Applications of a Neo-Aristotelian metaphysics of powers in the domain of Philosophy of Religion

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Abstract

This thesis explores some applications of a Neo-Aristotelian metaphysics to philosophy of religion, with a particular focus on the metaphysics of powers. This widens the uses of such an ontology within the contemporary literature, since power metaphysics has been much neglected in philosophy of religion. The thesis starts by introducing power ontology and many of the questions that have been explored within it, noting when these will be relevant for what is to come later in the thesis. It then turns to exploring ways in which, I claim, a power ontology can be used within philosophy of religion. The first thing I explore is the Trinity, where I claim that powers are able to provide a metaphysics for this. The following chapter explores how God might create laws of nature and why I think the powers position should be preferred. I then explore how powers might provide the foundation to object to the fine-tuning argument, and after formulating this response explore how successful it is. In the penultimate chapter I examine how powers might inspire us with a solution to the Euthyphro dilemma against theistic meta-ethics, and formulate a position based on this. In the final chapter I then try to show how what I have said in the previous chapter can be thought of in terms of powers alone, such that powers have a role to play within axiology.

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Chapter 1 - Introduction

This thesis is about applications of a neo-Aristotelian ontology to philosophy of religion, specifically on theistic uses of power metaphysics. What powers are, and how they are conceptualised will be discussed in the first chapter, but for now one need only note that power theory provides us with a view of properties that takes them to be essentially causal. Exploring the details of this metaphysic has been a key agenda for many philosophers within recent times. However, this investigation has not only focused upon the nature of powers but also on their applications. My thesis primarily adds to this latter project, by contending that an area severely underexplored as of yet by power theorists, namely philosophy of religion, can be greatly benefitted by a power ontology so to help answer several theistic questions. It will be the job of the remainder of the thesis to show that this is in fact the case.[1]

1.1 - Extending power ontologies into philosophy of religion

Power ontologists have been hard at work exploring areas in which powers might be beneficially employed. A key reason for this is that one can use the utility of a theory as an argument for its acceptance, much like Lewis did in arguing for modal realism as a theory of possible worlds (Lewis, 1986a, 135). Thus, if one can show that one's theory has explanatory benefits over others, both in terms of explanatory power and scope, one has greater reason to accept it. Whilst I will mention a number of other areas in which powers have been put to work in the next chapter, it will be useful to briefly provide an initial sketch of two such applications which have been increasingly adopted.

The first way in which powers have been employed is to provide an ontological account of laws of nature.[2] Rather than laws being thought of as external 'determiners' which act on inert objects, powers theorists think that objects themselves are inherently active and powerful, with the laws just expressing what these powers do in certain situations. This view therefore gives a stronger metaphysical account of laws than Hume's, whilst also differing

[1] I shall speak in terms of the Christian tradition since it is the one I know best, although this isn't to say that similar moves I make here couldn't be made by those within other religious traditions.

[2] There are a number of different ways in which power theorists do this, for instance Bird (2007, 202) and Molnar (2003, 199) hold that laws of nature supervene on powers, Ellis takes it that laws are reduced to powers, and Mumford (2004) claims that powers eliminate the need for laws and law talk altogether.

from those which take laws to be that which externally governs. I will have much more to say about this view of laws in chapter 4.

A second way in which powers have been used concerns modality, where a powers theory of modal truthmakers has also been given (Vetter, 2015; Jacobs, 2010; Pawl, 2017; Borghini & Williams, 2008). This is a 'hardcore actualist' theory (Contessa, 2010), which differs from 'softcore actualism' in that its modal truthmakers are natural objects rather than abstracta, such as states of affairs or propositions. This time the general idea is that what makes something possible is that it either has the power to, or would have had the power to, or could have the power to X. As such one might think of this theory of possibility like a branching tree, where different branches represent different manifestations of powers. If there is a branch on the tree with a certain state of affairs then this state of affairs is possible, with it only being possible because the manifestation of certain powers would bring this about if they were to manifest. In chapter 5 I will also have reason to comment on this theory of possibility further and some of the difficulties that come along with it.

Unlike these two approaches, which further the use of powers within the domain of metaphysics, I shall seek to show how powers can help within the realm of philosophy of religion.[3] This is an area that has been largely underexplored by contemporary theorists, such that I will be here providing the first more systematic usage of powers within philosophy of religion.[4] Whilst there has been some use of powers within philosophy of religion, such as in Leftow's account of modal truthmakers which is cashed out in terms of God's power (2012a), Dumsday's use of them in certain cosmological arguments (2014) and arguments against naturalism (2015), and Lenow's (2019) rebuttal of the modal collapse argument against divine simplicity, there has been little sustained engagement with the contemporary literature on powers that has taken place within metaphysics. I shall fill this gap by showing in detail how

[3] Since philosophy of religion, at least historically, has been thought of as a sub-branch of metaphysics, one could take it also to be expanding the metaphysical usage of powers. I, however, will continue to speak as though philosophy of religion is a discipline separate from metaphysics.

[4] This is not to say that powers have always been neglected within philosophy of religion, since given the impact of Aristotelian thought on historical philosophers of religion, such as Aquinas, this hasn't been the case. Whilst some of what I say in this thesis will be inspired from this older work, much will diverge from historical moves that were made by these types of theorists.

the contemporary literature on powers can aid philosophers of religion in answering certain questions they face.

1.2 - Targeted readership

A question may rightly be asked as to whom this thesis is aimed at, namely is it primarily for metaphysicians interested in power metaphysics or philosophers of religion? My answer is that this work is primarily aimed at philosophers of religion, although that is not to say that metaphysicians have nothing to gain from it. Every chapter will be of significance to philosophers of religion, whereas perhaps only certain chapters will be of similar significance to metaphysicians. Nevertheless, I hope that at least metaphysicians with an interest in powers would find the whole thesis to be of interest, since at the very least they might like to see how positions they defend can be put to use in philosophy of religion, being imaginatively employed to solve certain problems that theists face. For it might be that through this they come to see other areas in which powers might be useful that they themselves find more appealing and/or helpful. Equally, they might think that in virtue of the way I employ their power metaphysic that something, assuming my analysis is correct, has gone wrong in how powers are thought of as they shouldn't be able to achieve what I claim they can. As such the metaphysician might want to reassess their position. Additionally, some of the ways I shall employ powers will also provide some illumination on what they can do given a specific view of their nature, where this shall be something that has not yet been seen by metaphysicians. Given this, there is also much for the metaphysician to gain from this work. Nevertheless, I make it explicit from the outset that this work is primarily for the benefit of philosophers of religion, although there will be aspects that benefit a wider audience.

There are good reasons to explore how powers could be used in philosophy of religion. Two reasons for thinking this are as follows. Firstly, many historic theists were some type of Aristotelians, and Aristotelians typically embrace a theory of powers, or at least something very much like contemporary powers. As such insofar as these were employed by theists who were Aristotelians and insofar as this formed part of the fundamental theory which undergirded their theistic view, it seems that the use of powers by philosophers of religion has historical pedigree. Given this the exploration as to how contemporary power metaphysics can inform contemporary work in philosophy of religion seems to have some historical precedent. Secondly, it just seems incumbent and sensible to explore how fairly

popular metaphysical views affect questions within other areas of philosophy, unless we have some good reason not to. It would be good to know how power's theory can affect one's views in philosophy of religion, that is whether it is indifferent to it, beneficial for it, or detrimental to it. Given these reasons, it seems to me like we have good reason to explore how powers might be used in philosophy of religion, where I shall suggest they can benefit it in a number of ways.

1.3 - Virtues of the approach

There are several reasons why what I say in the remainder of the thesis should be adopted by theists. The first is that the ontology which I employ, fits with lots of things that theists would like to explain. That is, I will suggest that one type of ontology which relies on the metaphysics of powers can answer a number of problems theists wish to respond to. Rather than adopting different or larger ontologies to answer these difficulties, I shall claim that an ontology of powers alone is sufficient to do the job. This isn't to say that powers alone can answer all theistic difficulties, since this is a far more ambitious claim and one I am unsure is defensible, but it can overcome many. Further, it might be that an ontology of powers can overcome many other theistic worries than I address here, and I wish to make no claim that it cannot, but addressing additional worries is beyond the scope of this project.

A second reason has already previously been hinted at, namely that it is beneficial to have a fairly popular metaphysical account explain a number of different problems. That is, some might worry that theists require some austere unpopular metaphysics in order to defend views they wish to make. This says nothing about the truth of the metaphysics itself, but being able to employ theories that have been significantly explored and used elsewhere by many other theorists should challenge the notion that theists need to adopt certain odd views to make sure things work out.

Another virtue is parsimony. We might think that this comes in different types, such as conceptual parsimony and ontological parsimony. My project is clearly conceptually parsimonious since it will only require the conceptual framework of a powers ontology in order to solve the problems I wish to. However, given that ontological parsimony is a principle many want to adhere to in metaphysics, such that Schaffer can say, 'Few principles are as

pervasive in contemporary metaphysics' as '*Do not multiply entities without necessity!*' (2015, 664), it would be helpful if my account was also ontologically parsimonious.[5]

I follow Rodriguez-Pereya (2002, 204-210) here in thinking that there are two types of parsimony which are virtuous, quantitative and qualitative ontological economy. Which is to be preferred is debated, but I take it that qualitative economy is typically preferred to quantitative economy. Take a powers theory of laws and modality. One reason you might adopt this type of view is that it is qualitatively parsimonious, that is you only need one type of thing, powers. For on a powers theory of laws all that is required is that you have powers. By contrast other realist accounts of laws need more than one kind, namely they need non-powerful properties and external relations. Similarly, for modal truths all one needs is the kind 'power', rather than kinds like 'facts' or 'states of affairs' as well as other types of properties which other accounts of modal truthmakers require. Again, if parsimony is a key virtue that one has in mind when determining their ontology, the fact that one only requires the kind 'power' to do the work will be of significant benefit.[6] After all, metaphysicians generally prefer less ontological kinds within their metaphysics, clearly evidenced by people trying to provide as few categories in their ontology as possible.[7]

Theists also typically value parsimony, with Swinburne (2004) being perhaps the most explicit in this, although he is by no means alone in taking this to be a vital consideration when working out a theistic metaphysic (Leftow, 2012a, 299-316). One need only see how often an appeal to Ockham's razor is made within philosophy of religion to see that this is the case. Given that philosophers of religion are also partial to parsimony, I shall contend that this is also a reason they have for adopting a powers account.[8]

However, one might be concerned that theism is not qualitatively parsimonious, since after all it requires that there is a God and a created world. Further, for theists God is typically the

[5] I suspect metaphysicians prefer minimalist ontologies since there is less brute or unexplained in their ontology, but this is something philosophers of religion aim for as well (Leftow, 2017a, 328-332).

[6] This isn't to say that there aren't reasons not to adopt an ontology of powers, since several criticisms have been lodged against them. I will say something about some of these in the next chapter.

[7] For example, Lowe (2006) has four, Heil (2003; 2012) has two, and Paul (2017) one.

[8] Many philosophers of religion also employ other aspects of Aristotelian metaphysics, and insofar as they are partial to this, they likely will be initially more sympathetic to the powers view before they consider any of the benefits of it which this thesis sketches out.

only thing that exists at the most fundamental level of their ontology. This is because many theists want to claim that God is 'the sole ultimate reality' (Leftow, 2012a, 3-5; Craig, 2016, 2), due to such philosophical reasons as God's perfection (Leftow, 2012a, 7-12) and other divine attributes like aseity (Craig, 2016; 2017; Gould, 2014).[9] Given this, can I still appeal to qualitative parsimony as a virtue? A few things can be said in response to this.

The first is that the theist might claim an ontology of God at the fundamental level alone is more parsimonious, both in type and token, than that which has more items within the fundamental level. After all, God is only one type of qualitative thing with one token instance, whereas many other theorists will have multiple types of things and therefore many other tokens at the most fundamental level.[10] Further if Schaffer is right and we should instead reimagine Occam's razor in terms of Schaffer's laser which claims, 'Do not multiply fundamental entities without necessity!' (2015, 644) Theism comes out pretty good with only one entity at this level and those in the levels above are of less of a concern when it comes to parsimony.[11]

Perhaps the worry will be that theists will require that there is more than one level within their ontology and this isn't qualitatively parsimonious. In reply it is worth pointing out that many, perhaps most, ontologies today have more than one level within them and so this isn't really a problem theists have when compared to other views. Maybe instead the concern is that the theist will have more levels to their ontology. Perhaps the thought is that for any non-theistic ontology the theist will have all of these levels plus the additional one for God. Maybe this is right, or maybe God can play the additional role so to remove some of the levels, I'm unsure. In any case, assuming Schaffer's laser is correct this isn't much of an objection to the view.

[9] Much work has recently investigated how God is related to modality (Leftow, 2012a) and abstracta (Craig, 2016; 2017; Gould, 2014). I will not touch upon this within my thesis. All I require is that God is more fundamental than powers, and I shall assume that abstracta can be dealt with in some way such that God is the sole ultimate reality.

[10] Suppose they only have one type at the fundamental level instead, for instance atoms, there will still likely be many tokens of this type.

[11] A reply might be that the difference here is that the theist requires something that transcends nature and so it differs in a more qualitative way than things which do not. This would take us into the territory of determining what is meant by the supernatural and the natural and how distinct they are in order to ascertain whether this is a good reply and this isn't something I can broach here.

Another option would be for the theist to grant that their ontology would be more qualitatively parsimonious without God, however since they are a theist, this isn't an option. Nevertheless, there is still the question as to which type of view theists should prefer. That is, theists can still hold more or less parsimonious views. Should they prefer an ontology with many qualitatively distinct items or few? As I've suggested above many think the latter, that one should go for a parsimonious ontology. However, I suspect there will be other theists who disagree with this, and instead think that qualitative parsimony is overrated. The thought here would be that once you have God in the mix there is no cost in Him creating many qualitatively different things.[12] If one does think this, then my consideration of parsimony won't move that person into thinking that they should adopt the solutions I give here. Nevertheless, since many do think theoretical considerations which guide us in non-theistic situations should also guide our choice in theistic situations, there will still be a large number of theists for which qualitative parsimony will still be important.

Finally, the theist could claim that God is a power and therefore even the theistic view is qualitatively simple since it only requires one category, power. This is a claim I talk more about in chapter 3 and so further discussion of God being identified as a power will wait until then. Yet if this option is viable, then fundamental reality will also be made up of powers. Perhaps it will be that the power which is God will be of a *sui generis* type, however I'm less concerned about parsimony when it comes to different species within a genus than I am with different genera. That is, I take it to be more parsimonious that there are many different types of powers, than that there are powers, categorical properties, states of affairs, etc. which either only have one type or multiple different types within each category.

Given what I've said here, I take it then that ontological parsimony will also be a reason why theists might wish to adopt what I say within the remainder of this thesis.

A final reason doesn't provide a reason for why theists might wish to adopt the views I give here, but provides an additional virtue of my project, namely bringing together two areas of philosophy in dialogue and testing the scope of powers theory. Whilst philosophy of religion and metaphysics often interact, there is a tendency for it to be slow to employ work done

[12] I refer to God with traditional masculine terms, mirroring the historic Christian tradition, and follow Leftow in thinking, 'if it was good enough for Jesus, it is good enough for me.' (2012a, viii) Yet this doesn't commit me to God being gendered or sexed (Zimmerman, 2010, 806, n.3).

within contemporary metaphysics.[13] However, my project will bring it into contact more readily with contemporary work that is being done within metaphysics, and with work that seems to be more than that which is merely of fleeting interest. Further, in bringing this work within the powers literature into contact with philosophy of religion one can also further see the scope to which powers have application.

1.4 - Problems addressed

With all that said, the natural question remaining is to ask what the problems are I will be focusing on, and why these were chosen rather than others. This latter question is important since I don't claim here that powers can solve or help answer all other questions in philosophy of religion. It may well be the case that a powers ontology can aid in answering many other questions, and those interested are welcome to further think about potential wider applications within philosophy of religion that they might have. Nonetheless I focus on a few so to give a flavour as to what this metaphysic can achieve within this domain.

I focus on three problems, along with an investigation of an additional issue that might arise due to an answer I give to one of these problems. The first and third difficulties I investigate are perhaps more well-known issues within philosophy of religion, whilst the second is less so. The first is a particular Christian problem, namely the difficulty of providing a coherent ontological model of the Trinity. That is, how can one hold together the claims that God is three in persons and yet one in substance. One might be surprised to see this as an issue I suggest powers are beneficial in answering, since this type of application is far from the typical usage in power metaphysics. Yet this flexibility of usage is one of the benefits of a power metaphysics' employment, offering us a wide range of explanatory possibilities.

The second problem I explore has to do with how God creates laws of nature and governs the world. This problem is less standard within philosophy of religion, nevertheless it has received some treatment within the literature. This is the one area that power metaphysicians will be less surprised by my application since powers have been used to think about laws of nature more generally within metaphysics, with my use here focusing more upon the effect this has

[13] There are benefits and drawbacks to this, since the metaphysics of the day might turn out to be a fad or dropped fairly quickly, and as a result philosophers of religion lose little by not interacting with this. However, the drawback is that sometimes philosophy of religion can look somewhat dated in the work it does.

on philosophy of religion. Yet this discussion also leads me to investigate a further problem, which one can think of as an addendum to the chapter. This problem is thought to arise, or at least fairly easily arises, given a powers view of laws of nature, where the issue it raises is that it might provide a way of blocking the fine-tuning argument for theism. Exploring this response will be of importance to many within the philosophical literature more generally, since it is widely thought that if any argument at present gives significant evidence for theism, or at least has any hope of doing so, it is the fine-tuning argument.[14] Since many theists also place a lot of weight on this argument, it will be important to assess this response, which has received no sustained attention either in terms of formulation or analysis in the literature. Yet this chapter will also be of interest to metaphysicians in other ways since I explore many underexplored aspects of powerful laws, such as their contingency or necessity in terms of instantiation and questions which arise due to conceivability worries.

The third issue I investigate is how God creates value, in relation to the so-called *Euthyphro problem*. This is usually posed in terms of a dilemma, asking whether something is good in virtue of God willing it or if it is good independently of God's will. Either answer is bad news for theists, since if God wills the good then the good can seem arbitrary, whilst if good is independent of God then God depends on something else outside of God Himself which means God has constraints placed on Him and this will be thought by many as incompatible with His nature.[15] I propose an answer to the dilemma which is inspired by the work powers can do and in the following chapter start to spell out how one could give this answer in terms of powers alone. This isn't to say that this answer necessarily requires a powers ontology, but rather that a powers ontology is at home with this type of answer. Again, this use of powers might strike many as strange, and hopefully also intriguing, since powers haven't been employed much, if at all, in deep axiological/meta-ethical theorising. Thus, one might wonder how they are able to play such a role within the Euthyphro dilemma. Therefore, rather than addressing this all in one chapter I will have an additional chapter, after investigating the Euthyphro question, which begins to set out a power-based theory of value, demonstrating their relevance to this area of philosophy. This should be of benefit both to power

[14] Obviously, this thought isn't held by all, and many theists in fact prefer other arguments. However, it is often asserted to me and others by philosophical non-theists that the fine-tuning argument is the only one they think as maybe having any evidential value.

[15] One might think this due to God's being the ultimate reality, which I mentioned above.

metaphysicians in general and for those interested in axiology, in demonstrating to both camps what can be done and how this metaphysics can inform our meta-ethical theory. It will also be the chapter which is most speculative and that which requires additional investigation. After all, setting out a comprehensive view of value is a very big project indeed, particularly if one wishes to ground it in a metaphysics that typically is not employed in this way. Nevertheless, the chapter should give sufficient information as to how I am thinking about the meta-ethical account and where further work is needed.

These then are the problems which this thesis shall explore. I note here that I do not claim that the answers I give to each of these are necessary to solve the difficulties. That is, I am happy to say that perhaps other metaphysical views can solve the same problems in their own distinct ways, and perhaps even that different metaphysical systems can be adapted to give similar types of responses which I give to some of these difficulties. Exploring this is not something that this thesis does, but those strongly inclined towards other metaphysical views are welcome to attempt to adjust my solutions in terms of their metaphysical commitments. Nevertheless, I will be claiming that the responses I give based on a powers metaphysic are good ones, being at least as good as other responses on offer. Yet since they can also offer a unified solution to multiple problems, in the sense that a powers ontology is all you need, I take it as a strong reason for preferring these power-ful solutions over the many others which each may require different ontologies.

Why then were these problems chosen? The main reason is due to their importance within the discipline of philosophy of religion, where often these issues are thought unresolvable or at least yet to have been resolved. This is evident due to the ongoing debates regarding the Trinity, Euthyphro dilemma, and fine-tuning argument, whilst the one a little out of place is God's creation of laws of nature. Yet since natural laws play such a key role in atheistic metaphysics, exploring a role for God in this is also of significance.

The other reason these problems were chosen was due to their diversity, such to show the flexibility of the powers account. That is, the problems focus on very different areas. The first exploring a feature of God's nature, the second on an aspect of the creation, laws of nature, therefore being more within the domain of the metaphysics of science, the third area investigates an argument of natural theology, and the final on the creation of value, and therefore axiology. That powers have things to say to this diverse array of problems should

be of interest to philosophers of religion, since they might be able to think of other ways in which powers are beneficial. By contrast, if I had only focused on one specific area, such as on laws of nature, the application of powers to philosophy of religion would seem somewhat limited and their potential unmanifested. Further, the diversity allows me to offer more to power metaphysicians in general since some of the areas I explore, such as those to do with ethics and the fine-tuning argument, can be pulled from their theological moorings and can thereby be thought of as having a broader relevance to philosophy.

1.5 - Methodology in thinking about these problems

The methodology I have employed in thinking about these problems is as follows. First, I try to make clear exactly what the problem is that I am addressing, and then to interrogate it assuming an ontology of powers, exploring where powers might be relevant and what they might have to say about each of these issues. I then seek to, implicitly, ascertain how well the view I suggest a power theorist can give does given certain explanatory virtues. I list some of them here:[16]

Explanatory Scope – A position is better than another if it can account for more of the data needing explanation.

Explanatory Power – This virtue concerns how good an explanation is, over the whole range of what it explains.

Coherence with intuition – This virtue is somewhat subjective and holds that a theory is virtuous insofar as it coheres with one's intuitions.

Coherence with other views – This virtue claims that a view is virtuous insofar as it coheres or doesn't directly go against other views which we have good reason to adopt, for instance certain scientific phenomena.

Simplicity – Although there are different types of simplicity, the one focused on here says ontological economy is virtuous.

[16] Some of these parallel the explanatory benefits Oppy (2013a, 7-8) lists as his decision criteria when assessing views.

Non-Ad Hoc-ness – This holds that a theory shouldn't postulate things only to make a view work, with postulating ad hoc entities being a vice.

Intrinsic Intelligibility – A view should be intelligible, and the more obviously and clearly it is the better.

Whilst I implicitly rely on these virtues when assessing the responses based on power metaphysics that I individually give, they also play a role when assessing how beneficial the power response is as a whole in responding to the multitude of questions I look at, as opposed to employing diverse metaphysical positions to answer each question individually. There is much more that could be discussed regarding these criteria, such as going into more detail on each of them as well as working out which order of preference they should be ranked – for instance does simplicity beat explanatory power. Working all this out would be a large job in itself, and one I think more philosophical work should be devoted to; however, this thesis is not the place where it will be done. Rather I use these criteria in a less systematic way as being that which aids what I say in the remainder of the thesis.

1.6 - Overview of chapters

The broad structure of each chapter that follows will be fairly similar; after spending some time setting out the problem, I shall present and briefly assess the state of the debate, and then go on to show how powers are relevant. I present a brief overview of each chapter below so to map out the structure of the rest of this work.

