of interest in these principles is not a successful rebutting or undercutting defeater of them!
- 41 I take there to be two distinct, but related creative acts that God would necessarily perform: causing entities other than himself to exist, at some particular time (which is a diachronic act), and grounding them in existence, at each moment of time (which is a synchronic act).
- 42 That is, this diffusive act is not an 'impersonal emanation' of God, but a personal act that includes, firstly, his powers—that enable him to cause and ground the existence of all entities, secondly, his beliefs—that cause and ground the existence of other entities will diffuse his goodness—and, thirdly, his purposes—to diffuse his goodness by grounding/causing the existence of all other entities.
- 43 For a detailing of these features, see ([32]).
- 44 The paradox of whether a maximally powerful being can create a stone that is too heavy for it to lift.
- 45 Mutual consistency would be things like whether maximal goodness is consistent with maximal power, as a maximally powerful being can do anything, but given its maximal goodness, it cannot perform the action of sinning. And consistency with reality will be such things as consistency of the existence of evil with a maximally powerful, maximally knowledgeable and maximally good being.

- 46 There are thus two ways provided for discovering the consistency of theism: either by seeing that no contradiction is entailed by the attributes ascribed to God within the theory, or by the theory abiding by the requirement that God's nature must be a maximally consistent set of attributes—and thus the consistency of the theory is 'built in' to this supposition.
- 47 There are thus also two ways provided for discovering the internal coherence of Theism: either by focusing on the identity of the attributes that are predicated of God or the derivability of them from maximal power, which both establish the unity and non-adjacency (i.e., internal coherence) of Theism.
- 48 There are thus, again, two ways provided for discovering the universal coherence of Theism: either by focusing on the inclusion of a trope within a wide range of ontologies within metaphysics, or the utilisation of this type of entity in important areas of metaphysics, which both establish the universal fit (or coherence) of Theism with other warranted beliefs.
- 49 One could raise the objection here that the notion of a 'personal' trope is not widespread in contemporary metaphysics, and thus Theism does not actually exhibit the coherential virtue of universal coherence—namely, that of a theory fitting well with other warranted beliefs or theories. In response to this issue, one can emphasise the importance of the type/token distinction for the virtue of universal coherence. That is, for the postulation of the existence of an entity to be such as to mesh with our knowledge of the world, this entity simply needs to be of a class (i.e., a type) of entities that are taken to exist within other fields; rather than it being a particular instance of this class (i.e., a token) that is regularly seen to be duplicated (as if this were, in fact, the case, then one would not be able to make discoveries of new instances of a given class, which one clearly can). Thus, even though God is a personal module trope—that is, he is able to be 'picked out' from the class of tropes by being personal (amongst other things)—as tropes are a class of entities that are widely taken to exist in other fields within contemporary metaphysics (outside of the field of analytic philosophy of religion and analytic theology), the postulation of the existence of God is a postulation of a *type* of entity that does, in fact, fit within our warranted beliefs and theories—even if he is a unique instance of this kind. Whereas, for example, if one were to assume Swinburne's ([30], pp. 103–126) construal of God as an omnipresent spirit, God would indeed be a type of entity that does not fit within our warranted beliefs and theories, as spirits are *not* widely taken to exist in other fields within contemporary metaphysics (outside of the field of analytic philosophy of religion and analytic theology).
- 50 Given that Theism and ON are thus equally assumed to be coherent and workable theories, from this point on, the Criterion of Coherence will fall out of our comparative analysis (and thus the acknowledgement that Theism (or ON) is a coherent theory—potentially alongside it being simple and explanatorily powerful—will now, for ease of writing, not be further mentioned as well.
- 51 This language of 'wiggling' in this type of causal manipulationist context comes from Schaffer ([16], p. 65). This terminology is helpful in emphasising the counterfactual variation, and or modal supervenience, of one entity on another.
- 52 The reason why this issue (and the subsequent dilemma that it presents that will be noted below) has not been identified in previous analyses of Oppy's natural theological framework is due to a utilisation of a more 'basic' systematisation of the theoretical virtues, rather than that of the 'robust' systemisation provided by Keas—which thus leads one to mistakenly believe that ON maximises explanatory power. More specifically, in a basic systemisation the evidential virtues are solely restricted to evidential accuracy; however, in the more robust systemisation one is able to utilise the more valuable and deeper virtues of causal adequacy and explanatory depth in performing the needed analysis. Thus, there isn't a maximisation of explanatory power of ON, as there are further ways for it to be maximised—namely, by it being causally adequate and explanatorily deep. Hence, one should favour an alternative theory—namely, that of Theism—that is able to be maximised in this way.
- 53 With the aspects that provide the basis for his qualitative character not providing any metaphysical complexity to him as they are numerically identical (though qualitatively distinct) from him—and thus function as 'improper' parts of him.
- 54 It is left open here whether there are, in fact, kinds at the non-fundamental level.
- 55 For a trope's role as a universal see, ([46–48]).
- 56 These remarks also apply to other categorial systems: such as that of Bueno et al.'s ([49]) no-category ontology, L.A. Paul's ([50]) one-category ontology, David Armstrong's ([19]) and John Heil's ([46]) two-category ontology, Barry Smith's ([51]) three-category ontology, Ingvar Johansson's ([52]) nine-category ontology, and Aristotle's ten-category ontology.
- 57 In previous work, I took God to be of one kind: trope. However, on the basis that a kind is to be correctly conceived of as a universal, I now take it to be the case that tropes *cannot* be of any kind. Nonetheless, if this supposition is incorrect, one can simply re-affirm God being of the kind trope, which still enables him to be a (quantitatively and qualitatively) ontologically parsimonious entity (i.e., he is one entity of one kind).
- 58 Though Schmid ([4]) focuses on classical Theism, this objection would apply to all versions of Theism.
- 59 These points also apply to GCR as involving an infinite regress; however, for ease of writing, we will focus on the GCR as including an initial singularity.
- 60 One could ask if the Axiological Principles that are assumed by trope-theoretic Theism are an entity that needs to be counted in our assessment? I would say no, as there is no reason to 'reify' principles, which can simply be (un-reified) concepts. However, if one is not persuaded by this, the Axiological Principles would be counted as entities in the same way that the principles that make up the laws of physics would be counted as entities as well (which are assumed as operative in ON and would be fundamental within this framework)—this thus shows that Theism and ON are equal relative to the number of principles posited.

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