Chapter two, after introducing neo-Aristotelian metaphysics more generally, focuses on the ontology of powers, providing a big picture overview of debates concerning their nature and discussions of their usage. The aim really of the chapter is to give the reader a wider acquaintance of the ontological disputes that have occurred regarding the metaphysics of powers, demonstrate more fully some of their uses, and to alert the reader as to which elements will be important for one to take certain positions on in order adopt some of the views I later expound. Further, I shall also discuss some of the objections that have been raised against power ontologies, and briefly comment as to how one might respond to them. Given this, by the end of the chapter one should come away with a power metaphysical toolkit which will be required to understand and see how I build answers to those aspects in philosophy of religion I address in the remaining chapters of the thesis.

Following this I turn to the Christian doctrine of the Trinity, where this chapter begins by outlining what the doctrine is typically taken to consist of. Having set this out I then turn to explicating certain models of the metaphysics of the Trinity which have been given in the recent literature. These can be divided into two camps, those known as Social theories and the others which are Latin views. I suggest that one should prefer a Latin account and then give a new model in this vein, using a number of theses which have been defended by power theorists. Having done this I show the benefits of the model and answer some objections that might be lodged against the account.

The next chapter focuses on an aspect of the world that God creates, namely the laws of nature, and suggests how theists could conceive of this. In this chapter I discuss the three main views of laws given within the literature, namely: Humeanism; the strong external governing account; and the powers view. I then briefly note the most prominent theistic view within the literature, before turning to how each of the three views of laws might come in theistic forms. After this I assess each of the views on both non-theological and theological grounds, where in the latter case I focus in particular on how God relates to creaturely causal action. Ultimately, I argue that the powers view should be most preferable to theists.

Chapter five investigates how the view given in the previous chapter regarding a powers view of laws of nature might be able to block fine-tuning arguments. By themselves powers are incapable of doing this, but I will show that through adding one or two other commitments, which a number of people find reasonable, one can formulate an unexplored way of answering fine-tuning arguments. The chapter will therefore begin by setting out the fine-tuning argument and very briefly noting recent responses to it. I shall then spend most of the chapter formulating and spelling out the metaphysics of the response I suggest has so far been neglected in the literature and then assess how well it fares against the argument.

The next chapter explores a way that theists can block the Euthyphro dilemma which is inspired by thinking about powers accounts of laws of nature. As usual I will first explore the responses that have been given in the literature and then suggest a response of my own. I shall then answer a number of objections that might be raised against this type of account, before turning to the penultimate chapter where I shall claim that the response I gave to the Euthyphro dilemma can be grounded in the metaphysics of powers. Here I will demonstrate how powers can do work within axiology, something that has yet to be done. Whilst I will be

unable to provide a full account of this here, since this itself is a huge project, I will suggest how the broad outlines of this type of account would look.

The thesis ends with a final concluding chapter, which looks back over what has been achieved and its importance for philosophers of religion.

1.7 – What's new?

Before diving into the next chapter let me briefly note, having provided an outline of each chapter, what should be considered novel in the chapters to come? The first thing that is new is my use of powers in exploring the metaphysics of the Trinity. Here I will require a specific conception of powers, which I detail in the chapter, so that one can formulate a coherent account of the Trinity. I also give a novel discussion between the relations of the persons within the chapter, which is something that has received little attention in the literature. My discussion of God's relationship to the laws of nature also has some aspects which are new to the contemporary literature, in that I give some additional reasons why a powers account might be preferred by theists. The following chapter, exploring a response to the fine-tuning argument, develops a response which, although briefly mentioned in throw away comments by one or two theorists, has never been developed or explored as I do here. Given this, it adds to the fine-tuning literature and provides a new and novel response which deserves further thought. The next chapter, on the Euthyphro dilemma, explores a neglected response which theists can give to the axiological version of the dilemma which is inspired by power metaphysics. This too is something novel within the literature as is the work I do in the following chapter which attempts to begin to spell out how powers might be used in axiology. Whilst speculative and merely providing the beginnings of a fuller account, where future sustained research could be done, it is clear that this is a novel use of powers in thinking about value and may prompt other philosophers to explore this area further.

Chapter 2 - Neo-Aristotelian Power Ontology

Aristotelian thought has seen something of a revival within many fields in philosophy such as ethics (Foot, 2001; Hursthouse, 1999), philosophy of mind (Jarworski, 2016) and epistemology (Sosa, 2007; 2009; Greco & Turri, 2012). I however am interested in the revival that has taken place within metaphysics. It should be noted that this renewed interest is not necessarily just a revived Aristotelianism but rather an Aristotelianism that has been modified in light of contemporary debates and discoveries. As such, the modern Aristotelian research programme has come to be known as Neo-Aristotelianism (Tahko, 2012; Novotný & Novák, 2014; Groff & Greco, 2013). I will mention three areas within metaphysics that the revival in Aristotelian thought has sparked,[17] the first two extremely briefly but I will pay significant attention to the last since it will provide the groundwork of much of what is to come in the remainder of my thesis.

One significant place in which Aristotelian thought has been revived within metaphysics has been in terms of essentialist thinking, with its reintroduction being largely due to the work of Kripke (1980) and Putnam (1973; 1975). Through their work the notion of essence was given new life, even if it was not exactly the way Aristotle would have conceived of it. Their work sparked a debate as to how we should best understand essence, with others like Fine (1994), Lowe (2008a; 2018), and Oderberg (2001; 2007) arguing that rather than understanding it in terms of necessity we should understand it in terms of real definition. This provided modern metaphysics a notion of essence much closer to Aristotle's thought, and one that many have found fruitful, being employed in areas of work such as modality (Contessa, 2010) and biology (Oderberg, 2007; Boulter, 2013; Austin, 2019).

Another area of Aristotelian thought that has seen recent sustained attention is on his view on composition, hylomorphism; a view that takes all objects to be composed of matter and form. For ease of explication, we can think of form as structure,[18] and thus hylomorphism

[17] This is not to say these are the only places which Aristotelian thought has been influential within contemporary metaphysics, since Aristotelian thought has influenced contemporary discussions of notions such as substance (Loux, 1978; Hoffman & Rosenkrantz, 1994; 1997; Lowe, 1998) and universals (Armstrong, 1978; Lowe, 2006).

[18] Jarworski (2016) suggests this is all there is to form, although Oderberg (2014a) thinks taking form to be just structure is a mistake.

holds that every object is a composite of 'structured-matter', where both principles, structure and matter, are non-reducible to one-another. Many metaphysicians have hoped that this way of thinking about composition will help solve many of the problems that are fraught within this area of philosophy, and as such it has been increasingly discussed within contemporary metaphysics (Koslicki, 2008; 2018; Rea, 2011; Marmodoro, 2013; Koons, 2014; 2017; Sattig, 2015; Evnine, 2016), with debates over its specific formulation and how it is to be applied looking as though they will not end anytime soon. However, the area of neo-Aristotelianism most relevant for this thesis concerns another area, and since I will be employing this area extensively throughout the remainder of this work, a more substantial introduction is required.

2.1 - The metaphysics of powers - an introduction

Within recent years, work on powers/dispositions/capacities/potencies/potentialities[19] has grown significantly, with the current debate largely being framed by several influential books (Harré & Madden, 1975; Bhaskar,1978; Cartwright, 1989; Crane, 1996 Mumford, 1998; Ellis, 2001; Molnar, 2003; Heil, 2003; Bird, 2007; Martin, 2007; Vetter, 2015).[20] However, powers used to be seen with disdain by many metaphysicians with Mellor writing that they were considered 'as shameful … as pregnant spinsters used to be-ideally to be explained away, or entitled by a shotgun wedding to take the name of some decently real categorical property' (1974, 157). Why then did people think this and why the change of heart?

The reason that powers were disliked seems to have been due to two primary reasons, empiricist epistemology and the reigning Humean paradigm within metaphysics. To see why these were an issue for powers it is helpful to get more of a flavour as to what powers are. Perhaps the easiest way of doing this is by way of examples. Salt has the power to dissolve in water, my eyes have the power to see, and an entity with negative charge has power to repel other negatively charged entities. These examples allow us to ascertain a few things. First, powers are typically thought of as being a type of property. Second, powers are essentially defined by the change they bring about, that is their manifestations. Third, manifestations are typically only thought to occur when a power is in certain circumstances. Finally, powers are

[19] I will say something about this terminology later, but for now these terms can be taken synonymously.

[20] This isn't to say there wasn't any earlier work done on powers, but it typically took the form of papers, for example Maxwell's (1968) paper.

thought to exist even when they aren't manifesting. For instance, salt is thought to have the power to dissolve even if that power never manifests.

With this understanding we can see why powers were thought to clash with both empiricism and Humeanism. Starting with the former, those with strongly empiricist leanings had worries about the veracity of powers since powers were thought to be real even when in their non-manifesting, 'dormant', state and given this were not empirically detectable despite also being thought to exist. The worry then was that powers introduced some sort of spooky ethereal realm into our ontology, and that this shouldn't be there. Powers instead should be reduced to something non-spooky. Thus Goodman wrote,

> 'The dispositions or capacities of a thing—its flexibility, inflammability, its solubility—are no less important to us than its overt behaviour, but they strike us by comparison as rather ethereal. And so we are moved to inquire whether we can bring them down to earth; whether, that is, we can explain disposition-terms without reference to occult powers.' (1983, 40)

These supposedly non-spooky types of properties, which powers were thought to reduce to, are called categorical properties, where typical examples of these are being a shape (for instance being a triangle) and spatial relations (such as being to the left of).[21] The nature of this type of property is drawn in stark contrast to that of powers since they are not essentially defined by the change they bring about (Armstrong, 1997, 69) and manifestation talk does not apply to them.[22] Given this, categorical properties are far more friendly to empiricist thought, since they are always in a state of actuality. The question then is whether powers could be reduced to these types of properties alone, such that powers themselves were nothing more than 'categorical properties'. I will have more to say about this project shortly.

Turning now to the second reason an ontology of powers was deemed unpopular, Humeanism. Humeanism, so claims Lewis, says that 'anything can coexist with anything else. … Likewise, anything can fail to coexist with anything else' (1986a, 88) This, however, is not something powers theorists claim. Rather as powers are essentially defined in terms of their

[21] Although as we shall see some power theorists wouldn't think that these are actually categorical properties (Bird, 2017).

[22] However, Cross (2005) argues it's a lot harder to draw the distinction than this.

manifestation they are intrinsically tied to their manifestations. Whilst there might be nothing on Humeanism that makes it essential to negative charge that it repel other instances of negative charge, the same cannot be said for those who think there are powers. Humeanism, to use the language of Ellis, holds to the world-view 'passivism' (2002, 2; 2001) There are no connections in nature, at least for Humeanism, 'all there is to the world is a vast mosaic of local matters of particular fact, just one little thing and then another.' (1986b, ix) Or for others they are external to the objects they govern, such that 'the things in the world were just as passive as ever, only now they … [are] being pushed or pulled around, willy-nilly, by forces.' (Ellis, 2002, 2) On both views the passive objects in the world are categorical properties, and on the latter view there is an addition of some type of external laws in order to make the world active.[23] By contrast powers make the world dynamic, which we might give the world-view name 'dynamism', since it doesn't hold that nature is fundamentally passive but rather fundamentally active and dynamic. As Ellis says, 'The real world is essentially active and interactive. It is not passive, as the old mechanists believed, and the neo-mechanists of today also believe. It is dynamic. And its dynamism stems from the existence of genuine causal powers in things' (2002, 62).[24] The reason why many have reinvested into this approach such that it has become a viable option is due to many finding the Humean programme unsatisfactory, arguing against it in certain ways (Lierse, 1996; Ellis, 2001; Mumford, 2004),[25] and due to thinking that scientific discoveries seem to show that at the fundamental level nature is powerful (Mumford, 2006; Williams, 2011b; Blackburn, 1990, 63; Strawson, 1980, 280).[26]

The main contention over the viability of powers is therefore whether they can be reduced to categorical properties such that powers are not needed in our ontology.[27] Many think this

[23] I will say more about this in chapter 4 when I talk about differing views on the laws of nature.

[24] Given this, it is interesting to note that Handfield (2008) has attempted to give a Humean theory of powers, although the success of this has been challenged (Simpson, 2018).

[25] Mumford and Anjum, for instance, argue that we can detect causal connections, as they claim 'causation can be experienced directly' (2011, 196), which directly goes against the Humean view.

[26] Chakravartty (2017) also gives an argument based on science for powers, although his argument focuses on the pragmatic benefits powers bring to scientific inquiry and the pragmatic difficulties categorical properties bring.

[27] I use the terminology of powers throughout this thesis as I take powers to be non-reductive. Those who think these types of properties can be reduced usually speak of dispositions rather than powers (Lewis, 1997; Armstrong, 1996). Things, however, are more complicated than this since many who use the terminology of dispositions or capacities, potencies, potentialities also refer to what I mean by power, rather than providing a

type of move fails, and thus that powers should be considered non-reducible entities.[28] I assume that they are correct in this and that powers are non-reductive. Here I will note why many think this, namely due to the failure of reduction of powers, however note that this is a very complex and continuing debate and as such I shan't be able to get into all the details which have arisen here.

The way people have tried to reduce powers is through what has been called the conditional analysis. The thought here is that if such an analysis can be given then powers are no longer needed. In its simplest form the analysis claims an object has the power to bring about manifestation M when in conditions C if and only if it would M if in conditions C. If this is correct and this is all there is to a power, then the postulation of non-reductive powers is not needed. As such the success of this type of analysis has been strongly resisted by power theorists who claim this reductive conditional analysis fails (Martin, 2007, 12-23; McKitrick, 2018, 15-41; Bird, 2007, 24-41). The reason the analysis fails, so claim power theorists, is that there are counterexamples to such an analysis. For instance, Martin (1994) proposed finks as a counterexample, Bird (2007, 27-29) antidotes, Johnston (1992) mimics, and there have been many others given too. Each of these counterexamples seem to focus on some form of intervention in the action of powers such that the power doesn't manifest, or manifests a different outcome, which the conditional analysis can't capture. The question then is whether the conditional analysis can be repaired, and there have been some attempts in the literature to do so (Manley & Wasserman, 2008; 2011; Choi, 2009; Hauska, 201).[29] Counterexamples, however, which philosophers love to think up, are often given to these revised versions too. Given this I follow Marmodoro and Mayr when they write,

> 'Perhaps some analysis immune to counter examples will be found at some point. But the odds are against this outcome, and by and large metaphysicians nowadays have

reductive account of these properties. Nevertheless, others who think there are powers also think there are a distinct type of property which they call dispositions (Pruss, 2011, 239-248; Bird, 2013; McKitrick, 2018; Maier, 2018). None of this will concern me throughout the thesis and I will continue to use the terminology of powers.

[28] A slight caveat here. There are a group of theorists who hold a non-reductive but deflationary view of powers, where this account holds that powers are nothing more than second-order properties, which means that having a power amounts to having the property of having certain other first-order properties (Prior, Pargetter, & Jackson, 1982; Prior, 1985). I shall not be discussing these accounts either.

[29] Suppose the analysis can be repaired, this might not worry some power theorists since they might claim that even if the conditional analysis was successful something powerful is still needed, since we can still ask what makes these conditionals true, with one answer being that the truthmakers are powers.

> come to believe that such a reductive analysis is not feasible, because it would either be ultimately circular, or involve such overly complicated conditionals that it would have little chance of telling us what dispositional statements really had in common.' (2019, 76)

As such, given the failure of this analysis I'm going to hold that powers are non-reductive entities in our ontology.[30] There are many other reasons to believe in powers that have been given in the literature, other than the failure of this analysis, some of which I have already mentioned, such as that properties are best identified by their causal role (Shoemaker, 1980), that quiddities are no longer required for identity given powers (Bird, 2007, 73-79), that science gives us reason to posit them (Mumford, 2006; Williams, 2011b), due to helping solve the problem of change (Feser, 2014a, 31-46), because of a dissatisfaction with Humean metaphysics (Lierse, 1996; Ellis, 2001), and given pragmatic concerns regarding scientific inquiry (Chakravartty, 2017).

There is an additional reason to like powers, which I am more interested in for the purpose of this thesis, namely that powers are so useful that we should posit them within our ontology.[31] What powers can do has been explored by many theorists, and the list is constantly growing, but let me give you a feel for what it has already been argued that they are helpful with: giving an account of laws of nature (Bhaskar, 1978; Cartwright, 1983; Mumford, 2004; Bird, 2007), modality (Vetter, 2015; Pawl, 2017; Pruss, 2011; Yates, 2015), causation (Mumford & Anjum, 2011; Chakravartty, 2007, 107-118),[32] free will (Vihvelin, 2004; Steward, 2012; Groff, 2019), providing useful resources in philosophy of mind (Jaworski, 2016; Heil, 2012; Wilson, 2014), ethics (Anjum, Lie, & Mumford, 2013; Robinson, 2011; 2013; 2014), and philosophy of biology (Austin, 2019). As can be seen, powers are thought to be powerful in explaining or helping explain a number of phenomena, although how helpful they are in

[30] There have been additional objections to powers, such as a worry made famous by Molière, the virtus dormitiva objection, which claims that powers are explanatorily vacuous and shouldn't be posited. Power theorists, however, have had much to say in reply to this (Mumford, 1998, 136-143; Feser, 2014a, 43-46; Michon, 2007) although I do not discuss it here. For some further objections see Barker (2013) and Jaag (214).

[31] This line of argument is similar to one which Lewis gave when arguing for his realist theory of possible worlds (1986a, 135).

[32] Some have also wondered whether there can also be non-causal powers (Nolan, 2015).

specific cases is up for debate.[33] In any case supposing *on the whole* they are helpful, if one likes a style of argument where explanatory usefulness provides reason for acceptance, then this seems like a fairly strong argument in favour of powers.

My thesis will argue that powers are useful in another area, philosophy of religion, and hence will strengthen this argument. Nevertheless, before showing why this is the case, it will be helpful to introduce many of the other debates that have occurred between power theorists so to pave the way for what is to come.[34] Whilst not all of the debates I mention here will play a role in the rest of the thesis, I think them nonetheless helpful so that the reader can orient themselves within the wide discussions that are happening within the power's literature. Hence my brief explication of the many different questions power theorists have explored, regarding the nature of powers, is not in vain.[35] Nonetheless, when discussing something that will come to play a part later in the thesis I will let my reader know. The way I will introduce these differing debates regarding powers is by way of asking questions and providing answers, since this format seems to me the most helpful.

2.2 - Powers and categorical properties

In the previous section we saw that some theorists try to reduce powers to categorical properties by way of the conditional analysis. I've claimed that we should think that this fails, or at least I will assume for this thesis, along with many others, that it does. Nevertheless, there is still an additional question which we can ask, namely how do powers relate to categorical properties. To this there have been three main answers.

The first, the dualist position, typically holds that there are both categorical properties and powers (Molnar, 2003; Ellis, 2001; Unger, 2006; McKitrick, 2018), and that powers in some way depend upon or are grounded in categorical properties (Tugby, 2012; forthcoming). For instance, it might be that the structure of salt, a categorical property, grounds the power of salt to dissolve. On this view powers are essentially derivative and incapable of independent

[33] Not all power theorists will like this argument, or may at least restrict it, as they think that powers have over reached themselves and explain far less than I suggest (Bird, 2016).

[34] For some edited collections on powers see: Kistler & Gnassounou (2007); Groff (2008); Handfield (2009); Damschen, Schnepf & Stüber (2009); Marmodoro (2010); Bird, Ellis & Sankey (2012); Groff & Greco (2013); Jacobs (2017); Engelhard & Quante (2018); Meincke (forthcoming).

[35] For additional introductory material on powers see: Choi & Fara (2018), Allen (2016, 139-190), Marmodoro & Mayr (2019, 47-89), and Groff (2019).

existence. Nevertheless, one could hold a dualist picture where both powers and categorical properties exist with each existing independently of the other.[36]

The independence move, however, provides us with another answer to the question, where categorical properties are no longer needed in order to have powers. One view which holds this is pandispositionalism (Bostock, 2008; Mumford, 2009),[37] which claims that there is only one type of property, powers, and therefore categorical properties are not required at all.[38] Pandispositionalism has the advantage over dualism that it is monistic, since it says that only one type of property is needed, whereas dualism says two types are required.[39] However, the big question is whether it can give an adequate account of the *supposed* categorical properties in terms of powers. Some other views which hold that powers exist independently from categorical properties claim something a little weaker, suggesting that powers are all there is at the fundamental level, but how we should conceptualise non-fundamental properties is left undetermined (Bird, 2007; 2016; 2018). Whilst theorists who adopt this type of view have less to do in explaining everything in terms of powers, the virtue of parsimony may be lost, unless one thinks this virtue only really matters at the fundamental level.[40]

The final view, the powerful qualities view, tries to find a middle road between the two previous theories.[41] It claims, at least in one form, that 'the qualitative and dispositional are identical with one another and with the unitary intrinsic property itself.' (Martin, 2007, 65; Heil, 2003; 2012; Engelhard, 2010; Jaworski, 2016, 53-80).[42] Note here that rather than speaking of categorical properties, proponents of this view prefer to call them 'qualitative'

[36] Oderberg's (2007; 2017) view might be classified this way, since he seems to hold that when a power manifests it becomes a categorical property, although he prefers different terminology.

[37] This differs from dispositional essentialism, which claims that at least *some* properties have dispositional essences (Choi & Fara, 2018), since pandispositionalism claims all properties have dispositional essences. Note this definition of dispositional essentialism is compatible with dualism, as it doesn't claim these have to be non-dependent properties, and the powerful qualities view, because it doesn't claim that a dispositional essence is all there is to a property.

[38] Dumsday (2015) argues that this type of view is at odds with metaphysical naturalism. Given this, it might provide theists one reason to accept the view, so to have another argument in their arsenal against naturalism.

[39] Those holding to pure categoricalism can also claim the virtue of parsimony, since they reject the need for powers.

[40] Schaffer (2015) seems to suggest something like this.

[41] Taylor (2018) has attempted to argue that the powerful qualities view is the same as the view previously given, although many find this dubious.

[42] Note that there are other forms of this view such as the compound interpretation, which claims that 'properties are essentially compounds of *distinct* dispositional and qualitative parts.' (Taylor, 2018, 1438)

properties. The thought is that thinking of a property as only powerful or only categorical/qualitative is to merely partially consider it (Taylor, 2013, 95-96). However, once we fully consider what it is to be powerful and categorical/qualitative we come to see a 'surprising identity' (Martin & Heil, 1999, 47). This view can also give us a monistic view of properties, in that all properties required might be like this, and therefore it too can claim the virtue of parsimony. Additionally, it is also meant to overcome worries put to other monistic positions, such as how certain properties are actually powers, for instance those which are typically taken to be categorical properties such as shape and spatial relations. As such in providing an answer to this it is thought to have the benefits of dualism. However, many find this view extremely difficult to understand, since they take categorical/qualitative properties to be different in kind to powers and can't understand how they are the same (Oderberg, 2009).[43] This worry is not only made by those who reject the powerful qualities view, but also by some who endorse it, such as Jacobs, who has attempted to reformulate the view in terms of truthmaker theory to bypass this concern (2011).

This debate does somewhat feature in the remainder of my thesis. The primary reason for this is that I have stated one of the reasons you might like what I say here in terms of ontological parsimony, namely in claiming that powers are all you need. But given this, dualist views aren't going to work for me, at least at the fundamental level,[44] since they require two type of entities, powers and categorical properties, rather than one. As such for the remainder of the thesis I will be assuming a monistic view rather than a dualist. I will typically speak of a pure powers view, however this is for ease of explication rather than anything else, and therefore one could adopt a powerful qualities view if they wished.

2.3 - The identity of powers

The next question asks what it is that determines the identity of a power, a question which is relevant for the following chapter (chapter 3). There are two answers that have been given to this question. The first, most widely endorsed, is that both the conditions which are required so that a power manifest and the manifestation itself determine the identity of a

[43] Giannotti (2019) provides a reply to this type of objection.

[44] One might think, as I stated earlier Schaffer (2015) does, that parsimony should only guide us at the fundamental level, and therefore categorical properties at a higher level aren't going to matter.

power (Bird, 2007, 19).[45] Hence the identity of salt's power to dissolve is set by the conditions required for salt's dissolving and the dissolving of the salt.[46]

However, there has been some pushback to this type of approach, leading to the second answer, in which the manifestation alone determines a power's identity (Vetter, 2014; 2015). This type of approach is partially motivated by semantic considerations, the fact that some powers seem to have no manifestation conditions, and as the manifestation conditions to bring about the same power appear to vary widely. However, it is still largely questioned whether this can overturn the former position, since there are worries that the manifestation conditions will still appear but this time being built into the manifestation.

Given this talk of manifestation regarding a power's identity we need to ask a further question, namely what makes powers manifest?[47]

2.4 - What accounts for the fact that powers manifest?[48]

There have been two views that have become prominent in answering this question.[49] The first claims that you should think about the manifestations of powers in terms of a stimulus condition and a response (Bird, 2007), the triggers view. The idea here is that a given power *D*, is characterised by manifestation *M*, which results from *D*'s being stimulated by *S*. Hence powers are inert, doing nothing, until they are triggered to do so. Yet one reason some give for preferring an alternative view is that they think this approach fits poorly with examples of manifesting powers. Thus, Heil writes of salt's dissolving in water, 'Where do you locate *D*? In

[45] There is a type-token ambiguity here (Lowe, 2010). For Bird it's the manifestation type and stimulus type that determines the identity of a power.

[46] Some have suggested that a power's nature is determined holistically, such that a power's identity is determined in terms of other powers (Williams, 2010a; Mumford, 2004, 182-184).

[47] Some have also theorised about powers which cannot possibly manifest, and the consequences this has for certain views of powers (Jenkins & Nolan, 2012).

[48] Note that the answer to this question isn't relevant for what is to come within the remainder of this thesis, and one could take either option for what is to come. Nevertheless, it has been an important area of discussion within the powers literature.

[49] A further distinction has been made by some here, namely powers that have an instantaneous manifestation and powers whose manifestation is a continual process. The latter 'have temporal duration, rather than be an instantaneous transition from one power in potentiality to another' (Marmodoro, 2017a, 75) as in the case of the former. For instance, the manifestation of a bomb exploding we shall say is instantaneous, whilst the power of a magnet to attract is a continual process.

the salt? In the water? And where is *S*? Is *S* the salt, the water, or something else?' (Heil, 2012, 122)

Given this and other concerns, an alternative view, the mutual manifestation view (Martin, 2007, 48-51; Anjum & Mumford, 2018, 121-124), has been formulated, with this perhaps being the most popular position today (Marmodoro, 2017a, 57, n.2). On this account, powers which come together in appropriate conditions bring about their mutual activation. Such that the power of water to dissolve salt and the power of salt to be dissolved are brought together and activated when salt is placed in water and dissolves. Yet McKitrick worries how this type of account provides an explanation of power activation other than just through metaphor (McKitrick, 2018, 126-128). However, she does suggest one way out of her predicament, although she finds it implausible (2018, 128), which holds that powers are constantly manifesting, such that no such activation is needed, yet the powers are often suppressed in their manifesting due to other powers in their environment. Yet, were one to remove those powers causing an interference, you would see the manifestation of the power. Whilst it seems some theorists have held something like this (Lowe, 2006; Dumsday, 2016a, 79-101), it's unclear that many would want to go this far.

There are two other questions which are important to ask related to a power's manifestation and I now discuss each in turn.

2.5 - What makes powers manifest?

There have been a few answers to this question, where I shall rely on particular answers to this in the following and penultimate chapters of this thesis. One fairly uncommon answer, which I have noted already, is that when a power manifests it produces a categorical property.[50] However, two other views are much more prominent. The first suggests that when a power manifests another, albeit different, power/s is/are produced (Mumford & Anjum, 2011; Bird, 2007). Call this the jumping account, since one power through its manifestation jumps into being another power. This has led to an objection called the always packing never travelling objection (Armstrong, 1997, 80), which claims that if a manifestation of a power

[50] Note that when Oderberg (2007; 2017) speaks of this he thinks of categorical properties and powers as synonymous, or at least very closely related to, Aristotle's act and potency respectively. However, it has been argued that thinking this is a mistake since act and potency are applicable to more of Aristotle's categories than merely 'properties' and therefore cannot be identical to them (Clark, 2015).

results in another power then there is never any motion since there is no movement from potency to act, rather all we have is one potency after another. Whilst defenders of this view have offered responses to this type of objection (Bird, 2007, 100-108), another view found in both Aristotle (Witt, 2003, 38-58; Marmodoro, 2014, 13) and Aquinas (Page, 2017, 171) has been given. This account, defended by Marmodoro (2017a; 2017b), claims that 'the activation of a power is an *internal* 'transition' from one state to another of the very same power: its manifestation is not the occurrence of a new power; rather it is simply a different state of the original power: an activated state.' (2017a, 59) This bypasses the always packing worry since powers move from a state of potentiality to actuality,[51] yet it raises other questions such as what a state is (McKitrick, 2017, 43) and whether we can understand how a power in these two states can be numerically identical.

2.6 - The modality of a power's manifestation[52]

Our assumption that powers are non-reductive precludes them having a non-reductive analysis, however there can still be a type of modality that governs their manifestation. What then is this modality?

At present there are perhaps four answers that have been given. The first is conditional necessity. On this view, when the conditions for a power's manifestation are met it will necessarily manifest (Hüttemann, 2013, 121-122; Marmodoro, 2016; 2017a, 67-69). Hence the name 'conditional necessity'. As such if you put two powers in identical situations, where the manifestation conditions are met, both will necessarily manifest. By contrast, on the second view, what has been called the dispositional modality view (Anjum & Mumford, 2018), if you have two powers in identical situations, where the conditions for manifestation are met, it is possible that one power manifest whilst the other not, or both manifest, or neither. The reason for this is due to the view claiming that 'connecting a causal power with its manifestation … is neither pure necessity nor pure contingency but something in between.'

[51] This move also bypasses another regress worry (Marmodoro, 2009), given by Psillos (2006).

[52] Again, this discussion doesn't inform much of what I say later in the thesis, although this time I hesitate in claiming that any answer to this question is consistent with the remainder of what's to come. This is because dispositional modality and probabilistic powers, due to their allowing that the conditions required for a power's manifestation can be present and yet the power may not manifest might cause some issues, particularly given what I say in 5. However, I am not certain about this.

(Mumford & Anjum, 2014, 106; 2011, 175).[53] However, a problem with this view is that it is difficult to make sense of something in-between necessity and contingency and some of the examples given in support of the view have been shown to be explainable on the conditional necessity position (Marmodoro, 2016). As such the conditional necessity position might seem best.

However, due to probabilistic and indeterministic powers, which seem to be required due to certain contemporary scientific discoveries, there might be two other types of modality governing powers. The first holds that a probabilistic modality determines some powers, such that they probabilistically manifest when their manifestation conditions are met. The second type of powers, spontaneous powers, are indeterministic, where their manifestation isn't brought about by the operation of prior causes (Lowe, 2008b, 176). However, it isn't clear exactly how to spell out what this type of modality is, or whether a robust account of the probabilistic modality can be given. Further, perhaps it will be claimed that the former two types of modality can accommodate these types of powers. Questions such as these lead me to suggest that this is a place where further investigation into powers could be fruitful.

Given all this talk of a power's manifestation a question arises as to how powers are related to their manifestations, and it is to these types of questions we now turn.

2.7 - Powers and relations[54]

Some people take it that powers are relational entities, where a relation exists between a power and its manifestation (Bird, 2007; Tugby, 2013). There are, however, others who think that the positing of a relation is unnecessary (Oderberg, 2017, 2389-2404; Heil, 2003, 80; Marmodoro, 2017a, 65-67). One reason for positing a relation is this, that powers seem 'in some sense' inherently directed towards their manifestation (Place, 1999, 227) and that this directedness is relational. Thus, suppose you have *x* and *y* and a one-way relation holding between *x* and *y*, we would then say *x* is directed towards *y*, where the directedness is explained in virtue of the relation. However, those who wish to resist the relational account of powers attempt to explain this aspect of powers in terms of non-relational features, since

[53] Mumford (2013, 19) mistakenly took the dispositional necessity view to be Aquinas's, which isn't the case (Page, 2017), although he no longer holds this (Anjum & Mumford, 2018).

[54] This is another key debate within the powers literature, and whilst again it doesn't explicitly feature within the remainder of the thesis, I will require that powers are in some way directional.

they are concerned that the view of directedness as relational opens the way up to regresses. For instance, take the Psillos (2006) regress against theories that posit that the directedness of a power towards its manifestation is a property of the power, or in other words that there is a relation between two different things, a power and its manifestation. From this Psillos suggests a regress ensues,

> 'The question I am interested in is what F does when it is *not* manifested … Suppose we grant that when unmanifested, power F has the *power* Q to manifest itself, that is to φ. (As noted above, this would be meant to explain F's directedness to its manifestation.) Since Q is a power, it is also directed to its manifestation, but it may well be (actually) unmanifested. So Q must have the *further* power R to manifest itself in a certain way; but being a power, R must have the power S to manifest itself in a certain way, and so on. *Ergo*, if power F has the power Q to manifest itself in a certain way, then an infinite sequence of powers need to be posited to explain what F does when it is not manifested.' (2006, 139)

However, one way out of this regress is to suggest that there is no relation between a power and its directionality, that is 'a power *does not* have directionality as a property; a pure power is this or that instance of directionality towards φ-ing … No division, no regress.' (Marmodoro, 2009, 348-349) However, the advocate of the relational view is likely to reply that although this might solve the regress they struggle to make any sense as to how powers can be directed entities whilst being non-relational, and might suppose that those who hold such a view will likely have to think of this directedness as somehow metaphorical, a position they would rather avoid.[55] As such they will have to find another way out of the regress, for instance by adopting some type of dualist theory, where categorical properties play a role, an option Psillos gives, although he thinks there are drawbacks to it. As to whether there are any other replies relationalists can give and whether they are any good isn't something we can explore here. In any case, both of these views, relational and non-relational views of powers, claim that powers are directional. How we explain the nature of this directionality is our next question.

[55] Molnar (2003) tries to demystify the non-relational view by positing physical intentionality, which we will look at in the next section, but it is controversial whether this is successful.

2.8 - The directionality of powers

Two options for answering this question have been most popular. First is the physical or natural intentionality position (Molnar, 2003, 60-81; Borghini, 2009; Heil, 2003, 221-222; Place, 1999). This view holds that 'the most typical characterization of intentionality … all fail to distinguish intentional mental states from non-intentional dispositional physical states.' (Martin & Pfeifer, 1986, 531) As a result it's claimed that we can explain the directedness of powers in terms of intentionality. Those who object to this view, however, argue that there isn't enough of a parallel to make this claim (Bird, 2007, 114-126; Oderberg, 2017; Barker, 2013, 649; Mumford, 1999). Whilst there has been some response to this (Bauer, 2016) others have opted for a different way of thinking about the directionality of a power. On this, the second view, which I shall make use of in the penultimate chapter of this thesis, directionality is explained in terms of a very weak type of teleology (Kroll, 2017; Feser, 2014a, 88-105; Oderberg, 2017), where the basic idea is that to be directed is to have an inherent end point. Some might also think that this view can encompass the intentional account of directedness, since teleology is sometimes thought of as prior to intentionality and employed in giving an account of it (Koons, 2000; Okrent, 2007).[56] Further, as teleology is usually linked with normativity (Bauer, 2009, 239-241), some have suggested that powers can provide us with an account of what it means to be normative, 'An Aristotelian can give a straightforward account of normativity: a substance is supposed to produce *E* on occasions of *C* if and only if its nature includes a *C*-to-*E* power (one might also prefer more active terms like "tendency" or "striving").' (Koons & Pruss, 2017, 198; Koons, 2017, 6-7) If powers are normative, then not only does it provide us with the resources to help solve other philosophical problems, but it also enables us to say that the normative theory of powers, which some claim Lowe held (Mumford & Anjum, 2011, 183-185), also depends on the teleological account. However there have also been objections raised against this view, with some suggesting they can get more of a handle on what we mean by directionality than we mean by teleology (Manley & Wasserman, 2017, 48).[57] If this is right then perhaps there is no explanation for the directionality of powers; it's just a primitive aspect of them.

[56] It might also be able to envelope functional accounts of directionality as well (Mumford, 1998; Whittle, 2008), since teleology is also usually linked to function.

[57] Although I suspect the reply here would be that directionality just is a teleological notion.

Now we've seen what powers are like, there are distinctions that have been made regarding what types of powers people think there are.

2.9 - Different types of powers

Many have suggested there could be multi-track powers, where this is a power with distinct manifestation types, with this postulation resulting from a perceived need to account for empirical data we discover in the world.[58] A further distinction here has been made between qualitative and quantitative multi-track powers, where the former means the power has qualitatively distinct manifestations, whilst the latter results in a power's manifestation differing only in degree or intensity rather than kind. For instance, some think the power of elastic to stretch is a quantitative multi-track power, since it can stretch to different lengths, whilst a ball's sphericity has the multi-track power to reflect light radiation in a determinate way, produce a concave depression in clay and roll (Heil, 2003, 198-199). The former type of multi-track powers usually are considered more controversial than the latter, since some have argued that it leads to problems for the identity conditions of these powers (Lowe, 2010).[59] This however has been disputed, with it being argued that the distinction between qualitative and quantitative multi-track is not as helpful as first thought (Williams, 2011a). As we shall see, in the following chapter I will make use of qualitative multi-track powers to answer one of the difficulties philosophers of religion face.

Marmodoro (2014, 130-133) has suggested that Aristotle argues that there are multi-stage powers too, and that these should be postulated due to the work they can do in explaining perception. These are powers that have different stages of activation, for instance 'perceptible qualities may be activated into their first actuality in the absence of any perceiver, if the conditions in the environment are appropriate; but they are activated into their second actuality only when the corresponding perceptual capacity of a perceiver is co-activated.' (Marmodoro, 2014, 132) Providing an explanation of perception (Marmodoro & Grasso, forthcoming; Marmodoro, 2014), then, is one such reason to postulate this type of powers, but it might be that they additionally have explanatory benefit elsewhere.

[58] This differs from Vetter's (2013) use of multi-track since she seems to be primarily concerned with different stimulus conditions.

[59] Other prominent single-trackers include Bird (2007, 21-24) and Cartwright & Pemberton (2013).

There are also many other types of powers that have been argued for, which I shall mention briefly. All these, again, have been postulated so to explain a feature of the world the theorist thinks needs explaining. Hence a distinction between active and passive powers (Marmodoro, 2017a, 72-75) has been made so to explain the asymmetry of causation, whilst others deny such a distinction and also that causation is asymmetrical (Heil, 2012, 118-120; Ingthorsson, 2002). Marmodoro (2017b) has also made a distinction between structural and substantial powers so to explain the different types of unity and oneness power composition can deliver, something I shall speak more about in the penultimate chapter. The former is said to unite powers together, a weaker form of composition, where the latter is said to unify them, a stronger form. Additionally, we saw above that probabilistic and spontaneous powers have been postulated so to explain probabilistic and indeterministic phenomena, such as the decaying of a radio-active isotope and a libertarian view of freedom (Lowe, 2008b). Additionally, sure fire powers, powers that always manifest, have also been posited due to their explanatory benefit, which is another thesis argued for by power theorists that I will employ in the following chapter. For instance, if one thinks the world is composed of powers all the way down, then perhaps some sure-fire powers are needed at the bottom level.[60] Finally, two other types of powers have been postulated, intrinsic and extrinsic, where the former are properties that are had regardless of anything external, whilst the latter are properties had in virtue of that which is external. For instance, the power of being lockable could be an extrinsic power since it is one a lock may acquire without undergoing an intrinsic change (McKitrick, 2018, 158-177; Contessa, 2012).[61]

2.10 - Powers and the traditional properties debate

As powers are properties, we might ask if any conception of properties more generally is most suited for powers. That is are they best thought of as universals, tropes, or nominalistically? Whilst there are power theorists who hold to each of these views, only some have contended that one should hold a certain view of properties more generally due to the nature of powers. For instance, Tugby (2013) and Bird (2007) contend one should think of them as Platonic

[60] The supposed need for this has some relation to the well-foundedness of grounding.

[61] Note that this type of distinction is one drawn within the properties literature more generally, and therefore I suggest there might be other distinctions found within the general properties literature which will also apply to powers. Space precludes further discussion of this.

universals. A reason for thinking this the best option has to do with something discussed earlier, namely the thought that a power's directionality is relational, with one reason for thinking this being that it doesn't make sense to say that a power can be directed at a non-existent manifestation, as then we would have a relation with a non-existent relata. Insofar as one thinks this then one has a reason for adopting a platonic theory of powers. By contrast Whittle has argued that thinking of powers nominalistically is preferable since a powers theorist will not need to have properties as sui generis entities in their ontology since they can 'Ockhamize' their ontology by reducing properties to causal powers with no theoretical costs (Whittle, 2009, 243). Further, Dumsday (2014) gives a reason why theists might prefer a nominalist view, by suggesting that one can run a novel cosmological argument if one assumes that there are powers and that nominalism is true. Yet others think powers should be thought of as either Aristotelian universals (Ellis, 2001; Mumford, 2004) or tropes (Heil, 2012; Marmodoro, 2017b, 110). The question, as to which view is best, has received no systematic exploration and therefore this is a place where future work could be fruitful. Whilst in the thesis I shall make use of at least one power being a trope, in the following chapter, and discuss other views relating to what types of properties powers are, in chapter 5, most of what I say is compatible with any view one wishes to take on this question.

2.11 - Summary

With this knowledge, one will now have a good understanding of the nature of powers, the debates which have been had within the powers literature regarding this, and what aspects will be more relevant for what is to come within the thesis. As such it is now time to turn to my first specific use of powers within philosophy of religion, namely that it allows us to give a coherent account of the metaphysics of the trinity.

Chapter 3 - The 'Power'-ful Trinity

In this chapter I want to explore one way in which I take it that power metaphysics can aid Christian philosophers of religion, namely in providing the tools to give a metaphysical account of the Trinity, that is coherent and in line with orthodoxy. History legitimises my type of approach, using an Aristotelian framework to do so, since this was something that has been tried before by early Christian theologians.[62] For instance, Victorinus held that the 'Father represents *dunamis*, the Spirit represents the first *energeia*, or actuality, and the Son represents the second *Energeia*, or characteristic of the divine.' (Edwards, 2019, 82) This would be a model where there are stages of a power's activation, such as on the multi-stage view of Marmodoro (2014, 130-133),[63] but all stages simultaneously manifest. This is unlike the view I will give, which is perhaps closest to that given by Eunomius (Edwards, 2019, 80, 98-102), but it is hard to be sure. In any case I think using Aristotelian metaphysics to explore the doctrine of the Trinity deserves a closer look given that we now have the benefit of a more sophisticated understanding of the underlying power ontology upon which these early Christian views are based on.

To do this the chapter will proceed as follows. I will begin by outlining the Christian doctrine of the Trinity and what needs explaining when theorising about it from a philosophical point of view. I shall then discuss the distinction that has been made between social and Latin views of the Trinity and then outline some of the models that have been given by both camps.[64] After this I shall suggest why I will be opting for the Latin approach which, as will become clear, is the family of views that my proposal find itself in. Following this I shall begin to propose my model, first by highlighting what thesis from power metaphysics I shall require, thus providing me with a power toolkit from which to formulate my model. Having done this, I will show how these theses combine to give us a power-based metaphysic of the Trinity. I then demonstrate how my model accounts and answers two specific questions within

[62] For more on Aristotle's influence on the early Christian thinkers see Edwards (2019).

[63] Recall that I introduced this notion in the previous chapter.

[64] I think of models like Plantinga: 'The rough idea is this: to give a model of a proposition or state of affairs *S* is to show *how it could be* that *S* is true or actual. The model itself will be *another* proposition (or state of affairs), one such that it is clear (1) that it is possible and (2) that if it is *true*, then so is the target proposition. From these two, of course, it follows that the target proposition is possible.' (2000, 168)

trinitarian theorising, namely how it explains the priority of the Father and the answer it gives to how many consciousnesses there are and conclude by answering some objections that might be raised against my account.

3.1 - The doctrine of the Trinity

It is classically orthodox for Christians to believe that God is a Trinity, that is that there is only one God, and God is Father, Son and Holy Spirit. Whilst there is no direct mention of the Trinity within the Bible, Christians claim that the Trinity can be inferred by other things that the Bible teaches. As such Trinitarian thought became canonised into Christian thought fairly quickly. So that Nicene-Constantinopolitan creed of the year 381 states:

> 'I believe in One God,
> the Father Almighty,
> Maker of Heaven and Earth,
> and of all things visible and invisible.
>
> And in one Lord Jesus Christ,
> the Son of God,
> the Only-Begotten, begotten of the Father before all ages;
> Light of Light;
> True God of True God;
> begotten, not made;
> of one essence with the Father, …
>
> And in the Holy Spirit, the Lord, the Giver of Life,
> Who proceeds from the Father;
> Who with the Father and the Son together is worshipped and glorified;
> Who spoke by the prophets.'

The Athanasian creed puts it this way,

> 'And the Catholic Faith is this, that we worship one God in Trinity and Trinity in Unity. Neither confounding the Persons, nor dividing the Substance. For there is one Person of the Father, another of the Son, and another of the Holy Ghost. But the Godhead of the Father, of the Son and of the Holy Ghost is all One, the Glory Equal, the Majesty

> Co-Eternal. Such as the Father is, such is the Son, and such is the Holy Ghost. The Father Uncreate, the Son Uncreate, and the Holy Ghost Uncreate. The Father Incomprehensible, the Son Incomprehensible, and the Holy Ghost Incomprehensible. The Father Eternal, the Son Eternal, and the Holy Ghost Eternal and yet they are not Three Eternals but One Eternal. As also there are not Three Uncreated, nor Three Incomprehensibles, but One Uncreated, and One Incomprehensible. So likewise the Father is Almighty, the Son Almighty, and the Holy Ghost Almighty. And yet they are not Three Almighties but One Almighty.'

From these creeds philosophers of religion claim there are a number of claims that Orthodoxy requires us to embrace:

1. There is one God
2. The Father is God, the Son is God, and the Holy Spirit is God
3. The Father, Son, and Holy Spirit are not identical
4. The Father, Son, and Holy Spirit are of one substance

Additionally, as we see from the Nicene-Constantinopolitan creed there is an additional claim that there is some sort of priority relation between the Father, Son and Holy Spirit, since whilst the Son is begotten the Father and Holy Spirit are not, and whilst the Holy Spirit proceeds, the Father and Son do not.

A robust metaphysics of the Trinity therefore requires us to embrace all these explanatory features, whilst also showing that they are compatible and consistent. The difficulty here arises since it seems that 2. forces us to say that the Father = God, the Son = God and the Holy Spirt = God, yet also having to claim that there is only one God, as in 1. Yet given what has just been said it can look as though there are three Gods, or perhaps that there is only one God which has different names, namely Father, Son and Holy Spirit. As such on this latter reading the Father = Son = Holy Spirit. Yet we know that this cannot be correct since we also have to hold claim 3., which says that the Father, Son and Holy Spirt are not identical, despite all being God, and all being of one substance. How we are to explain all these claims and make them consistent, is therefore a problem of the Trinity.

I will explore how a powers metaphysics and theses embraced by power metaphysicians can help explain how God is three different yet numerically identical persons as well as elucidate the relations of fundamentality between the divine persons. Typically, the models that have been constructed to do this fall into two different camps, and it is to this I now turn.[65]

3.2 - Social and Latin Trinitarianism

It was once claimed that there was a distinction between how the Latin West thinkers thought about the Trinity, Latin Trinitarianism (henceforth LT), and the Eastern Greek thinkers thought about the trinity, Social Trinitarianism (henceforth ST). However, whether there is such a distinction historically has recently been questioned by a number of scholars (Ayres, 2004; Coakley, 1999; Cross, 2002; 2009). Nonetheless, the labels of ST and LT have stuck,[66] and I shall follow Leftow in thinking the distinction should be thought of in a certain way, namely:

> 'ST takes the three Persons as in some way basic and explains how they constitute or give rise to one God. […] [Whereas] LT takes the one God as in some way basic and explains how one God gives rise to three Persons.' (2010a, 441)

ST has probably had the most amount of research devoted to it, with its earlier discussions being credited to Plantinga (1986, 1989). More recently Swinburne (Swinburne, 1994, 170-191; 2018) has defended a version of ST. He argues that person was understood as Boethius did, as an individual substance with a rational nature, and within the Trinity there are three individual substances with their own rational natures. However, he thinks the oneness is preserved as each share the same type of nature, namely that of being divine. More recently Craig and Moreland (2003, 575-595) have given another ST account. On this view the Trinity is like the three headed mythical dog Cerberus. We are then to imagine that each of the heads of the dog is endowed with a distinct faculty of consciousness, that of Rover, Bowser, and

[65] For some other nice introductions to different conceptions of the Trinity, see: (McCall & Rea, 2009; Tuggy, 2016; McCall, 2010, 11-55; Rea, 2009).

[66] There is another class of views which don't usually fit either ST or LT known as constitution views, since they focus on lessons we can learn from thinking about a lump of clay and a statue, that is standard questions regarding composition, and then extrapolate these out so to think about the Trinity. Brower and Rea, for instance give an account of this type. As they say the guiding intuition behind this type of approach is 'that it is possible for an object *a* and an object *b* to be "one in number"—that is, numerically the same—without being strictly identical.' (2005, 58) Whilst this is an interesting approach I shall not look at it any further here since my view will be more in line with LT, but note that there has been much critical discussion of this view (Hasker, 2010b; Craig, 2005; Leftow, 2018; Tuggy, 2013b), as there has been for all Trinitarian models.

Spike. The thought is that even given these distinct centres of consciousness there is still one dog, Cerberus, with each centre of consciousness being fully canine. Yet the faculties of consciousness are not thought to count as dogs, with all three composing one dog Cerberus. The thought then is something like suppose Cerberus has a soul and dies, Cerberus's soul is one thing, one substance, but it has three centres of consciousness each of which is canine but also in some sense Cerberus. Similarly for God,

> 'God is a soul which is endowed with three complete sets of rational cognitive faculties, each sufficient for personhood. Then God, though one soul, would not be one person but three, for God would have three centers of consciousness, intentionality and volition, as social trinitarians maintain. God would clearly not be three discrete souls because the cognitive faculties in question are all faculties belonging to one soul, one immaterial substance. God would therefore be one being that supports three persons'. (Craig & Moreland, 2003, 594)

On each of these views it is clear that the three-ness is prioritised, typically as the persons are initially thought of as three distinct consciousnesses; and then how and what the unity or oneness of God is thought about after this initial posit.[67] The main worry, therefore, regarding ST type views is whether they are Tritheistic. That is whether the oneness of God is actually preserved, and further if some type of oneness is preserved whether this is strong enough for what the Christian doctrine of the Trinity is after (Leftow, 2009; Spencer, 2018; Ward, 2015).[68] As one can imagine there are replies to this type of objection (Hasker, 2010a; Craig, 2006), and I don't wish to claim here how successful any of them are.

Turning to LT, far less has been done to create models of this type of Trinitarian view, with Leftow's work being the central defence of this view (2004; 2007; 2010a; 2012b; 2012c), although there have been recent attempts to give other LT accounts (Effingham, 2015; Pickup, 2016), with the one I will shortly give being another. Here I give a brief and simplified account of Leftow's model. Leftow asks us to imagine a Rockette, Jane, who usually dances in a trio, but her partners are not in for the day's performance. Luckily for Jane, backstage there is a time machine which she can use. The thought then is this, the one being Jane, can do her

[67] These aren't the only ST views about, for instance Hasker (2013) gives another view of this type.

[68] There are other types of objections as well (Tuggy, 2004; 2011; 2013a).

usual performance and then use the time machine to go back in time and join herself to perform one of her co-dancers performance, and then after doing that, use the time machine once more to go back in time to join her two selves to perform her third co-dancers routine. The thought then is that we have one being, Jane, who has something like 3 life streams. Jane stream one, who never used the time machine, Jane stream two who used the machine to be dancing on the left of Jane stream one, and Jane stream three who used the machine to dance on the right of Jane stream one. As such we seem to have one being, Jane, and yet three life streams, which we could equate to persons. God being Triune, then, is like Jane, in that He has three life streams, but unlike Jane He has these necessarily and needs no time machine in order to get them in the first place.

As one can see here one starts with one thing, namely a substance who is also a person, Jane, and then tries to show how one can also get the threeness of persons. Given this, a worry with this type of view is often the opposite from that of ST, namely that this view is Modalistic, that is it cannot give us the threeness that we require of the Trinity (Tuggy, 2016). This is something I shall have more to say about later in this chapter. In regards to Leftow's model there are other concerns, for instance Hasker worries that Leftow's model relies on time travel being possible, and yet he claims it isn't (2009, 158).[69] I'm happy to allow that time travel might well be possible, rather my concern is that the time travel analogy is used to show something, and then removed at the last stage of the argument, such that what time travel was meant to show was possible is now possible without time travel scenarios. I'm a little less convinced by this.

Nevertheless, Leftow's approach does strike me as promising and I don't have much to say by way of criticism of it, and as will become clear I will make similar moves to some of the ones he makes. My model will therefore start with oneness and try and get threeness from this. However, the benefit of my model over Leftow's will be firstly that it doesn't rely on time travel scenarios, and secondly that if powers are able to do the work here then I can also employ them elsewhere in my ontology. By contrast, as far as I'm aware, Leftow only uses time travel cases to think about the Trinity, and therefore this metaphysical tool/thesis is not

[69] There has been much back and forth between Hasker and Leftow on a number of features of Leftow's model, see (Hasker, 2009; 2012; Leftow, 2010a; 2012b; 2012c).

as widely applicable as my powers approach is.[70] Given our favouring of parsimony, if my model succeeds, and if powers are useful elsewhere in philosophy of religion, then this gives us a further reason to prefer my model.[71] Additionally, it seems that it is important for ST models that they allow for multiple consciousnesses (McCall, 2010, 236; Plantinga, 1989, 22). Whilst it seems some versions of LT exclude this possibility (Ward, 2015, 242) my account, as will become clear, shall not. Given this it should be seen more favourably by ST theorists.

With this all said it is time to turn to my own model and what I require in order to get it going. Before doing so let me note that typically models of the Trinity rely on some strange principles in metaphysics, such as the views of relative identity (van Inwagen, 1988) where one is to interpret the 'is' in statements 1-4 in differing ways, not taking all of them to be referring to absolute identity.[72] Another move is to hold to a thesis called numerical sameness without identity (Brower & Rea, 2005) which allows one to say, that something can be numerically the same and yet not identical, such as in the case of a statue and the clay it is made out of. The thought then is to employ a similar move within Trinitarian theorising, such that we say that the Trinitarian members are constituted by the same 'stuff' such that they are numerically the same without being identical, and as a result of this we can read 1-4 as being consistent. There are also other models which rely upon other principles that give one the tools to explain the explanandum, but rather than focusing on them I now turn to my own model.

Let me note from the outset that the theses I rely upon, which are defended by power theorists, also end up providing us with some strange metaphysical views. However, they also give us the ability to provide a metaphysics of the Trinity, as I shall demonstrate.[73] Here I do not try to defend any of these theses which certain power theorists hold to, but rather my aim is to show that insofar as one holds to these theses a metaphysics of the Trinity can be given. The supposed strange views that allow this to be the case therefore, are ones that

[70] This is not to say that time travel scenarios are not helpful in other areas of philosophy of religion, since Pickup (2015) has argued that real presence in the Eucharist is aided by time travel, but rather that Leftow doesn't use time travel scenarios to do a lot of work in philosophy of religion. This, then, is unlike what I am attempting to do with powers.

[71] Note here that I do not claim that the model of the Trinity that I go onto give is the *only* account one could give, rather I merely claim that it is one such account. I am happy to assume that there could be a number of coherent and satisfactory possible accounts.

[72] Since there a number of ways of making this move I do not discuss it any further here. For more on this see: Tuggy (2016).

[73] Note I think this gives a metaphysics that is sufficient for Trinitarian orthodoxy, rather than necessary.

certain power theorists already subscribe to. My project can therefore be seen as showing that a coherent account of the Trinity can be given if these theses are correct, whilst also admitting that if they turn out to be false the account is un-illuminating.[74]

3.3 - A powerful toolkit

Thesis 1: Some powers can exist without categorical properties

Thesis one holds that some powers can exist without being grounded in categorical properties. Pandispositonalists hold this in virtue of thinking all properties are powers, and as such there are no categorical properties.[75] However, I only require that some powers are not grounded in categorical properties and therefore one could hold to dualism, thinking both powers and categorical properties exist.[76] For ease of explication I will just run with a pure powers view, and since this view and the thesis above is prominent within the powers literature, with some suggesting that science reveals that the most fundamental level of reality consists of bare powerful properties (Blackburn, 1990, 63; Strawson, 1980, 280), many will grant me its plausibility.

Thesis 2: Some powers are multi-track

Thesis two takes sides over a current debate within the power's literature, as to whether powers are single-track, have one manifestation type, or multi-track, have more than one manifestation type.[77] The multi-track view that I require holds that one power token, of a particular type, can have multiple manifestation types.

To more clearly see the what a multi-track power is it is helpful to provide examples of a single-track power and a multi-track one. Starting with the former, we could think of salt's power to dissolve as a single-track power, in that it only has one manifestation type, namely

[74] Perhaps theists will have further reason to adopt these theses apart from the arguments for them in the literature, if they agree that it provides a coherent Trinitarian account.

[75] For example, Mumford (2004), and Bostock (2008) are pandispositionalists. Bird's (2007) view will also give me what I require, even though he thinks there are pure powers at only the fundamental level.

[76] Note also that I could also plausibly hold to a powerful-qualities view, such as Heil's (2012, 82-83), and think that all properties are both irreducibly powerful and categorical (what he terms qualitative). However, one would also have to hold that the qualitative nature of these properties is neither physical and/or structural so as to be compatible with my Trinitarian picture.

[77] Unlike Vetter (2013), I do not define multi-track as, 'has multiple stimulus conditions', but rather that one power X, can manifest in different ways, for instance by doing A, B, C, etc.

dissolving.[78] It doesn't matter that different conditions may bring about the manifestation of this power, such as being placed in water or being placed in tea, rather what is key is that there is only one manifestation type, dissolving. By contrast an example of a multi-track power comes from the power an electron has, namely negative charge. Here we can say that there are two different manifestation types of this singular power, namely, to repel and attract. Again, what is key here are the different manifestation types, rather than the fact that there can be multiple conditions which are able to bring about these manifestations.

Some have suggested that we can make further distinctions between multi-track powers, where there are those which have qualitatively different manifestations and those which have quantitatively different manifestations. The example of the electron given above provides us with the former, whilst an example of the latter comes from the power of elasticity, where there are said to be different quantitative manifestations of a particular type.[79] Nevertheless, this distinction is controversial and is not one I will rely upon.[80] All I require is that there is a single power token, of a particular type, which has more than one manifestation type. Therefore, despite objections raised against multi-track powers (Lowe, 2010), my thesis sides with Neil Williams' defence of them and his conclusion that,

> 'The moral ought to be clear: we should treat powers as capable of being multi-track. That is not to suggest that they all are, but some or many could be that way. […] Whether any powers are in fact multi-track is strictly beyond our epistemic ken. We are left with 'best guesses' about the nature of powers, and these are extra-empirical, despite being guided by the sciences in question.' (2011a, 594)

[78] One may wonder about the manifestation of tasting salty and whether makes the power of salt dissolving a multi-track power. Those who are single-trackers will say no, whilst multi-trackers might say yes. If one is happy with multi-track powers it may be difficult to give examples of single-track powers since multi-trackers may always be willing to say the power can manifest in more ways than one. Yet single-trackers obviously will not be willing to say this. Therefore, please take the salt's dissolving case just to be an example as to how single-trackers think about powers. Whether this power is multi-track will somewhat depend on the answer to this debate, and I do not go further into it here.

[79] For instance, the manifestation of the elastic we can say gives us quantitatively distinct powers due to the differing lengths it can be pulled. The type of power, in this instance, is the same and therefore it does not give us a qualitatively multi-track power but a quantitative-track multi-power. More work needs to be done on this type of power, but it is not one I require so I say nothing further about it here.

[80] For potential difficulties with this distinction see: Williams (2011a).

A question may also be asked as to what is meant here by the manifestations of a power. As I noted in the previous chapter (see section 2.5) two answers to this have been given, the first is that the manifestation of a power is the bringing about of a different property, or new power (Bird, 2007, 107; Mumford & Anjum, 2011, 5; Mumford, 2004, 171), what I call the jumping account. The alternative view holds that the manifestation of a power is the power coming to be in a different state, namely manifesting, and therefore being active. I turn now to thesis three which makes clear what account of manifestation I require.

Thesis 3: A power in actuality (or manifesting) is numerically the same power in potentiality (or yet to manifest), rather than some distinct power

This thesis holds that one power token can be in two states, namely a manifesting active state and a passive dormant state, rather than thinking that a manifestation is the brining about of a new property. As such it holds with Anna Marmodoro that 'there is no polyadic relation connecting a power in potentiality to its manifestation, since the manifestation is numerically the same power in a different state.' (2017a, 65; 2017b) The view thus claims that the numerically same power can be in two states, a passive/potential state and an active state, where 'an activated power is the very same power as the power in potentiality, but it is now manifesting' (Marmodoro, 2014, 20).

In terms of an example, one could think of salt's power to dissolve. The idea is that salt's power of dissolvability is in a passive state when it is in a jar away from, say water. Yet that very same power is in an active state, or manifesting, when it comes into contact with water, where the manifesting of the power is just the power being in an active state and bringing about a change.[81] As such the very same power of salt, its dissolvability can be in two states, and as such we can say that the power of dissolvability in actuality (or manifesting) is numerically the same as the power of dissolvability in potentiality (or yet to manifest), rather than some distinct power

[81] One might ask what it is for a power to have states, as McKitrick (2017, 43) has done when speaking about other aspects of powers. I don't have anything to say in answer to this, but since I am relying on theories power theorists subscribe to, I do not feel compelled to say anything either.

I note also that the affirmation of thesis is by no means novel, with Aristotle[82] and Aquinas[83] holding this view, and therefore with such a historical precedent and contemporary defence of this thesis, I shall also add it to my metaphysical toolkit.[84]

Thesis 4: Some powers always manifest

Thesis four holds that some powers always manifest, such that there are no conditions where they are only ready to manifest.[85] A number of power theorists hold there to be such powers with William Bauer, for instance, writing that 'while F does not nearly manifest all it is capable of at any given time, F does manifest some of its power thereby continuously existing' (2012, 157). Marmodoro provides an example from contemporary physics of these types of powers suggesting,

> 'the power of electric charge of an electron is always exercising as a wave that generates an electric field. There are no electric charges which are in potentiality, i.e. not giving rise to an electric field, although the field may not be interacting with anything in its environment.' (2017b, 113-114)

Given that this thesis has pretty widespread support within the literature, I shall make use of a modified version of it, which I shall further explicate later.

Thesis 5: Some powers are identified by their manifestations only

The final thesis holds that even though powers are usually identified by their stimulus conditions and manifestations (Bird, 2007, 19), some powers are identified by their manifestations alone (Vetter, 2014; 2015). I don't actually need this thesis as long as one is happy to say that at least one power can manifest in all conditions, even if there is only a single power in existence. Perhaps if we draw a distinction between constitutive and epistemic identity criteria we could say that even though we can never epistemically

[82] See: Witt (2003, 38-58) and Marmodoro (2014, 13).

[83] See: *De spiritualibus creaturis*, a. 11 co.; *Contra Gentiles*, lib. 2 cap. 45 n. 3; *Summa Theologiae* I, q. 54 a. 1 co.

[84] One reason for adopting this view is since it provides a good answer to the always packing never traveling argument against powers (Armstrong, 1997, 80), which says if a manifestation of a power results in another power then there is never any motion since there is no movement from potency to act, rather all we have is one potency after another.

[85] These powers could perhaps be the building blocks of reality due to their constant actuality and therefore presumably preclude the need for categorical properties to do this.

articulate all the stimulus conditions of these powers, we can still provide the stimulus condition 'any state of affairs' as their constitutive identity criteria. If this is acceptable, then I also can work with this thesis, that some powers have constitutive identity criteria whose stimulus conditions are 'any state of affairs'.

These theses provide me with a power based metaphysical toolkit, and it is with these tools that I formulate my Trinitarian model.

3.4 - Multi-Track Trinity

Employing the first thesis I hold that there is one power trope that has no categorical base, where I specify this to be a trope since tropes are unrepeatable individual properties, and I don't want there to be any further instances of this type of power.[86] I suggest we take this purely powerful property to be a property God possesses, that of deity, the property which makes God divine. This should be relatively uncontroversial since powers are usually taken to be properties, but here I want to challenge the thought that deity is only a property. For instance, Brian Leftow writes,

> 'Perhaps deity is not a property. Aquinas held that God is identical with His nature (*ST* Ia 3, 3). If He is, 'God' and 'deity' refer to the same thing. If they do, either God is a property or deity is not a property.' (2012a, 136, n.3)

Not everyone will be willing to embrace this thought, that God is a property, even though a number of theists have endorsed it (Mann, 1986; Vallicella, 1992). One worry here might be that properties cannot exist on their own. This seems to me to be a misguided concern. For it seems that many metaphysicians who are trope theorists think something like this. Thus, they hold that what exists are properties that make up bundles which are substances. On my account, I posit a self-standing trope, to which I see no cogent objection to, with some trope theorists, such as Campbell (1990), explicitly endorsing such a view.[87] Further I claim that we can conceive what an individual trope existing is like, which gives some credence to its being possible. Think of a Platonic view of properties. These properties exist eternally and aren't

[86] Mann (1986, 352-353) makes a similar move in his defence of Divine Simplicity by suggesting God is a causal power, although he doesn't flesh this out in much detail.

[87] Paul (2017) and Ehring (2011) seem to embrace something like this too. For some further discussion of this type of view see Koslicki (2016, 224-238).

thought to have any bearer. Trope theorists just say imagine particularised versions of this with the addition that these properties do not exist in another realm, as they did for the Platonic properties, but rather exist in our worldly realm. This seems possible to me and as such I'm unmoved by the objection that properties require bearers. The trope deity will not depend on anything else for its existence, but rather has an independent existence.

Perhaps instead we could suggest that deity, a power existing without any categorical grounding, shouldn't be thought of as a property at all, but rather a substance. One reason for thinking this might be as follows. Descartes defines a substance as, 'a thing which exists in such a way as to depend on no other thing for its existence' (*Principles of Philosophy*, I. 51). Given this definition we can say that the pure power deity is a substance, rather than a property, since it depends upon nothing else for its existence, with this becoming clearer after we apply thesis four. Since similar moves can be made even if one employs contemporary definitions of substance (Lowe, 1998, 158; Heil, 2012, 42), it seems to me that we can quite plausibly speak of the pure power deity as a substance.

If you dislike this option, then perhaps we can instead follow Aquinas and place God beyond the substance-attribute dichotomy. We can then embrace the thought that due to God's transcendence, it is 'Far better to say that God is metaphysically *sui generis*, and that there is nothing further to be said about the ontological category to which God belongs.' (Oppy, 2014, 103; Leftow, 2012a, 306) My pure power deity then, could be thought of along these lines, as something modelled on a power, yet being of some *sui generis* ontological category.[88]

Yet, supposing you dislike this approach too, then I suggest you interpret '*ousia*' and '*substantia*' as referring to the general category 'entity'. Doing this allows us to say that the pure power trope deity is an entity and so too is God, where these turn out to be numerically identical with each other. Thesis one, therefore, seems to be applicable to God, and can be understood in one of the ways I have suggested, either where God is a property, substance, a *sui generis* kind, or entity. Nevertheless, whatever option one takes I will continue to speak of powers as properties since they are usually talked of as such, but this must be taken as a *façon de parler*, where what is really meant is one of the options spelled out here. With all

[88] Whatever ontological category this is, it will refer to whatever is meant by '*ousia*' in the Nicene Creed and '*substantia*' in the Athanasian Creed.

this said, I shall assume Aquinas is correct meaning that God and deity refer to the same thing, and thus that God = the power trope deity.

Nevertheless, perhaps you just don't like the claim that deity is a power and therefore reject my model before it has gotten started, since you say God is a person and a power, a property, even with these caveats, cannot be a person (Plantinga, 1980). Four responses can be given to this. The first is to issue a reminder, stating that all I am proposing here is a metaphysical model as to how to think about the Trinity. One must remember that models only depict/image/mirror reality, but are never identical to reality itself, and as such they shouldn't be taken to represent reality perfectly in every way. My use of powers, then, need not be thought of as univocally applying to God, but could instead be thought of as analogical. All I require is that God has some features similar to powers. Secondly, I appeal to historic considerations where a move like this, at least according to some commentators, was made by Aquinas when he identified God as *actus purus*.[89] Just as a power's nature has something to do with being causal and active, Aquinas holds that 'God is pure activity.'[90] As Fergus Kerr writes, for Aquinas 'God's nature *is* activity – though activity with a certain 'subsistency'.' (2002, 190) Yet this is very similar to my conception of God as a pure power, where this power, as I have just sought to show, plausibly has some type of 'subsistency'.[91]

Third, one could claim that being a person is having a type of property (Mann, 2015, 38), since persons are rich-property instances, and since this conception of God has God somewhat like a property this shouldn't rule him out as being a person. Finally, one could use a distinction that has become popular among some, for instance Davies (2004, 9-14) and Hart (2013, 127), between so called theistic personalism and classical theism. The former, such as Swinburne (1977, 1, 104-105), claim that God is a person, whilst the latter think of God as personal yet not a person.[92] Suppose that we should be classical theists, then that God is a property and properties cannot be persons needn't worry us. But surely, a property could have intellect and will, i.e. that which makes something personal, for instance through being connected to

[89] Rogers (1996, 172) thinks of persons as an *act* following Hume, and if this is correct, since God is an act, being pure act, then He is a person.

[90] For this translation see: Aquinas, *Disputed Questions on the Virtues*, a.1, obj.3., (2014, p.503).

[91] I'm not claiming that Aquinas thought of God as a power, but rather that there are aspects of his thought that closely resemble mine.

[92] God is thought to be personal insofar as He possesses personal attributes, such as intellect and will.

other properties in some way, or in virtue of itself.[93] As such, it might be that adopting a classical theist approach to God is the way forward here.[94] Given all this, it seems I have some fairly good justification for my starting point, particularly given the venerable tradition of God conceived as pure act.

Applying thesis two, that some powers are multi-track, we come to hold that the power deity has more than one manifestation. One will be unsurprised to know that I take deity to have three manifestations, merely because the Trinity comprises three persons. I follow Aquinas (*De Trinitate.* q.1 a.4. co) here in thinking that knowledge of God as three persons comes from divine revelation rather than reason, and as such I am sceptical of attempts to show by argument that there must be three persons within the Trinity.[95] Nonetheless, if these arguments are successful they strengthen my case, since they will provide some plausibility to the claim that deity only has three manifestations. However, unfortunately currently the only reason I have for there being three manifestations is that the creeds have it that way. Integrating this thesis with the first means there are three different manifestations to the power deity, a power not grounded in any categorical property.

Through employing thesis three, that a power in potentiality is numerically the same power as it is in actuality, we get the result that each manifestation of deity, deity in actuality, is the same as deity when it is not manifesting, deity in potentiality.[96] It is in this combination of theses two and these three that we have the 'strange' metaphysical view that will do much of the work for us in our Trinitarian theorising.[97] To give an example of this, given a multi-track power, for which we will employ Heil's (2012, 121) example of an electron's negative charge being multi-track, we can say that the repelling of other electrons, attracting positrons, and responding to a Geiger counter are all just aspects of the electron's negative charge being in actuality. Thus, repelling other electrons is an electron's negative charge in actuality, the

[93] Perhaps it is a multi-track power?

[94] However, I think the distinction between theistic personalism and classical theism is more difficult to draw than the typical literature on this usually claims (Page, 2019).

[95] For instance, that of Swinburne (1994, 170-191) and Coakley (1993).

[96] As I go on to show, I don't ever think deity is found in a state of potentiality, but in order to illustrate the account, and due to needing a thesis like this, I plead one to bear with me in thinking about this counterpossible.

[97] Theorists rarely talk of these two views together, although they do talk of each individually. For instance, Marmodoro holds to thesis three, as shown above, and also to multi-track powers (Marmodoro & Grasso, forthcoming). Arguably Aquinas also held to thesis three, as mentioned previously, and that the will is multi-track (*Summa Contra Gentiles* II, 45).

attracting of positrons is an electron's negative charge in actuality, and making a Geiger counter respond is an electron's negative charge in actuality. Yet presumably these are not the same manifestations, the repelling of an electron is not the same action as attracting a positron or making a Geiger counter respond. The closest analogue to this thought concerning deity and its three manifestation tracks, is Leftow's (2004, 312-313) idea that there are three simultaneous life streams in God, whereas we will go on to see these tracks also manifest simultaneously.

Summarising so far, there is one multi-track pure power deity trope which has three manifestations, and yet whilst each manifestation is different all the manifestations are deity in actuality, such that if you pointed to the first manifestation you would say, 'that's deity', if you pointed to the second manifestation you would say, 'that's deity', and if you pointed to the third manifestation you would say, 'that's deity'. Since these are the only manifestations of deity, all of these add up to God's life. The result of my proposal thereby makes possible Leftow's claim that the 'three divine Persons are at bottom just God: they contain no constituent distinct from God. The Persons are in some way God three times over.' (2007, 357) On my conception there is one trope deity, which is God, and the manifestations of the multi-tracks are just deity in actuality three times over.

Applying thesis four, that some powers always manifest, gives us the result that deity is a power that manifests its three tracks continually, since it is always in a state of actuality. However, as mentioned previously, I require a slightly modified version of this thesis since deity must necessarily rather than always manifest. Plausibly I might have a power to become angry which manifests whenever I'm around someone, say my conjoined twin. Yet because I cannot separate from my conjoined twin this power is always in actuality. Nevertheless, we don't think this power necessarily manifests, rather it only contingently manifests despite it never ceasing. Deity, however, does not contingently manifest, but necessarily manifests. I therefore take deity to be a power that is purely actual, such that it necessarily manifests, and thus no conditions are required to actualize this power since it is always, eternally, manifesting. Because of this there is no answer to the question, 'when could deity manifest one of its multi-tracks' since deity is purely actual and as such cannot but manifest in its threefold way. Deity just is the manifestation in three distinct tracks, and there are no possible conditions such that it ceases to manifest in these three ways.

It is important to see that this is different from other worldly powers, for instance the power of an electron's negative charge, since conditions are required in order that this manifest one of its multi-track's, such as the power to repel, or attract. Further, the power of an electron's negative charge also illustrates what it means for a power to have different states, being in potency or act. Yet deity never experiences differing states since there is necessarily no time when this power is in potency, since it is always and continuously in actuality and therefore manifesting. The result of this is that for deity there is no alternative state other than eternally manifesting in a threefold way. We might come to think of this move made by thesis four, as somewhat analogous to Aquinas's thought that God's essence is his existence (*Summa Theologica* I, q.3, a.4), since it is just the essence of deity to eternally manifest in a threefold way in every possible situation.

Thesis five has already been applied, since I have stressed that there are no specific conditions required for deity to manifest in its threefold way. Since these multi-track manifestations are just the same power, deity in actuality, this power is not identified by its manifestation conditions but by its manifestations. What then are the manifestations of deity? They are the persons of the Father, Son, and Holy Spirit. Each of these manifestations, however, is just the power deity in actuality, and as such Father, Son, and Holy Spirit are all equally deity in actuality.

How then do the manifestations differ, such that they are distinct manifestations, thus allowing deity to be multi-track? Multi-track powers typically only have different manifestations due to interacting with differing power partners. Hence an electron acts in different ways when it is met with the power negative charge, positive charge, or a Geiger counter. It is the differing manifestation conditions that make the differing tracks manifest (or actualize). Yet, as I have emphasized, in the case of deity no differing manifestation conditions are required to make deity manifest in a threefold way, rather deity necessarily does. How then are we to make sense of this?

One option would be to appeal to divine transcendence again, claiming deity is a *sui generis* type of multi-track power that doesn't require any distinct manifestation conditions for the manifestation of the three tracks. However, this is a weak response, and it would be good if we could do better. Perhaps instead we should say that the manifestation conditions of deity do change due to the manifestations of each of the individual tracks. We could then say that

part of the stimulus conditions for the second track is the manifestation of the first track, and the stimulus conditions for the third track is the manifestation of the first and second tracks. The differing manifestation conditions would then denote the different manifestations of deity and hence the different persons, where this will be analogous to those theologians who took the divine persons to be distinguished by their relations of origin.[98]

Orthodoxy has it that the Father is in some way the source of the Son and Spirit, and therefore we can say that the first manifestation track of deity manifests as the Father, where this manifestation occurs necessarily given any conditions and as such is identified by its manifestation alone, as per thesis five. Since the Son in some way depends upon the Father, we can say that his stimulus condition is the manifestation of the Father, the first track. Therefore, since the Father is necessarily manifesting in the first track, the Son necessarily manifests in the second track, since the Son's stimulus conditions have been met. Given that the manifestation conditions are now once again different, we can say that the third track, the Spirit, has as its stimulus conditions the manifestation of the Father and Son, the first and second track. Given that these two are manifesting the Spirit also manifests in the third track. One might be concerned that Eastern Orthodoxy cannot buy into this account since the third track requires that the Father and Son manifest and hence there seems to be some type of reliance on the Son as well as the Father for the manifestation of the Spirit rather than the Father alone. However, this worry can be overcome if a distinction can be made between stimulus conditions and ontological dependence, where one can say that the Son only changes the stimulus conditions such that the Spirit manifests, yet ontologically we can say the Spirit fully depends upon the Father.[99] Despite their being distinct stimulus conditions for the three manifestations they will still turn out to be necessary, eternal, and simultaneous, which is of vital importance since these are requirements for orthodoxy.

Questions, however, might be asked of me as to whether this answer has sacrificed orthodoxy for consistency, since now the Father alone appears to be *a se* whilst the Son and Spirit are not.[100] It seems to me, however, that this type of questioning is one that anyone who tries to

[98] For example: Aquinas, *Summa Theologiae* I, q.27; Augustine, *De Trinitate* V, 5; Anselm, *On the Procession of the Holy Spirit*, 2.

[99] Something I will address further shortly, in section 3.5.

[100] Craig and Moreland (2003, 594) appeals to this as justification for bypassing the need of explaining the priority relations within the Trinity.

explain the priority within the Trinity is liable too, and so perhaps I can just reply that I am no worse off than anyone else. However, other answers to these types of concerns can be given, where Mark Makin has done the most to answer this form of objection. In short, one approach would be to,

> 'invoke the accepted distinction between the divine essence (*ousia*) and the person (*hypostasis*) […] [and] maintain that the Son possesses aseity with respect to the divine essence, but not with respect to his person. […] Admittedly, the Son does not possess aseity with respect to his person, as opposed to the Father, […] But it is not at all clear that this difference entails that the Son is not fully divine.' (2018, 388)

Makin goes onto provide answers to further rejoinders to this type of response, but suffice to say I take this objection to my view to be surmountable and one all defenders of orthodoxy need to deal with.

My view then, can be seen as following Leftow's thought that,

> 'what distinguishes God the Father from God the Son is simply which act God is performing. God the Father is God fathering. God the Son is God filiating, or being fathered. The Persons simply are God as in certain acts--certain events-in His inner life.' (2004, 315-316)

In my terminology, the one power deity that is eternally manifesting, manifests in one track as the Father fathering, in the second track as the Son filiating or being fathered, and in the third track as the Holy Spirit spirating, where there is no possible world in which these simultaneous manifestations do not occur at all times. Thus, my model holds with Thomas Weinandy that 'the persons of the Trinity are not nouns; they are verbs and the names which designate them – Father, Son and Holy Spirit – designate the acts by which they are defined.' (2000, 118-119) If one asks me the further question as to what the persons on my account are, I once again follow Leftow in thinking 'the right answer is that they are whatever sort God is- the Persons just *are* God, as the Latin approach will have it. The Persons have the same trope of deity.' (2004, 314) This is by no means as informative as many people would like, however since the notion of personhood is much disputed within both philosophy and theology, with some Trinitarians such as Barth (1936, 359) and Rahner (1970, 109) rejecting

this terminology altogether, I am not much concerned by leaving this element of my model vague.

Summarising, my model holds that there is a single powerful deity trope that isn't grounded in any categorical property, and further that deity is a multi-track power that has essentially three manifestation tracks. Since I hold that a power manifesting (in actuality) is numerically the same power as when it is waiting to manifest (in potentiality), the manifestation of deity, even though multi-track, is just deity in actuality. I further claim that deity is a pure power that constantly manifests, thereby being purely actual, such that it could never fail to manifest in any possible world. Therefore, deity in actuality just is the manifesting of the Father, Son, and Holy Spirit. Finally, I claim the distinctions between the manifestations are due to the relations between each manifestation, since if the manifestations were wholly identical we would have to hold that deity is single-track rather than multi-track. I offer this as a conclusion to be further explored, as opening up venues for thinking about the Trinity and powers even if this is not the final word.

This outline of my model seemingly captures everything the Creed of the Council of Toledo affirms when it says,

> 'although we profess three persons, we do not profess three substances, but one substance and three persons […] they are not three gods, he is one God. […] Each single Person is wholly God in Himself and […] all three persons together are one God.' (Leftow, 2004, 304)

Nevertheless, there is a further complication of orthodoxy that I now seek to address.

3.5 - The priority of the Father

Whilst I have used the priority of the Father in my explanation of the changing stimulus conditions for the three manifestation-tracks of deity, I am still yet to explain the Father's priority relating to ontological dependence. Since many today take this type of priority as causal, something affirmed by both Catholic (Emery, 2011, 121) and Orthodox theologians (Ware, 2010, 116), I shall suggest how my model can account for this.[101]

[101] See Effingham's (2018) insightful paper for more on a causal approach.

In order to do this, I will make use of the notion of grounding, where grounding is understood as a relation of generation or determination.[102] Grounding is also typically taken to be non-reductive (Fine, 2001, 15), irreflexive, asymmetric, and transitive, which will be important for our notion of priority (Schaffer, 2009, 376). An example, however, provides the easiest way of understanding what grounding is thought to be. The singleton set 1 (from now on {1}) is plausibly grounded in the number 1, since the existence of 1 explains the existence of {1}. Further, since Grounding has been taken by some to be akin to metaphysical causation (Schaffer, 2016; Wilson, 2018; Bennett, 2017), this gives us further reason to think that it might be useful in explicating the causal priority within the Trinity.

Employing the notion of ground, we can say that the Father, grounds the Son such that if there were no Father there would be no Son, and yet since there is the Father there must be the Son. A similar story could be told regarding the Holy Spirit, where either the Father alone, or the Father and Son ground the Holy Spirit. Utilising grounding's formal features we can say that the Father immediately and fully grounds the Son and, depending on one's theology, that the Father mediately and fully grounds the Holy Spirit, or that the Father and Son immediately and each partially ground the Holy Spirit.[103] We can further hold that the Father is absolutely fundamental and ungrounded, since nothing else explains his existence, since he just is the first track of deity in actuality. Thus, it seems we have a way to spell out the ontological priority found within the Trinity.

There is, however, a potential problem. If we take numbers to be abstractions, then 'we see that, of logical necessity, the natural numbers exist provided anything at all exists' (Lowe, 1998, 226). Therefore, once the first track of deity manifests as Father, you also have numbers, and hence the Father grounds numbers. But do we want to say that the Father grounds the Son with the same type of necessity as he grounds numbers? If we don't mind, this worry is adverted, however if this is a concern then we can either question the account of numbers presupposed, or suggest that deity, the three manifestations, jointly ground numbers rather than the Father alone. This second response, however, doesn't look particularly promising since there seems no reason why the individual tracks couldn't

[102] Grounding is also thought to Aristotelian roots, and therefore can be thought another element to a neo-Aristotelian research program (Schaffer, 2009).

[103] For explanation of these features see: Fine (2012).

themselves ground numbers. A final response denies that grounding is univocal,[104] and therefore claims that the Father in some way more strongly grounds the Son, or grounds the Son in a different way than He does numbers.[105] This I suggest, would be accepted by the Nicene theologians who 'came to agree that this act of generation [in my terminology grounding] is unique: it fits into no category of generation that we know—however much we can make use of very distant likeness in the created order.' (Ayres, 2011, 124) Yet this option won't satisfy some metaphysicians and therefore they must either ignore this concern or hold to a different view of numbers.

If one doesn't like my grounding suggestion for accounting for the ontological dependence within the Trinity, an alternative would be to follow Makin's (2018, 383-391) essential dependence model, where 'eternal generation is a form of rigid essential dependence […] [such that] the Son is eternally begotten of the Father $=_{df.}$ The Father is a constituent of a real definition of the Son, and the Son exists eternally.' (Makin, 2018, 385) Using this framework one can then provide an equally appropriate definition of essential dependence for the Holy Spirit, which could be altered for Orthodox or Catholic accounts.[106] Whichever type of account one prefers, grounding or essential dependence, my multi-track Trinity can accommodate either. However, it should be noted that neither account spells out how the relations between the persons arise, but rather only describes their ontological priority. If asked how these arise I follow William Hasker in thinking, 'the best reply is that no further explanation can be given; at least no one has ever succeeded in providing an illuminating explanation.' (2013, 220; Leftow, 2004, 314) Nevertheless, despite leaving the person generating relations as somewhat mysterious, I hope to have shown that my model has resources to account for the priority within the Trinity.

[104] A claim like this has been defended in the literature which argues for grounding pluralism (Richardson, 2018). Whilst this differs somewhat from what I am after, it does provide some reason to think that grounding is non-univocal and that the solution I suggest here is possible.

[105] This could answer Makin's (2018, 382-383) concern that the relations of generation and procession would not differ on a grounding model.

[106] Effingham (2018) does a very good job responding to worries that the filioque clause might be thought to bring on the catholic view.

3.6 - How many …?

Having introduced my model, I wish now to highlight a particular benefit of my account concerning how many streams of consciousness and sets of omni-attributes my account allows for. Starting with the divine consciousness, should we think there is 'one wholly integrated divine consciousness and will with three necessary, inseparable, and complementary modes of activity' (Ward, 2015, 242), as theologians like Barth (1936, 314) and Rahner (1970, 103-115) did? Or should we take McCall's advice that 'Trinitarian theology should insist on an understanding of persons […] as distinct centres of consciousness and will who exist together in loving relationships of mutual dependence' (2010, 236), thus thinking there are three distinct consciousnesses as Moltmann (1981) and Pannenberg (1991, 300-319) did?

Perhaps we needn't worry about choosing here, since one of the benefits of my model is that it can accommodate either position. On the single consciousness view, we can say consciousness is linked to deity, and since there is only one deity trope, there is only one consciousness that is possessed by the three manifestation tracks. Thus, although the manifestation tracks are distinct, they still share common features, where perhaps part of what they share is the singular consciousness. Nonetheless, if one prefers thinking that there are three consciousnesses, one for each person, my model can account for this by suggesting that each of the three tracks of deity simultaneously manifest partly as distinct consciousnesses, where one is had by each of the tracks. Which position should be preferred is not for me to judge here, however since my model allows for both it should be deemed acceptable by either camp.

For omni-attributes a similar response can be given, since my model needs to account for each person possessing the same attributes, that of being almighty, eternal, and uncreated, as affirmed in the creeds. Again, my model can say either that there is only one set of attributes, shared by the manifestation tracks, or that there are three sets of identical attributes. Beginning with the first option, one can mimic Leftow in holding that for 'LT, all deifying attributes primarily belong to God, the sole substance of the Trinity. God is equally the 'substrate' of all Persons he constitutes or all events of his cognitive and affective life. So his deifying attributes exist equally in all three Persons.' (2009, 87) Hence, on my view all deifying attributes belong to deity, and since each of the persons just is a multi-track

manifestation of deity, all the attributes of deity, other than the relations which make the manifestations distinct, belong to each person. However, one could take the second option by employing another thesis defended by a number of power theorists who claim that an activated power may cause further powers to come about. In this case since the manifestation of powers bring about further powers, what will be brought about in this instance are distinct omni-attributes for each manifestation track. Again, I do not judge here which option is to be preferred, but just note that my account allows for either.

3.7 - Potential problems

There may, however, be potential problems looming for my account. Rejecting one of the five theses explicated above would render my account useless since it relies on these. As explained previously, this isn't the place to defend these theses, and therefore my account should be taken to counterfactually propose, if these theses are true then I can give a coherent account of the Trinity, where this chapter has sought to show the consequent, something I still deem a significant and worthwhile endeavour.

A second concern comes from thinking there is an unwanted item within my ontology, deity, which might be thought to give me a Quaternity rather than a Trinity.[107] I think this worry is misplaced, since on my view deity *just is* the three manifestation tracks in actuality and is nothing numerically distinct from these.[108] This is evident through thesis three which holds, power X in actuality is the same power as power X in potentiality. Further, since deity cannot but manifest, deity is never in potentiality but always in actuality, and therefore there is nothing to deity other than its three simultaneous continual manifestation tracks of Father, Son, and Holy Spirit.

The final concern for my model is that it is modalistic. This might seem especially so since it uses the term 'manifestation', and some explications of modalism employ this exact phraseology. For instance, Giles Emery writes, modalists see 'only *modes* of manifestation of the same one God. The same God manifests himself sometimes as Father, sometimes as Son (in the incarnation), sometimes as Holy Spirit (in the Church)' (2011, 60). Likewise, Hugh

[107] Perhaps we can remove this trope by following Leftow's argument, which concludes that, 'God is the whole ontology for *God is divine*.' See Leftow (2012a, 305-308) for a development of this suggestion.
[108] See page 55 for a qualification of this thought.

Turner suggests that for modalists, - 'the three Persons are assigned the status of modes or manifestations of the one divine being: the one God is substantial, the three differentiations adjectival' (1983, 375). Whilst both explications use the language of manifestations, it still isn't clear to others (Leftow, 326-327) and myself exactly what modalism amounts to.

Due to this, and for simplicity, I shall take the popular academic book *Christian Theology* by Alister McGrath, as providing an account of modalism that I shall work from. McGrath suggests there are two types of modalism, chronological and functional. He writes,

> '*Chronological modalism* holds that God was Father at one point in history; that God was then Son at another point; and, finally, that God was Spirit. God thus appears in different modes at different times. […] [Whilst] *Functional modalism* holds that God operates in different ways at the present moment, and that the three persons refer to these different modes of action.' (2011a, 245)

It seems clear to me that my model is not chronologically modalistic, since it claims all the persons of the Trinity, due to the multi-track nature of deity, are simultaneously and eternally present. One manifestation track does not cease for the next to occur, rather all manifestation tracks occur simultaneously for eternity.

Perhaps my view is closer to functional modalism, where functional modalism holds, 'God acts as creator (and we call this "Father"); God acts as redeemer (and we call this "Son"); God acts as sanctifier (and we call this the "Holy Spirit"). The persons of the Trinity thus refer to different divine functions.' (McGrath, 2011a, 245) Yet my account doesn't say the persons of the Trinity are different functions of the trope deity. Rather my account holds that the one trope deity has three manifestation tracks, since it is a multi-track power, where each of these just is the trope deity in actuality. Therefore, my position holds that the manifestations are both eternal and necessary, thereby avoiding the errors of Sabellianism. The account also suggests that we should think of the three manifestations, each as persons, although as I noted earlier, I leave the notion of personhood largely unexplained. Further, my view allows that the Son can pray to the Father without praying to himself, since even though Father and Son share the same trope deity, they are distinct since they are different tracks of the manifestation of deity. This is especially evident as my account allows for distinct consciousnesses, and therefore the consciousness of the praying Son would be distinct from

the Father's hearing consciousness. Given this, I don't take my model to be modalistic, at least on McGrath's construal of modalism.

3.8 - Summary

'For the Christian, the true "Theory of Everything" is Trinitarian theology' (Polkinghorne, 2010, 12). This chapter has attempted to provide a LT model of this doctrine. To do so I have made use of some specific theses about the nature of powers. As such the type of power I have required has been fairly specific, such that it satisfies all the theses I have stated – it must be a power that doesn't need to be grounded in categorical properties, is qualitatively multi-track, is numerically the same power when in potentiality and in actuality, necessarily manifests, is identified by its manifestation alone or with a stimulus condition that is 'any state of affairs'. Without these theses, however, I cannot get what I require. But given these, which are individually held by various power theorists, I can affirm (1), since there is only one God due to there being only one deity trope. It also holds (2) as it claims Father, Son, and Holy Spirit are all deity in actuality. Yet it further supports (3), since Father, Son, and Holy Spirit are not identical because their manifestations are different, thanks to deity being multi-track with differing manifestation conditions. Finally, my conception upholds (4), since the Father, Son, and Holy Spirit are each just the multi-track manifestation of the deity trope in actuality. Additionally, as I've shown above my account can also give content to the claims of the dependence of the persons found in the Nicene-Constantinople creed. If all this is correct, then my model is successful in providing another LT account.

However, one must remember that my aim in this chapter was merely to show that many of the positions that power theorists argue for allow for a coherent account of the Trinity to be given. That is, many power theorists are already signed up to metaphysical principles that allow for an answer to Trinitarian problems. Here I haven't done anything to show that the metaphysical theses held by these power theorists are true, but rather have just identified how they enable one to give a coherent account of the Trinity. Arguing for the truth of these principles would take us too far afield and is not a task I will undertake here. As such my conclusion is that here we have another way to give an account of the Trinity by applying many independently argued for thesis within the powers literature, and insofar as one adopts these theses then one has the tools required so to give an account of the Trinity. Further my model adds to the literature by showing how another type of Latin Trinitarianism can be given

that differs from Leftow's time-travel based account. Thus, whilst a more robust conclusion may be desired where all the theses I have employed are shown to be true, I rest content in demonstrating how things believed independently of Trinitarian concerns by power theorists can provide a metaphysics of the Trinity. In doing so I may have also given Trinitarian theists some further reason for endorsing the theses I have employed in this chapter, and more importantly powers into their ontology.[109]

Yet, I think there is far more that powers can do for philosophers of religion and so in the next chapter we turn to another area where I claim they can be useful, namely in spelling out God's relation to the laws of nature.

[109] Nevertheless, note again that I don't claim this is the only coherent and acceptable account of the Trinity one could give, but only that it is one such account that could be given.

Chapter 4 - God as Laws of Nature Maker

In the previous chapter I argued that one application of powers for theists was in providing a theologically orthodox and metaphysically viable account of the Trinity. In this chapter I discuss another area in which powers can aid philosophers of religion, namely in providing them with a way of thinking about how God creates the laws of nature. I shall suggest that the powers view has benefits for theists and as such it gives them good reason to embrace this type of account. Before doing so I will outline what I take it to be that theists are interested in explaining when thinking about God's creation of the laws of nature. I'll then mention some of the views that theists have put on the table, before finally turning to the view I favour and offering reasons why it is preferable.

4.1 - God and the laws of nature

The laws of nature figure as very important in contemporary theistic debates.[110] This is most apparent within discussions regarding the relationship between science and theism. The reason for this is that atheistic naturalists often seem happy to let explanations bottom out at the level of laws of nature, whilst theists generally are not. That is, theists often think there is a deeper level of explanation than atheists, such that the laws are not the fundamental stopping point, God, His nature and the acts He performs are. Whether theism should be preferred due to this is hard to say, since whilst theism can provide a deeper explanation, it also gives one more thing to deal with and explain, such as what God is, which encompasses many questions, and how He relates to His acts. Working out which is preferable mirrors other debates in philosophy, for instance should a concept of change be preferred that provides a deeper explanation of change but leaves more things to be explained at the fundamental level, or one which has a less deep explanation but leaves less needing to be explained? For instance, should we prefer an explanation of change which explains it in terms of two deeper primitives, act and potency, or an explanation where change itself just is the primitive? It is hard to tell. However, due to naturalist's reliance on the laws of nature, it is beneficial for

[110] Here I mean to refer to something different from the 'laws of science' (Weinert, 1995, 5), which have more to do with our knowledge of regularities and our symbolism of them. Rather, I am interested in the ontology of laws and the implications different positions have.

theists to have a story to tell about how God creates the laws and the reasons why one should prefer a certain account of laws to other accounts.

I am interested in laws of nature due to thinking about how God relates to creation on a continual basis and whether some views of laws are more beneficial than others. To see what I mean by this we need to make a distinction between creation and conservation. As I think about it, creation requires that one bring about, or help bring about, the existence of some further thing. God, typically, is thought not only to be a creator, but a special type of creator since He can creates *ex nihilo*, from nothing.[111] What exactly 'creation' ranges over is a fraught question within philosophy of religion at present, with discussions of God's relation to abstracta and modality ongoing.[112] Nevertheless, for our purposes laws of nature, where these are those things that ground propositions such as 'e = mc^2', are typically thought of as being in some way created by God, something I will return to shortly.

Conservation, on the other hand, is different. This too is held by theists, but typically not by deists. Augustine gives us an idea as to what conservation is writing, 'For the power of the Creator, omnipotent and supporting all, is the cause by which every creature subsists. If such a power should cease to rule what has been created, all would cease to be and nature would vanish … the world could not stand, not even for the wink of an eye, if God withdrew his ruling hand.'[113] The idea here is that whilst God has created everything He has to continually act on the world, in some way, in order that it keep existing. As such if God were to remove His action, the world would cease to be.

There have been numerous reasons given for believing in conservation such as scriptural attestation (Hebrews 1:3; Colossians 1:16-17),[114] it being implied by certain theistic arguments, such as Aquinas's first way (*Summa Theologiae* I, q.2, a.3),[115] and the fact that

[111] Although this isn't to say He has to create everything in this way.

[112] See Craig (2016; 2017), Gould (2014), and Leftow (2012a) for good discussion and further references to this growing literature.

[113] Augustine *Super Gen.* IV, ch. 12, n.22 (quoted in Ross, 1980, 620). Aquinas says something similar in *Summa Contra Gentiles* IIIa, 65.

[114] The *Book of Wisdom*, if included as scripture, provides the clearest affirmation of God's conservation. 'Nothing could survive unless you had willed it. Nothing could remain unless you continued to call it into being.' Wisdom 11:25 (*Common English Bible*).

[115] This isn't to say that other arguments don't give one the same conclusion, but the thought is that Aquinas's argument to pure act is not meant to show that the universe requires an initial starter upper, but rather that it needs to be continually upheld by a being in order that it exists. Aquinas works this out explicitly in *Summa*

there seems to be no good naturalistic reason or cause as to why the world continually exists (Leftow, 2011a, 92-94; McCann, 2012, 23-30; Braine, 1993). Additionally, there has also been debate among two views as to how we are to understand the nature of conservation. The first view, 'continuous creation' (Quinn, 1983; 1988), takes conservation to be *ex nihilo* such that God acts upon nothing in conservation, whilst the second view, 'agent-patient conservation' (Craig, 1998a; 1998b; Copan & Craig, 2004), claims that God acts upon a previously existing entity in conserving the world in being and therefore not *ex nihilo*.[116] For our purposes here it does not matter which view one embraces, rather what I will be mostly interested in is a result of God's continual conservation, namely the question as to how God's continual action interacts with or allows for creaturely action. Rather than address the potential positions here, such as deism, occasionalism, mere conservationism and concurrentism, I shall say more about them later in this chapter when appropriate. The point I shall make, however, is that the powers account of laws is best suited to giving certain answers to this question that many would wish to give.

Before stating how those theists who have discussed God and laws of nature, often think about God's relationship to them, it will first be helpful to clarify how people think about the laws of nature more generally, and it is to this we turn.

4.2 - What are laws of nature?

What the ontology of laws of nature is has has puzzled many philosophers, resulting in a vast amount of discussion and disagreement between theorists. This puzzle is made more complex by the fact that it seems that the ancients and many Medievals thought the universe was both orderly and yet they had no need for an ontology of laws of nature (Johnson, 2005, 60, n.47; Adams, 2013, 3-13; Harrison, 2008, 14-15). Laws of nature therefore seem a relatively recent posit, arriving on the scene in early modern mechanistic thought, such as in the work of Descartes and Newton (Ruby, 1986, 357-359; Henry, 2004, 73-114; Garber, 2013, 46-47). Having said all this, within recent years three families of views have established themselves

Contra Gentiles IIIa, 65. The success of the first way, however, is hotly debated, and for further discussion see Feser (2009, 65-81), Martin (1997,132-145), and Oderberg (2010a) who think it is defensible, and Kenny (1969, 6-33), Rowe (1975, 10-46), and Kretzmann (1997, 54-83) who do not.

[116] For further discussion see Vallicella (2002) and Miller (2009b).

as the typical approaches when thinking about the ontology of laws. I call these Humeanism, the strong external governing view and the powers account. I now lay out each in turn.

The first family of views, the Humean empiricist view, follows the traditional reading of Hume and holds that there are no connections in nature and that laws merely describe the regularities observable in the world (Beebee, 2000; Loewer, 1996).[117] Nothing determines that something does *X* or *Y*, rather *X* or *Y* happens and laws simply describe those regularities. As such, no necessity is involved in laws. Everything is contingent and everything could have been otherwise. Thus, Lewis can write that in this Humean world where there are no necessary connections, 'all there is to the world is a vast mosaic of local matters of particular fact, just one little thing and then another.' (1986b, ix)

The second family of views is the strong external governing position. Particular versions of this view are associated with Dretske-Tooley-Armstrong (Dretske, 1977; Tooley, 1977; Armstrong, 1983) and the anti-reductionist positions of Carroll (1994), Maudlin (2007), and Lange (2000).[118] This view contrasts the previous Humean account, since laws are placed within our ontology as they do some ontological work. Laws are what make stones fall to the earth, rather than merely describing this regularity, as the Humean conception does. The key to both of these views is the special 'nomic necessity' that laws have. In terms of universals, which the Dretske-Tooley-Armstrong view employs, laws are said to be necessary connections between universals, but this necessity only holds within this world and therefore does not carry across possible worlds. Thus, Armstrong writes, 'with the help of universals and the device of states of affairs *types* we have been able to define what we might think of as an intermediate necessity, indeterminate between Humean contingency and necessity. We might call this 'nomic necessity'.' (2010, 41) By contrast the anti-reductionists, Carrol, Maudlin, and Lange, don't see the need for universals (Carroll, 2004, 5), taking laws of nature to be 'in no need of "philosophical analysis"; [since] they ought to be posited as ontological bedrock' (Maudlin, 2007, 1), whilst also thinking that laws have the nomic necessity spoken of above.

[117] I don't here question the traditional reading of Hume, although I note that some have (Strawson, 2014).

[118] Carroll and Lange think laws are metaphysically contingent in the way I describe, but they don't explicate the necessary connection since they are anti-reductionists.

Nomic necessity is therefore that which makes these views into a family, where one reason for adopting this type of necessity is due to a thought experiment which in its simplest form asks us to imagine a world with all the same properties but different laws. For instance, take 'Gold, or the chemical with the atomic number 79', either as a universal or trope, and assume in this world that it is nomically linked with the universal or trope 'melts at 1064°C'.[119] The idea behind the thought experiment is that it is merely a contingent fact that 'Gold, or the chemical with the atomic number 79' is linked with 'melts at 1064°C', since we can imagine that 'Gold, or the chemical with the atomic number 79' could have been linked with 'melts at 112°C' or 'melts at 2000°C'. Different possible worlds will have different melting points of gold, not because the normal conditions are different, but because the nomic link is different. If we can imagine something like this, the thought continues, then laws and properties are distinct. As a result, the laws could have been different and the properties the same, the properties different and the laws the same, or both could have been different.[120] Given this, this family of views requires a categorical view of properties, since their nature is 'self-contained, [and] distinct from the powers that they bestow.' (Armstrong, 1997, 69) As such different properties are able to do different things across possible worlds and yet the properties which do these different things are thought to be identical.

The final family of views that I will look at are those developed within power ontology. The ontology underpinning this family of views does not include categorical properties.[121] By contrast, the powers view, holds that every property which plays a role within laws of nature, is inherently powerful and has a manifestation which it is essentially directed towards, where this determines the property's identity. Due to this, unlike the previous views, power theorists think that if you had the same properties instantiated across possible worlds the laws would be identical. On this view a law could just be thought of as a description of what specific types of powers do in certain situations.

There are a number of differing ways that powers theorists see this type of account going when one gets down to the specifics. This mainly has to do with the relationship one thinks

[119] This melting point might change given different atmospheric pressures, but ignore this complication for the moment, my point still stands.

[120] For further elaboration on this thought experiment see: Tooley (1977); Carroll (1994, 77-85).

[121] Perhaps categorical properties will be required to ground the powers, or something like that, but they are not required in order to give us, or enable us, to have laws that govern.

powers have to laws, much in the same way that there are differences between materialists as to the relationship between mental properties and physical ones. For instance, Bird (2007, 202) and Molnar (2003, 199) hold a weaker view than others in claiming that laws of nature supervene on powers, where if paralleled in philosophy of mind one might say that mental properties supervene on physical ones. A stronger view is held by Ellis (2001) who takes it that laws are reduced to powers, where the parallel here would hold that mental properties are reduced to physical ones. Finally, Mumford (2004), who holds the strongest view, claims that powers eliminate laws altogether, where in philosophy of mind this parallels eliminativism about mental properties. For my purpose here, it doesn't matter which specific view one prefers, what is clear is that on all views, powers are fundamental and laws are in some sense secondary or obsolete.[122]

With this outline of the differing positions on laws of nature given, how have contemporary philosophers of religion typically thought about God's relationship to the laws of nature?

4.3 - Contemporary views of God's relationship to laws of nature

The honest answer is that there has been little sustained attention from philosophers of religion as to which view of laws of nature one should think is best for theism.[123] Where discussions of laws of nature most often appear is in debates over miracles (Horst, 2014), but even here there is often a lack of development in considering the ontology of laws and why theists might think some accounts of laws are more preferable to others.[124] The most sustained attention has been given by Foster, in his book *The Divine Lawmaker* (2004).[125] Most of the book itself doesn't give an account as to how God relates to laws, with this coming in the penultimate chapter of the book, chapter 9. However, it's unclear from this chapter exactly what Foster is after. For instance, at one point he writes that, 'if there are laws at all, we must take them not to be concrete entities that control the world causally, but abstract

[122] Note that there are also hybrid views, such as Thako's (2015) view. For my purpose here, we will ignore that complication.

[123] Orr (2019) has provided a recent discussion of some of these accounts.

[124] Swinburne (2014, 160-164) briefly comments on different theories of laws when arguing how it effects his argument regarding the probability of temporal order in a Godless universe.

[125] Ratzsch (1987) also discusses laws in a paper, claiming that they are 'stipulations of how God either does act or would act in given circumstances.' (1987, 399) I have worries that this will only leave an occasionalist account of God's interaction with the world, however I do not want to endorse an account that forces occasionalism onto us, given that it is rejected by many theists.

entities whose existence consists in the relevant facts of nomic necessity.' (2004, 156) This leads Adams (2018, 304) to take it that Foster thinks laws are entities, if only in a lose sense, since Foster takes them to be abstract facts. Yet as Adams rightly notes, 'the idea of divine creation of an abstract fact is just as – if not more – obscure than the creation of an abstract *entity*.' (2018, 304) However, Orr (2019, 146-148), argues that Foster argues for a nominalist position, which would seem to preclude the need of abstracta. Having read Foster, I believe the jury is still out as to who is correct in their assessment on this. Foster also seems keen to endorse some type of nomic necessity, akin to the strong external governing account we saw above, such that laws are external existents. Yet he also tries to link this up with causal necessitation (2004, 156-159), writing,

> '1. For there to exist a law of nature is for there to be a certain type of natural regularity such that it is necessary, in the relevant nomic sense, that things are regular in that way.
>
> 2. For it to be necessary, in this nomic sense, that things are regular in a certain way is for there to be something which causally imposes this regularity on the universe *as a regularity* (i.e. in a way that leaves open all the details of how things conform to it).' (2004, 159)

I also find this hard to track since, I now wonder if something is causally necessitated whether it still is nomically necessary or metaphysically necessary? If all that Foster means is that God continually causes the nomic necessitation relation to hold then I can understand this, but why the additional type of necessitation is needed is something I am unsure of. In any case, as will become clear, for various reasons I do not like a nomic necessity view of laws where they are taken to be external existents, and therefore I would reject Foster's account.[126]

Let us now turn to the different ways laws of nature have been thought about within metaphysical debates more generally and how this would affect what God would have to do in order to create laws. With this in hand we will be able to assess the different theistic positions on offer.

[126] For more criticism of Foster, see Adams (2018) and Orr (2019, 134-149).

4.4 - How does God bring about the laws of nature?

The first family of views, as will be remembered, is the Humean position, where this view of laws is not one where laws govern. Instead on this account laws are merely descriptions of regularities which occur within the world. 'The world is a vast mosaic of local matters of particular fact, just one little thing and then another' (Lewis, 1986b, ix), with laws supervening on this. On this type of view there is not much that God needs to do in order to get laws. All He needs to do is create stuff in the world, perhaps substances with properties (e.g. Heil, 2012), or bundles of properties (Ehring, 2011, 98-135), or anything else non-modal that He wishes. Once God has done this there is enough for laws of nature to be instantiated, assuming there are regularities. One then merely needs to ascertain what regularities there are, and in virtue of this God will have created laws of nature. Given this, on this view there need be only one type of thing that God creates, namely categorical properties. As such on this type of view God has a very easy time in creating laws.

The second family of views, the strong external governing position, comes in different varieties, one employing universals and the other not. Nevertheless, both views make use of nomic necessity, which is the type of necessity these laws govern with. I split these views up into the Platonic view and non-Platonic views, where this latter group will encompass those who take an Aristotelian view of universals and those who reject the use of universals all together. On either of these views things are more complicated for God than on the previous Humean position. Start with the Platonic view. On this view there are Platonic universals which exist independently of God and eternally alongside Him. God then chooses from these existing universals which will be instantiated in our concrete world and how they will be nomically linked with other universals. On the non-Platonic view there are no eternally existing objects that are independent of God.[127] God then on this view has to create concrete properties, perhaps instantiated Aristotelian universals or tropes, and also determine what their nomic relationship with the other universals or tropes is. For instance, is God going to make it the case that gold is going to melt at 1064°C as it does in this world, or will it melt at another temperature. Thus, in our ontology, on both views, there are at least two items, namely categorical properties and then the external relations which hold between them

[127] As such God has some other type of relationship to properties thought of as abstracta, although what this relationship is isn't something I will discuss here.

within the world. The governing relation, on this type of view, as mentioned will be external to categorical properties since God could have created these properties and given them no modal or governing role at all. Rather God must do something extra in order to get modality, the governing feature of laws, into this account. Given this, God has less of an easy time in creating laws than He did on Humeanism.

On the final family of views, the powers account, God once again has an easier time despite there being a modal or governing aspect to creation. The reason for this is that when God creates the world, He creates a world of powers which are inherently modal. Given this, God no longer needs to create 'laws' in order to govern what properties do. Rather what properties do is an inherent aspect of them, where these properties when in certain situations are inherently powerful and active. As such on this view the truth-makers of laws are 'the essential irreducible powers of the objects of that world.' (Molnar, 2003, 162) When we say that X is a law what we therefore mean by this is that this describes what powers of a certain type do in particular situations. Mumford says much the same, writing, if we had recognised 'that properties were already modal, and the particulars that instantiated them were thereby already powerful, we need never have posited laws in the hope of them doing work that was already being done.' (2004, 196; Martin, 2007, 22; Ott, 2009, 250) Given this, all God needs to do to create laws is to create a world with powers in it, since when He does this, laws come along for free.

We can illustrate these types of accounts using the chart below.

Conception of physical laws	Are laws ontologically distinct from properties?	Items in ontology	Steps God performs to create	Governing internal/external to properties
Humean view	No	1 type of entity (Categorical properties)	1 step – God creates properties and we spot regularities	No governing role
Strong External Governing views	Yes	2 entities (Categorical properties and the relations between them)	2 steps – God creates concrete properties and their relations	External
Powers view	No	1 entity (Powers)	1 step – God creates concrete properties and laws are ipso facto instantiated	Internal

4.5 - Non-Theological preferences

Having provided these accounts of laws, are there any reasons, from a non-theological standpoint, why we might prefer some types of accounts to others?

Start with Humeanism. The main worry I have here is expressed nicely by Feser when he writes, 'If a law is just a regularity, then it does not *explain* anything. For what we need to know is *why* there are just the regularities that exist in nature, rather than some other regularities or no regularities at all.' (2014a, 69) The difficulty here is that merely describing regularities doesn't explain these regularities, which is perhaps the main reason for positing laws of nature in the first place. Perhaps the Humean will reply that there isn't actually anything there that requires explanation, since after all they are working with a non-modal picture of the world. As such this objection might beg the question against the Humean since they will claim that their empiricism doesn't allow for ontological commitment apart from due to empirical reasons and since they think there is no evidence which shows that laws are

more than mere regularities they have nothing else to explain.[128] However, one can argue against the regularity aspect of laws, as Cartwright (1980; 1983; Dupré & Cartwright, 1988; Cartwright & Pemberton, 2013) has done, by claiming that fundamental physics demonstrates that there are no exceptionless regularities, but rather just gives statements that describe the actions of causal powers.

I, however, suspect most will just deny the intuition the Humean relies on, namely that there is no deeper explanation of regularities, assuming there are regularities. Given this they will probably agree with Mumford when he writes, that the Humean account is 'irrefutable but neither compelling, appealing nor intuitive. Being unappealing, in this case, should be thought to outweigh the irrefutability of the theory.' (2004, 33) As such, this theory only seems to be one we should adopt as a last resort as if we can give an account which provides a deeper explanation of laws that is both adequate and plausible then we should adopt this position instead. As such those of us without the Humean intuition, namely that there isn't anything else to be explained further than describing regularities, will likely reject this view. We just cannot be good Humeans!

One of the views which thinks that laws require a deeper explanation is the strong external governing account, of which we saw there were two varieties one with Platonic style abstracta and one without. Despite thinking that this account is preferable to Humeanism, since it offers an explanation of the regularity, I still think there are objections to this type of view. One type of objection would rule out certain types of this view due to disliking the view of properties that it assumes, such as wishing to reject Platonic abstracta. Since there is much debate on how one should think about the nature of properties I will bypass this type of concern here, as I will have more to say about it shortly.[129] Rather my worry for this type of account affects all versions of the strong external governing view.

My main concern with this view is the thought experiment which is used to motivate it and the type of necessity it requires. So to recap the thought experiment says, take 'Water, or H_2O', either as a universal or trope, and assume in this world it is nomically linked with the

[128] Mumford and Anjum (2011, 195-213) challenge this empirical premise by claiming that we can perceive causation.

[129] Note that power theorists can also take powers to be Platonic (Tugby, 2013) and so being a power theorist doesn't automatically rule out this type of worry.

universal or trope 'freezes at 0°C'.[130] Now it asks whether you can also think of 'Water, or H_2O' where the freezing point is different, for instance freezing at 7°C or 50°C, where all the other conditions of the water is the same. The thought is that we can imagine this and we should also think that if it is conceivable it is thereby possible. Yet given this possibility, it turns out that laws and properties are distinct. That is properties, such as 'being water', 'freezing at 0°C' do not need to be linked in the lawlike way they are in this world. Given this we could live in a world where all the properties are the same and the laws were different.[131] As I mentioned above, it is for this reason that 'nomic-necessity' is postulated and the use of categorical properties is employed.

There are good questions that can be raised against 'nomic necessity' and what exactly it is, with Lewis writing,

> 'What leads me (with some regret) to reject Armstrong's theory, whether with universals or with natural properties, is that I find its necessary connections unintelligible. … I say that *N* deserves the name of 'necessitation' only if, somehow, it really can enter into the requisite necessary connections. It can't enter into them just by bearing a name, any more than one can have mighty biceps just by being called 'Armstrong'.' (1983, 366)

However, I will have little to say specifically about this type of necessity, but will instead question the thought experiment on which its postulation is based.[132]

The problem I have is that I think the lesson we should learn from the thought experiment is that one cannot have the same properties and different laws. I think one should think this is impossible. Take for example the property possessed by a positron, namely the property of positive charge. We might then ask what the constitutive identity criteria of this property are. It seems to me, following Shoemaker (1980), that the best candidate for this is the causal role that a given property possesses. What would it mean to say that in another world the 'positive

[130] This freezing point might change given different atmospheric pressures, but ignore this complication for the moment and my point still stands.

[131] For further elaboration on this thought experiment see: Tooley (1977); Carroll (1994, 77-85).

[132] This type of thought experiment has been questioned by other power theorists (Mumford, 2004; Ellis, 2001; Bird, 2007; Ott, 2009, 248-249), but others such as those embracing Humeanism (Beebee, 2000; Loewer, 1996) find it questionable.

charge' of a positron might cause attraction, rather than repulsion, of other things that are positively charged, such as another positron? If a property's identity criteria is determined by its causal role, then no property can have different causal roles in other possible worlds, rather what we have is a different property.

The way that this can be denied by the strong external governing view is to say that properties are not defined by their causal role, as those who advocate categoricalism about properties contend, but instead they are individuated by quiddities, that is an individual 'thisness' of a property. Given this, the identity of a property remains the same even though their causal role changes. However, I don't think quidditism should be adopted for a number of reasons.[133] The arguments against quidditism are mainly epistemic in nature, taking advantage of the fact that quidditism completely divorces what something can do from the property's nature. The duplication argument says that it is possible that there be two objects, X and Y, in world W1, that have exactly the same effects upon everything, whilst having distinct categorical properties T and U. It therefore seems that distinct properties T and U can have the same causal role. The replacement argument says that although A plays the causal role P in the actual world, an alien property Q plays the causal role P in another possible world: the role played by spin in the actual world could be played by splspin in other worlds. Finally, the permutation argument says that categorical properties H and J might globally swap causal roles in another possible world, where the categorical property which has the role of charge in the actual world might have the role of mass in another world and vice versa. The problem that all these arguments point to is that quidditism leads to scepticism, since each of these situations are permitted. We have no way of ascertaining which categorical properties a particular has, since the effect the particular brings about could equally be brought about by any property.[134]

Further, we might also object to quiddities on other grounds. For as Chakravartty notes on this view, '*any* nomic profile *at all* is compatible with the identity of a given property … there is a possible world in which it has any causal profile one might imagine, so long as its quiddity remains the same.' (2017, 34) This no doubt gives us some weird consequences, such that

[133] Black (2000); Bird (2007, 66-98).

[134] Ellis (2010; 2012) contends that when categorical properties are supported by powers then these consequences are not particularly severe.

positive charge could have the causal profile of bringing about the smell of roses. Whilst this possibility might appeal to some philosophers who want the modal landscape to be as big as possible it seems Chakravartty is correct in thinking that for scientists 'adoption of quiddities seems a bizarre way to make sense of our ordinary talk of properties, let alone property talk in the scientific domain.' (2017, 34) As such, here we have another reason to reject quidditism based on what our best scientific practice should be. Granted that none of these reasons against quidditism are devastating, such that one cannot consistently hold it, however they do provide me with strong reasons not to embrace it and therefore also categoricalism. Instead I shall take it that a property's identity is determined by its causal role.

Given this, however, the strong external governing view of laws becomes extremely problematic. The reason for this is that given my rejection of quiddities, and given what I have said above, I am committed to a property essentialism, where the causal role of properties is essential to properties themselves.[135] But because of this, one cannot have the same property do different things in other possible worlds. As such the thought experiment on which the strong external governing view relies upon does not describe a genuine possibility, and therefore the need for 'nomic necessity' is no longer required. Rather, metaphysical necessity alone will do the job.

One might object to what I have said by claiming that one can imagine a positively charged particle attracting another positively charged particle and therefore the thought experiment described above is possible. I will have more to say about this type of objection in the next chapter and so the longer discussion will wait until then. For now, I state that imagination is not the same as conception, and I claim one cannot conceive a positively charged particle attracting another once they understand that which determines a property's identity.

Another objection that might be raised against what I've said is that even though there might be many properties which have their causal role essentially, there must be some to which their identity is inessential. If there are then my worries about quiddities might be misplaced, since I have to allow some types of quiddities and not others. One could respond to this by claiming that there are no non-powerful properties and therefore all properties are powers

[135] I suppose one could argue for a quidditism where different quiddities ground specific powers necessarily. However, I will ignore this type of position since I don't know of anyone who has adopted it.

(Mumford, 2004; Bird, 2007). Alternatively, one could hold the powerful qualities view, where all properties are both categorical/qualitative and powerful (Heil, 2012; Martin, 2007). Finally, perhaps I could allow for a dualist view, where only certain properties are categorical, such as location, since it doesn't seem as though we want to attribute a quiddity to such properties as this. Nevertheless, it is simpler to take one of the former two options, and I'm happy to do this.

Given all this, I think I have shown that it is implausible to think that laws are in addition to, and external to, properties, but rather that it is the property's essential causal role which accounts for laws of nature.[136] This then leads us to the powers view of laws.

Nevertheless, there are objections to the powers account of laws which have been raised.[137] Here I focus on one in particular. This objection claims that recent work within quantum mechanics has shown that we should see relations, or laws, as fundamental, rather than objects with powers. That is, we should be ontic-structuralists (French, 2014; Ladyman & Ross, 2007). This view radically departs from what I take to be the typical way of thinking about the world, with Ladyman and Ross setting out their position by writing, 'the identity and individuality of objects depends on the relational structure of the world. Hence, a first approximation to our metaphysics is: 'There are no things. Structure is all there is.'' (2007, 130) They continue noting that they 'shall argue that in the light of contemporary physics … talk of unknowable intrinsic natures and individuals is idle and has no justified place in metaphysics.' (2007, 131) Their claim is that physics has showed us that powers are entities of the past, and instead we should think about reality in terms of relations and structures, which are fundamental. I want to resist this claim. There are two reasons for me doing so. Firstly, I think revisionary metaphysics should be the last step one takes. That is, one should try and preserve one's intuitive picture of the world if they can. Only when it is clear that one cannot do so, then, and only then, should one revise their grand metaphysical view. As such one should see if quantum phenomena can be explained in terms of powers, and it seems some theorists have been hard at work showing that it can be (Kuhlmann, 2010; Dorato, 2006;

[136] Mumford (2004) and Bird (2007) offer additional criticisms of the external governing conception of laws.

[137] There have been other objections raised from Barker (2013) and Yates (2017), however I'm going to assume that power theorists think these can be overcome.

2007; Dorato & Elsfeld, 2010; Suárez, 2004; 2007; Bigaj, 2012; 2014).[138] I assume here that these attempts have been successful, or at least point the way as to how it can be successful. The other reason I have for resisting ontic-structuralism is that it itself has had many criticisms levelled at it and therefore I don't feel forced to adopt it. I also find it ironic that ontic structuralists have claimed that it is for scientific reasons that we should adopt the theory, since power theorists have done much the same from their own perspective (Chakravartty, 2017; Williams, 2010b). I think science by itself is able to justify more than one type of metaphysical view, and therefore agree with Chakravartty in thinking that 'by itself, scientific practice does not yield *any* ontology *at all* unless one is willing to adopt some philosophical lenses through which to interpret its outputs.' (2017, 35) Given this, I think this objection fails and therefore one is able to adopt a powers account of laws.

With this said I now move onto theological grounds for preferring some accounts over others.

4.6 - Theological preferences

Start again with the Humean view. I don't have any particular theological reasons why one shouldn't adopt this type of account. Rather it just seems to me, and many other theists, that there are better and deeper accounts of laws of nature and therefore one should adopt one of them instead rather than the Humean account. Further, as far as I know, there are very few, if any theists, who are Humean about laws of nature, although I suspect this rarity isn't due to an incompatibility with theism since theism seems *prima facie* compatible with Humeanism.[139]

Turn now to the strong external governing view of laws. One might think it strange that I'm questioning whether there are theological reasons against adopting this type of view. The reason for this is that many have argued that this conception of laws only makes sense on a theistic framework. At the very least it seems historically laws were only postulated due to having a theistic picture (Ott, 2009,1; Davies, 2010, 7-73; Heil, 2017, 91-94). However, there are still many today who think that this type of law talk requires God in order to make sense

[138] Note that these authors often call powers dispositions or propensities.

[139] Orr (2019, 26-32) discusses why some theists might opt for a Humean view, although this is not a view he adopts, although he suggests that adopting such a view might force one into occasionalism.

of it (Cartwright, 1993, 299; Jaeger, 2012, 461; Harrison, 2008, 30; 2013, 137; Garber, 2013, 66). Thus Heil writes,

> 'although a conception of laws and contingent and external to what they govern had its source in contentious theological considerations, the demise of those considerations did not result in the demise of the conception. Philosophers altogether lacking in allegiances to Church doctrine are nevertheless happy to embrace a picture of the world according to which objects are governed by external, contingent laws. But if laws are not the expressions of God's will, if laws are not God's decrees, what *are* they? Minus God, what could it mean to say that particles, for instance, are 'governed by' or 'obey' laws?' (2017, 92)

As such, asking what God's role would be given these metaphysical views of laws should be deemed quite natural.[140] Additionally, as Jaeger (2010) has suggested that one of Cartwright's (1999) reasons for adopting a power style view of laws is partly due to her atheistic outlook.[141] Given this, surely there are theological reasons for adopting this type of view, rather than reasons to reject it. This might well be true, but there is a key reason I see for rejecting it. Before setting this out, one final point is in order.

I previously made a distinction between Platonic-style external governing law views and those which were not Platonic. I did this partly because there is this division within the literature itself, but also so that I could say that there are theological reasons to reject the platonic picture. The reason for doing this is something I have already briefly mentioned within this thesis, namely God's aseity, or ultimacy, where this holds that 'before all else existed, God existed, alone, or God and only God did not begin to exist.' (Leftow, 2012a, 4) The worry then is that the Platonic conception of properties will show that beside God there are many eternally existing things, thereby making false the typical theistic claim that God is necessarily *a se* or ultimate. This is not to say that there are no theists who think the Platonic conception of properties is correct and that understanding God's aseity and ultimacy needs adjusting,

[140] However, I disagree somewhat with Heil's overall assessment of law talk and theology, since he fails to mention that the view he puts forward, the powers view, is at least extremely close to the view Aquinas held and which was adopted by most within the Church until the early modern period.

[141] I don't wish to conjecture whether Cartwright is in fact an atheist, since it is not something I know. Others might think something similar to what is attributed to Cartwright, such as Heil (2017), but again this is somewhat speculative.

since there are a number of such persons (van Inwagen, 2009; Yandell, 2014). Nevertheless, as there has been much recent criticism to the Platonistic theist (Leftow, 2012a; Craig, 2017; Craig, 2018), and since this historically has also been the case, I think this is a good theological reason for rejecting this type of view. Given this, on all the views I will now be thinking about, either on the strong external governing view or the powers view, I will be assuming either an Aristotelian view of universals or a trope view of properties.[142]

With that said, my main reason for adopting the powers view will be because I think it can explain something theists want explaining better than the strong external governing view. I also think it might be the case that powers bring other benefits regarding laws, such as an improved analysis of miracles (Horst, 2014, 338-344) and a revived teleological conception of nature. I talk about neither here, although I will have something to say about this latter claim later on within the thesis. In order to speak more on the main reason why I think we should prefer the power view of laws to the strong external governing view, a bit more stage setting is needed relating to how theists think of God's conserving causal interaction with the world.

4.7 - God's conserving action in the world

Start with Deism. This holds that God's causation and creaturely causation are independent of each other. God starts everything off, and then creatures do the rest. God's main role, then, is a creative one, and His conserving role is only that He doesn't destroy creation. This is a very weak form of conservation, with God's causal interaction with the world ceasing once He has created it. This is not an option I shall consider further here, since theists think that God has a stronger role in conservation than this. Nevertheless, we can make a helpful distinction here between God's causal power and creaturely causal power, or primary and secondary causation as it is often called. On Deism God only exhibits His causal power in creating the world, and then everything that happens in the world is down to creaturely causal power. As we will see, how God's causal power relates to creaturely causal power is key to understanding the remaining positions.

[142] I remove a nominalist conception to make my task easier, since it is easier to conceive how these views of laws work when one is a realist about properties, although this is not to say that the views make no-sense on non-realist views of properties.

A second view is occasionalism, which holds that only God has causal power, and the natural world, although it might appear to have causal power, has none (al-Ghazālī, 2002; Malebranche, 1997). As such on this view nature has no causal powers, despite *prima facie* it seeming to. Rather all creaturely causation is just instances of God's causation. In order to overcome some worries some have regarding occasionalism, Plantinga has made a distinction between strong and weak occasionalism. He writes, 'On strong occasionalism, when I marshal the reasons for the decision, it is really God who does the marshalling; it is God who causes me to think of a given circumstance for a particular line of action, God who causes that circumstance to come to my mind, and God who causes me to make the decision I do indeed take.' (2016, 138-139) By contrast weak occasionalism holds that 'I am the cause … of my decisions and undertakings, but when I will to do something—raise my hand, for example—it is God who causes my hand to rise.' (Plantinga, 2016, 141) Unlike strong occasionalism weak occasionalism grants one type of secondary cause, an agent's free volition, with God putting into effect whatever the agent wills. Whether a distinction like this should be allowed is not something I will discuss here, but it does not seem unreasonable to think that this distinction is *ad hoc*, and only employed so to allow something like a libertarian free will defence to be possible on occasionalism. For if creatures have this type of causal power why not allow them to have other types as well? Perhaps one could reply that the 'will' is special in some sense and therefore this weak occasionalist picture should be allowed.[143] I, however, remain sceptical of this type of reasoning, and therefore will treat occasionalism, as it seems to have been historically, as being that of strong occasionalism.[144]

The third view is mere conservationism or weak concurrentism which holds that God causes the existence of each thing at every moment, but creatures have their own causal powers and cause what happens in the world. As such creaturely causes are the immediate cause of their effects; whilst God is only an indirect cause, since all He does is keep objects in existence. This view is therefore similar to deism in that God endows the world with its own causal power,

[143] Christians, for instance, might claim that the will is special in that it is the 'image of God' in human beings, which no other being possesses. I'm not convinced that this is how one should understand the image of God, and I think it an open question whether there are other creatures that have a will like humans.

[144] From now on when I speak of occasionalism I mean 'strong occasionalism'.

but differs in that it also claims God does something in order to keep the world existing from moment to moment, something deism denies.

The final view, concurrentism, tries to find a middle way between occasionalism and mere conservationism. Freddoso sums up the view writing,

> 'According to concurrentism, a natural effect is produced immediately by both God and created substances, so that (pace occasionalism) the latter make a genuine causal contribution to the effect and indeed determine its specific character, but (pace mere conservationism) they do so only if God cooperates with them contemporaneously as an immediate cause in a certain "general" way which goes beyond conservation' (1991, 554).

What precisely this immediate 'general' causing is remains obscure, despite Freddoso's characterisation of it 'as yet another instance of God's giving esse-as-such' (1991, 566). Nonetheless, the key is that God performs some action with the creature so as to bring about an effect immediately. Further, at least historically, concurrentists do not think that God and creatures perform separate independent actions that jointly bring about effects (Aquinas, Summa Contra Gentiles IIIa, 70). Rather they have thought 'God and the secondary cause constitute a single total cause that produces the relevant unitary effect by means of a single, undivided, action.' (Freddoso, 1994, 153-154) However, it isn't clear that this is essential to concurrentism, since there might be accounts where each act is individually insufficient, but jointly sufficient for an effect.[145] If this is possible[146] then what is required for concurrentism is only that God's action is specific to the worldly act under consideration rather than it merely being some general cause bringing about say, just the existence of things.

With this said, I can state the reason I think one should prefer a powers view of laws of nature. The idea is that most theists will opt for a mere conservationist or concurrentist view of nature, and insofar as they do the powers account of laws of nature fits best. This isn't to say that this view of laws cannot fit with an occasionalist view point, since it has been argued that it can be (Schultz & D'Andrea-Winslow, 2017; D'Andrea-Winslow & Schultz, 2018),[147] but since

[145] Vannder Lann (2006) discusses positions like this in relation to God's conserving act.

[146] Freddoso (1994, 151-156) thinks not.

[147] The occasionalist view seems compatible with all views of laws.

this seems to be an option fewer theists have been, and are willing to, embrace, it will not be so important to me here.[148] I now justify this claim.

4.8 - Powerful laws, mere conservationism and concurrentism

Start with my initial claim that mere conservationism and concurrentism are more popular among theists. What reason do I have for thinking this? In a sense it is purely anecdotal since there hasn't been much explicit work done on this type of question within contemporary philosophical theology. However, the person who has done the most sustained work in this area is Freddoso (1988; 1991; 1994) and he claims both that 'In the writings of many contemporary Christian philosophers and theologians, the truth of mere conservationism seems to be taken for granted' (1994, 134; McCann & Kvanvig, 1991, 587),[149] and that in the Medieval period and amongst a number of early modern writers, concurrentist thought flourished (1994, 134),[150] where this has influenced many writers today, particularly those in the catholic tradition.[151] This isn't to say that no one today adopts occasionalism, since there are some who think it a viable option (Vallicella, 1996; 1999; Plantinga, 2016; McCann & Kvanvig, 1991).[152] However, Freddoso makes a telling comment as to why this might be writing, that 'it coheres quite nicely with the metaphysical anti-realism that marks some of the most influential contemporary treatments of causality and scientific explanation.' (1994, 133) Yet given that realist views of causation have come to prominence within recent years in the metaphysics literature, such as the powers account, occasionalist thought may well be

[148] However, given that powers can say something about the occasionalist viewpoint this could be another reason to adopt the view, since this view of laws can provide an account of all the main three views of God's conserving causal action in the world.

[149] It has however, not been explicitly endorsed by many, although Miller (2011, 9-19) does. Freddoso also takes it to be inferior to concurrentism and writes that 'almost all the important figures in the history of philosophical theology have rejected it as philosophically deficient and theologically "unsafe".' (1991, 555)

[150] This isn't to say everyone adopted it, with Malbranche's occasionalism being a clear example of this within the early modern period. Frost (2014) also gives a Medieval example, Peter Olivi, who rejected this view in favour of mere conservationism. There is also the continual worry that concurrentists cannot have all they want, that is they wish to find a middle way between occasionalism and mere conservationism, but perhaps there is no such path.

[151] For example, see the work of Feser (2017, 232-238), a catholic, on this issue, who argues for concurrentism.

[152] McCann & Kvanvig's position isn't clear, since they only rule out that secondary causes produce their effects, but allow that they can be causes of them in terms of Humean regularity or counterfactuals. However, in later work McCann distances himself from Occasionalism (2012, 17-20, 36-42).

on the decline.[153] Thus, I take it that most, if they can, will seek to adopt either a mere conservationist or concurrentists picture of God's causal action in the world.

It is fairly easy to see why one might adopt a causal powers picture of laws when one wants to uphold mere conservationism or concurrentism, since it claims that the world is endowed with causal powers, with these being the grounding of laws of nature. On a mere conservationist picture God brings it about that He continually preserves the existence of the powers of the created world, which bring about their effects, whilst on a concurrentist picture God does this but in addition acts in a specific way alongside the causal powers of nature.[154] By contrast, on the Humean conception it is hard to see how things would work out, since there are no causal connections in nature, and therefore it seems to fit better with occasionalism. The strong external governing view, however, is a position that we might conceptualise as in-between the powers and Humean views. This is because on this view it seems like God could have made a world where there no were causal connections, that is no external governing laws, and just have created worldly stuff, what I will think of as categorical properties. Yet equally God can endow the categorical properties with external connections should He so wish, thus creating laws.

However, could God pick and choose the types of external connections the categorical properties happen to have whenever He chooses? For instance, at one moment in time could God have it that an electron repelled another electron by nomic necessity and yet at another moment it didn't, instead perhaps smelling like chocolate, despite still being an electron? Whilst it seems that the postulation of nomic necessity by most theorists is meant to rule this type of thing happening within this world, such that the laws cannot change within a world, it seems that once we posit a being who determines which nomic necessities hold we don't have any good reason to think that He cannot change them. For these nomic necessities are contingent, in that they don't have to hold in this world, since we could have had the categorical properties and yet different nomic necessities, and further, as the identity of these

[153] There have been many objections made against occasionalist thought, other than its implausibility, for instance see Dodds (2012, 211), Rogers (2001), and Freddoso (1988, 115-116).

[154] How exactly this dual action works is not something I will discuss here, since it is an area of debate. One way of understanding it, however, which I will assume, is that God's causality and creaturely causality work at different ontological levels and jointly (Tanner, 1994; Shanley, 1998; Dodds, 2012; Rogers, 2001, 350; Ott, 2009, 170). Given the rise of ontological pluralism (McDaniel, 2017; Turner, 2010; 2012), this seems a live possibility.

categorical properties do not depend on these types of necessities, but rather on quiddities. Yet once we think this, it seems that we are getting closer to an occasionalist picture, since it is God, at every moment, who determines which nomic necessities hold, and should He so wish He can change them at any time He wishes. Nature, as such, doesn't seem inherently powerful.

This is all the more evident, when thinking about the eleventh century Muslim philosopher and occasionalist, Al-Ghazali, and his thought that God could allow that two pieces of cotton could be exposed to exactly the same conditions, such as fire, and yet the outcomes be different, with one burning to ashes and the other not (*The Incoherence of the Philosophers*, 166-177).[155] This appears very similar to the strong external governing laws thought experiment. Granted, Al-Ghazali thinks about this case within the same world, but it seems given what I've said above, that a theistic version of a strong external governing picture also should allow for this. If it cannot, then there needs to be an in-principle reason why not, otherwise its restriction will seem *ad hoc*. Yet note that a powers theorist cannot allow for this, since the cotton has its own intrinsic causal powers which cannot be changed. Nature has its own inherent power, which seems to be more in line with mere conservationist and concurrentist thought. This isn't to say that the power view cannot allow that by some miracle one piece of cotton not burn, but the reason for this will be different. For instance, it might be that it doesn't burn since God puts some barrier around the cotton, or perhaps given a concurrentists view, where God's action and the creatures action are both required to bring about an effect, God removes His concurrence and as such the cotton doesn't burn (Suárez, *Disputationes Metaphsicae*. 22, sect. I, 11; Freddoso, 1991, 573-574; Ott, 2008, 171; Ott, 2009, 23).[156] However it is done, it cannot be the case that these causal powers have no intrinsic nature which determines what they would do, as seems to be the case on the external governing view.

Further, we might think that whilst on the powers view it seems things are inherently active and powerful, on the strong external governing view this isn't the case. Rather, it

[155] Ockham seems to endorse something similar, as Adams notes, 'Ockham acknowledges, God could have made it a rule that whenever fire comes near, God acts alone to produce heat in the nearby combustible. Nevertheless, Ockham refuses to take occasionalism seriously as a hypothesis about what really happens' (2013, 22).

[156] Aquinas gives different options since he doesn't think God can remove His concurrence as if He did he thinks the cotton would cease to exist (Adams, 2013, 12-13; Silva, 2013, 658-667; 2014, 277-291).

conceptualises the stuff of the world, namely categorical properties, as dead and passive (Ellis 2002, 60-63; 2001), with the addition of external governing laws required to provide some power to the world. Yet once we understand the atomistic or corpuscular theory as holding something like this, namely nature being dead and passive, we can appreciate Harrision's comment that this was 'part of the reason for the rise of occasionalist understandings of causation at this time [the seventeenth century]' (2008, 23). That is, power had to come from somewhere, due to a rejection of Humeanism, and so God was thought to supply it. Perhaps one might claim that the laws are what are powerful and that's what God gives power to on an external governing model. Note firstly that this goes against what has been historically thought, with Ott writing of Descartes and Malebrache, that 'neither of them suggests that the laws might operate "on their own," an alternative regarded on all hands as absurd.' (2009, 248) Further, contemporary defenders of occasionalism also seem to think a strong external governing account of laws requires God's continual power to make the world causal, thus Vallicella when defending an occasionalist picture employs a Dretske-Tooley-Armstrong view of laws with an added ''vertical' supplementation' (1996, 358-359) of causal-oomph from God. How then would God make the laws inherently powerful on a strong external governing view? I'm unsure. How does one make a relation between universals or tropes powerful? Perhaps one could claim that there is some way God could do it, but that it is inexplicable. I'm willing to allow something like this, although I think it counts against the view. By contrast, on the powers account, God cannot help but make something inherently powerful, since that is what powers are and given this nature does have its own causal power, as mere conservationism and concurrentism requires.

Given this, I think that mere conservationism and concurrentism fit better with the powers view of laws. This is not to say that I don't think the strong external governing account cannot fit with this view, since I think one might be able to adapt it so that it does, just as one can make a powers account occasionalist (Schultz & D'Andrea-Winslow, 2017; D'Andrea-Winslow & Schultz, 2018), but it seems to be an uneasy fit. Yet one might think that given a possible fit one should opt for the strong external governing view due to worries about the powers account limiting God. The idea here would be that God would be more powerful if one adopted another view, such as the strong external governing view, with this being a reason often given for occasionalism (McCracken 1983, 211). I think the claim that God is more

powerful on these accounts is highly debatable. One reply would be to follow Shanley and Aquinas in arguing that 'a created world with genuine secondary causation … rather displays it [God's power] more fully than would a universe of impotent beings. God is not a niggardly sovereign jealously guarding the prerogatives of causal power, but rather a generous Creator who graciously bestows the gift of action along with the gift of being.' (Shanley, 1998, 102; Aquinas, *Summa Contra Gentiles* III, 69) Given this, it seems we might be at a stand-off as to which should be preferred when it comes to God's power, and therefore given this, the objection shouldn't be thought of as a significant worry against the powers view.

However, one might push back against this, and claim God's power is limited in a worrying way on the powers view, as Jaeger does when she writes, 'for Judaeo-Christian theism, the world, with its order, is grounded in God's will; it takes its origin from a free act. Thus it might not exist, or it could be different from what it is. The world, and by consequence natural order, is thus contingent and not necessary.' (2010, 1613) The worry then seems to be that the necessity the powers account brings is troubling. I shall have more to say about the types of necessity the powers account requires in the following chapter, but for now note that the necessity I require here which allows for mere conservationism and concurrentism merely holds that God cannot change the nature of powers, such that in one world power X has causal role A, and in another world it has causal role B. Given this if two worlds have the same properties then necessarily they will have the same of laws. As Oderberg writes, 'the laws depend wholly on how objects must be. Hence they obtain in every world in which the objects they are about exist. In other words, every world in which certain objects exist will be a world in which those objects must behave in a certain way. … There is no world, then, in which the objects exist and the laws about them do not obtain. So the necessity of those laws is metaphysical, since it is a necessity derived from the essences of the objects.' (2007, 144)[157]

With this said, depending how one reads Jaeger, the powers view may or may not be concerning. If one reads her as saying that God should be able to make it a law of nature that electric charge attracts electric charge by non-miraculous means, then my account will deny that this is possible. I will also deny that this is problematic for God's power, since I claim that it is contradictory to think God could do this given that the identity of a property is determined

[157] Oderberg here is thinking of the essences of objects, hence his language of objects, but one can translate this into my language of properties without any loss as to what he means.

by its causal nature.[158] If, however, she only means to suggest that God could have made a world with different laws of nature, then my account allows this. The reason for this is that God can decide what He wants to create, that is which causal properties, powers, He builds the world from. Granted that He cannot create these properties and different laws, but He can create different laws by creating different properties. My view can thus agree with Plantinga when he states, 'it is not necessary, not part of the divine nature, to institute or promulgate just *these* laws' (2011, 281).

To finish, let me add one final reason why God might create laws by creating powers. Again, this reason is due to simplicity and parsimony. Leibniz (1686, Section 22) seemed to think that being economical was a perfection. Thus, suppose one wants to achieve some particular purpose, the thought is that if you can achieve this purpose in multiple ways, the best way is the one that is most economical. Suppose this is right. It then seems that God is more likely to create a world from powers. The reason for this is that if God wants a world where there is governance, which rules out Humeanism, then a world composed of powers is more economical than a world where there are strong external governing laws. For on the strong external governing laws there are two things going on, namely the stuff the world is made of, categorical properties, and the laws. We thus have two ontological categories and two things God has to do. By contrast on the powers view there is only one ontological category and only one thing God has to do, namely make the powers.[159] Given this, and assuming God can achieve all He wishes to by making powers alone, it seems given God's perfection He should create a world full of powers.

4.9 - Summary

Given what I have argued we have both good theological and non-theological grounds to think that God would create a world of powers. This is not to say that there are no other considerations which would be worth thinking about when making this assessment, since

[158] God's power, after all, is rarely if ever thought to allow that He is able to bring about contradictory states of affairs, with this often being a 'limit' on His abilities.

[159] There might be two things God has to do, namely think which powers He wants to create and then create them. However, given this then there are three things God has to do on the strong external governing model; think what the law like relations will be, make the stuff, and then instantiate the relations (or vice versa with the last two items on this list).

there are other interesting questions to be asked.[160] But given what I have looked at here, it seems this view of laws is best. This is perhaps not all that surprising since it also seems to have been the view many Medievals took when thinking about God's relation to nature's regularity (Harrison, 2008; Adams, 2013). Nevertheless, the powers view of laws does open certain doors which perhaps were not open on other views, that the theist may wish to have kept closed. What I have in mind here is a way one might try and challenge the fine-tuning argument. If this challenge is successful, then theists may wish to argue against this view of laws of nature given many of them heavily rely on fine-tuning arguments for providing evidence for theism. In the next chapter I will explore how powers might bring a reply to this argument and whether it is effective.

[160] For instance, it seems that the laws of nature, on some specific theological views, will change in the future. So, for example, take the Christian view that in heaven there will be no more evil. Given that laws of nature are typically appealed to in order to explain the suffering in our current world (Gelinas, 2009, 544-548), it seems they will have to change in the future. Yet on different views of laws how much they can change and how they can change might be restricted, such that some ontological views of laws are more preferable than others.

Chapter 5 - Implications for Fine-tuning Arguments

In the previous chapter I argued that theists should prefer a powers account of laws of nature. I argued this on both non-theological and theological grounds. In this chapter I want to explore how this view of laws might provide a way to block fine-tuning arguments for theism, since if it does many may wish to argue against this account of laws given many theists heavy reliance on fine-tuning arguments. Ultimately, I will suggest that this account of laws, even if added to in order to make the objection stronger, is still subject to a type of fine-tuning argument. In order to see this, I first need to do some stage setting, starting with what fine-tuning arguments are.

5.1 - Fine-tuning arguments

Fine-tuning arguments for theism generally run as follows.[161] First, we are told that in order for life to exist, very precise laws of nature, constants of nature, and initial conditions are required,[162] without which life would be impossible.[163] Advocates then contend that design is the best explanation or most likely hypothesis for these requirements being met as opposed to alternatives. Collins, the most prominent contemporary advocate, canvasses one alternative, brute contingency, where this answer takes two forms, either a 'naturalistic single-universe hypothesis … the existence of which is an unexplained, brute given', or the 'naturalistic multiverse hypothesis' (2009, 204).[164] Many would like to avoid brute contingency responses to the argument and since the response I'm proposing here does so, I have nothing further to say about these types of responses. In addition to this I don't have anything to add regarding multi-verse replies to this type of argument, and for the interested reader to this type of approach I invite them to look at the relevant literature.[165] Thus rather

[161] Note from the outset that, following standard practice, I do not mean to imply any kind of deliberative action on behalf of an agent by the language of 'fine-tuning'.

[162] For a detailed explication of what I mean by 'precise' see: (Hawthorne & Isaacs, 2018).

[163] Collins (2009, 211-222) gives examples of laws, constants and initial conditions as evidence of fine-tuning, whilst Swinburne (2004, 172) only uses laws and initial conditions, and Hawthorne and Isaacs (2018) only constants.

[164] Swinburne (2004, 153-191) does likewise, whilst Leslie (1989) gives necessitarianism an extremely brief mention.

[165] For instance see, White (2000), Tegmark (2014), Bradley (2009), Carr (2007), Swinburne (2012), and Collins (2009, 256-272).

than exploring responses that have already been given to fine-tuning arguments, I shall explore an option that hasn't as of yet been fully laid out, which can arise given the view of laws I suggested theists opt for in the previous chapter.[166]

5.2 - The Response (briefly put)

We shall call the type of response I want to give, the necessitarian response. For the purpose of introduction, put simply it says the laws and constants of nature are metaphysically necessary, such that they do not vary across possible worlds.[167] Yet since the fine-tuning argument requires contingency, given necessitarianism, the argument fails. Van Inwagen has recently suggested that this reply is 'much more interesting than the [brute contingency option]' (2015, 206), yet ultimately he finds it wholly unpersuasive. (2017, 207) Oppy also gives it briefly as an option for blocking the argument if one 'supposes that every possible world 'shares an initial part' with the actual world' (2013a, 27; 2016, 33). Given that Oppy appears to hold this, that every possible world shares an initial part (2013b, 47), we can take him to think necessitarianism persuasively causes problems for the fine-tuning argument.[168] Despite this and given the increasing interest of necessitarianism within the metaphysics of science, the response has never been sufficiently explored and this is something I seek to rectify here.

Before more fully outlining the structure of this chapter, I must first note that I will only deal with two aspects of fine-tuning, laws and constants, therefore neglecting initial conditions. I do this for two reasons: firstly, Bird (2014, 285-289) has recently given a necessitarian account of these conditions by arguing that they can be thought of as being determined by laws, with this being similar to what others have suggested (Sklar, 1984; 1990; Frisch, 2004); and secondly, in order to account for this data my proposal would require extra elements that need defending which I am unable to do here.[169] The response therefore only explicitly attempts to deal with the data of fine-tuning related to the laws and constants of nature.

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[166] The necessitarian response could also come in a multi-verse variety, and this may cause distinct problems for the argument not addressed here since I focus on a single-universe account.

[167] They are therefore necessary in a *de re* rather than *de dicto* sense.

[168] Oppy (2013a; 2013b) thinks a similar move can be made against certain cosmological arguments, see Leftow (2017a) for a reply; some of the comments made by Leftow would also be applicable to the necessitarian picture examined in this paper.

[169] Namely the necessity of the initial quantity and place of properties.

In order to lay out fully and assess the necessitarian response, I shall structure the rest of this chapter as follows. I will start by showing why fine-tuning arguments require contingency, and why necessity might be thought to block the argument. Subsequently I formulate the response necessitarians can give, suggesting that three requirements need to be met: firstly that laws are metaphysically necessary, secondly that constants are metaphysically necessary, and thirdly that the fundamental properties which determine the laws and constants are necessary. I discuss each of these elements in turn, suggesting how one might argue for them, before ending by assessing how the response fares when running the fine-tuning argument in two ways, as an inference to the best explanation and as a Bayesian argument.

5.3 - The requirement of contingency for fine-tuning

A major assumption behind fine-tuning arguments is that finely-tuned aspects of nature could have been otherwise; that is the laws and constants of nature, at least those related to fine-tuning, are contingent.[170] This assumption is one that typical respondents who advocate design and brute contingency usually take for granted. Those who advocate the design hypothesis presumably think the instantiated design of nature could have been otherwise, and similarly those adopting a brute contingency position, be that of a single universe or multiverse, allow for the possibility that a different brute contingent could have been instantiated. The necessitarian, by contrast, denies this initial assumption, claiming it isn't possible that the laws and constants have been otherwise; they are necessary.[171]

Before spelling out why this blocks the other responses, it is important to understand the types of necessity used throughout this chapter. First is narrow logical necessity, where the 'truths of propositional logic and first order quantification theory' (Plantinga, 1974, 1) are

[170] Perhaps a different type of argument to theism could be run without assuming this, that is where the laws and constants are necessary. I suggest one below but note that it is far weaker than the standard fine-tuning argument.

[171] That they are necessary may not mean that there is no sense in which we can say the laws and constants are fine-tuned. For instance, suppose we found out, perhaps due to computer modelling, that the range of laws and constants that are life permitting is very small, and then also found out that the laws and constants that hold in this world hold in every possible world. There is still a sense in which the life permitting range of laws and constants is small, and therefore fine-tuned, even though it is impossible that any other laws or constants hold. However, this paper in no way relies upon this point, and if one thinks the language of fine-tuning no longer should be used when the laws and constants are necessary then one can re-word what I say at various points without loss of content.

what is necessary in this sense. Next is broad logical necessity or metaphysical necessity, which Fine (2005, 236) characterises as 'the sense of necessity that obtains in virtue of the identity of things'.[172] Kripke provides some examples of this type of necessity when he claims Hesperus is necessarily identical with Phosphorous (1980, 108-110), and Gold necessarily has the atomic number 79 (1980, 123-125). It is thus because of what Hesperus is that it is necessarily identical to Phosphorus, with the same being said for Gold and its atomic number 79. Metaphysical necessity then, concerns 'being and its modes, whereas logic [and thereby logical necessity], properly understood, does not concern being in general but rather, the formal properties of and relations between propositions'. (Lowe, 1998, 10)[173] Finally, there is nomic or physical necessity, which holds in virtue of the laws of nature, which we saw in the previous chapter. However, unlike the prior necessities this necessity is relativized from world to world, since it is assumed that different possible worlds could have different laws. For the rest of this chapter the necessity that will most concern us is broadly logical/metaphysical necessity, and unless otherwise stated this is what I will mean by necessity.[174]

How then does necessity block the argument? The fine-tuning argument asks for either an explanation or most likely hypothesis behind the fine-tuning data, where all the data is assumed contingent, that is could have been otherwise. But if the fine-tuning is necessary then it cannot vary across metaphysically possible worlds. The laws and constants would never vary and hence wouldn't be contingent.[175] The necessitarian therefore denies the

[172] For more on the distinction between logical and metaphysical necessity see: Kripke (1980); Plantinga (1974, 1-9); Lowe (1998, 8-22); Leftow (2012a, 33-38); Fine (2005).

[173] However, despite what is said here, and the examples of metaphysical necessity given, as Gendler and Hawthorne (2002, 4) write the notion 'is standardly taken to be primitive.'

[174] Craig (2008, 161-164) thinks the necessity necessitarians will appeal to is physical necessity. Perhaps a necessitarian could respond in this way, however I think targeting metaphysical necessity is the best option. The reason for this is that since I take physical necessity to hold in virtue of the laws of nature, I cannot claim the laws of nature themselves are necessary in this sense. Perhaps one could claim that the constants and initial conditions are determined by the laws of nature and therefore hold with this type of necessity, but I do not opt for this view here. The second reason I opt for metaphysical necessity is that it falls out of certain positions taken in modal metaphysics.

[175] An objection might immediately present itself, namely that I can conceive that the laws and constants are different and therefore it is possible that they are different. This is perhaps the most important objection to the view and will be discussed once the response is set out more fully.

contingency claim inherent in the argument and replies that the laws and constants are metaphysically necessary; nothing further is needed.[176]

I think many theists should think this response is not as unpromising as many previously have, even if they ultimately think it unsuccessful. The reason for this change of heart is that the response mirrors many theistic answers concerning explanations of God's existence. Paralleling the necessitarian, who holds that the laws and constants are broadly logically/metaphysically necessary, 'most analytic philosophers hold that if God exists, He exists with broad logical necessity.' (Leftow, 2010b, 141) More importantly, theists who suppose God exists with this type of necessity also typically claim that appealing to metaphysical necessity is sufficient for ending explanatory chains, evidenced in responses to questions such as 'what explains God's existence?' For instance, Plantinga writes,

> 'perhaps a necessary being may be characterized as (a) a being such that some statement referring to it can properly serve as a final answer in this sort of question and answer series, an answer which puts an end to the series. … such a being must be one about which the question "Why does it exist?" *does not arise* or cannot sensibly be asked. A necessary being, therefore, may be further characterized as (b) a being about which one cannot sensibly ask why it exists. When the theist, therefore, asserts that God is the necessary being, we may construe his remark in the following way. He is pointing out that we cannot sensibly ask, "Why is it that God exists?"' (1967, 181-182)

The necessitarian follows Plantinga in all he says, but substitutes laws and constants for God. If the laws and constants are necessary then it is difficult to see any explanatory differences between the two, and hence necessity, if plausible, undercuts the argument; or at least theists who endorse the move made above by Plantinga should think so.

5.4 - The proposal

But you are likely thinking, this is all well and good, necessity might block the argument, but the real question is whether it is plausible.[177] It therefore seems time to start providing some

[176] Van Inwagen (2015, 208) seems to agree that this is sufficient for blocking the argument.

[177] In conversation some have suggested that merely establishing the possibility of necessitarianism is enough to cause problems for fine-tuning arguments, since the burden of proof will be on the proponent of fine-tuning

reasons for thinking that it is. Briefly the necessitarian proposal I explicate says, the laws of nature are metaphysically necessary, as too are the constants, and that the instantiation of the properties that determine these laws and constants is also necessary. This final component is especially important since one could think both the laws and constants are metaphysically necessary, and yet also that they could have been different.[178] Before looking at the elements of the proposal in detail, I should note that the view of laws and constants I set, following the previous chapter, will take the world to be comprised of powerful properties.[179] I shall not summarise again the nature of these properties, since all I require of them has come before, but merely note that the necessitarian view I explicate will rely upon the assumption that all worldly causal efficacy is in some way due to powers, and hence powers will play a key role in the account of laws and constants.[180]

5.4.1 - Necessary laws of nature

Turning to the necessitarian view, the powers account of laws, as we saw previously, holds that laws are metaphysically necessary. Yet as we also saw other accounts of the metaphysics of laws endow laws with differing modal status. I will not here rehearse what I said before but merely list the following options that were explored before to show how those accounts of laws allow the fine-tuning argument to run.

First take the Humean empiricist position, where there are no connections in nature and that laws merely describe the regularities observable in the world. Nothing determines that something does *X* or *Y*, rather *X* or *Y* happens and laws simply describe those regularities. As such, no necessity is involved in laws. Everything is contingent and everything could have been

arguments to refute necessitarianism. This may be correct, although the possibility to be established will need to be the metaphysical rather than epistemic possibility. However, in the literature it is the lack of plausibility of the view that seems to be the concern regarding necessitarianism, rather than its impossibility. As such, here I try to suggest why one might think it is plausible, but if one wishes to follow the reviewers thought, then one may read the remainder of the paper as my trying to merely show that necessitarianism is possible.

[178] How one could think this I hope will become clearer as the paper proceeds, but put briefly, if a properties *identity* determines what laws and constants are then it is metaphysically necessary that given the *existence* of these properties there are these laws and constants. As such the laws and constants are metaphysically necessary given the properties that exist, but it is a further question whether the *existence* of the properties themselves are metaphysically necessary. This is why necessary instantiation is also required for the necessitarian response I give.

[179] Perhaps necessitarianism does not require this, but my version will.

[180] Thus, one could hold a dualist, dual-aspect or monistic view concerning powers.

otherwise. Thus, fine-tuning arguments presumably work on Humeanism since it appears that different regularities could have occurred, some leading to life-prohibiting worlds and others to life-permitting. Despite this, Humeans might shrug their shoulders at fine-tuning data, saying 'there is no explanation of the data.' They can say this because given empiricism we need not think there is an explanation as to why the laws are as they are since thinking this is an import of rationalism and is therefore something many empiricists won't accept. Hence the fine-tuning argument only works on Humeanism if one also has a little bit of rationalistic blood.[181]

Turning to the second view, the strong external governing view of laws, which holds that laws are necessary connections but only within this world, such that this necessity does not carry across possible worlds, therefore giving us a nomic necessity only. This account of laws seems to allow the fine-tuning argument to run without any issue since the laws could have been different. For instance, different possible worlds will have different boiling points for water, not because the conditions are different, but because the nomic link is different. The defender of the fine-tuning argument to theism can then extrapolate this to instances of fine-tuning they are interested in and the argument is off and running.

Those opting for the powers view of laws, as we have seen, reject both of these views. Instead they hold that each power is defined in terms of its causal role, where this is the property's identity. Due to this, unlike the previous views, power theorists thus think that if you had the same properties instantiated across possible worlds the laws would be identical. Only with different properties do you get different laws.[182] Yet, by itself this shouldn't cause any problems for the fine-tuning argument because even if laws are metaphysically necessary given the properties in the world, the instantiation of those powerful properties is not, and this fact enables the argument to get going. Contingency has found another opening, with schmass possibly being instantiated rather than mass. A further distinction therefore is needed between weak and strong necessitarianism. The weak necessitarian thinks 'Laws concern properties. Properties may or may not exist in different possible worlds. … the law L(P) concerning property P is necessary, and that this requires only that L(P) holds in all

[181] This is only an escape for Humeans, since the other positions are rationalistic enough.

[182] I mentioned this already at the end of the previous chapter when thinking about Jaeger's necessity criticism, and how one might respond to it.

possible worlds where P exists.' (Bird, 2004, 257) By contrast strong necessitarianism says 'there is no difference between possible worlds as regards their laws; nomologically, they are identical.' (Bird, 2004, 259) Since the powers position I have explicated doesn't decide between these positions, we must decide ourselves. In the section concerning the necessity of instantiation I suggest how one might argue for strong necessitarianism, as it is this which is required for the necessitarian response to fine-tuning.

5.4.2 - Necessary constants

Having seen why we could think that laws are metaphysically necessary, we must move onto constants. However, before proceeding I should note that there is often a terminological difference between physicists and philosophers here that can be confusing. In my reading in philosophy of science one rarely reads about the constants of nature as distinct from laws,[183] but this distinction often appears in discussions of fine-tuning and physics. Philosopher of physics, Wallace, is informative in explaining how we should understand this difference between the disciplines writing,

> 'for most philosophers of science, a law of nature is something like the inverse-square law, *including the gravitational constant*. However, physicists usually regard the constants as parameters that can be set within the laws, leading to the distinction between constants and laws. But that doesn't in itself commit to the constants having any contingent status. I think it's best – when thinking about current physics, at any rate – to think of the constants as having the same nomic status as the laws.'[184]

If this is correct, then perhaps many of those philosophers of science who embrace a powers theory of properties might also think the constants of nature possess the same type of necessity as the laws, since constants are contained within laws. This would be a quick and easy way to argue that the constants are metaphysically necessary, merely in virtue of the laws being metaphysically necessary. However, it is not one I suspect all will agree with, for instance Collins (2005, 388-389), and so I attempt to spell out the metaphysics as to why a powers theorist might think constants are necessary, something yet to be done in the literature.

[183] One notable exception is Collins (2005, 388-391).

[184] David Wallace in personal correspondence.

When explaining why the laws are metaphysically necessary on a powers view, I relied upon the essential directionality inherent in powers. In order to explain the constants, I rely upon another aspect of powers I take to be essential, their intensity (Manley & Wasserman, 2007; Vetter, 2015, ch.3; Mumford & Anjum, 2011, 24-26). A number of power theorists think different powers have different intensities which they illustrate by way of example, such as different acids have different pH levels and different types of glass shatter more or less easily. Further, we can give parallel reasons for intensity being an essential aspect of powers as those we gave for directionality. Intensity, then, for some power theorists plays a key role in determining a property's identity, such that if the intensity of a property changed it would be a different property. For instance, if the pH level of a property changed it would no longer be the same specific property because it would have a different powerful essence.[185] Thus, just as directionality is essential to powers, so too is intensity, such that the same property cannot vary in its directionality or intensity across possible worlds.

Given this, what are the constants of nature on a powers viewpoint?[186] The gravitational constant, for example, is the intensity of the relation between acceleration and mass. The same determinate mass accelerates at the same rate every time it is instantiated, but were the constant to change, this rate would be different. This relationship is fixed as a matter of necessity for mass and acceleration. The result of this is that wherever mass and acceleration are instantiated, we will have the same gravitational constant. That is, the gravitational constant will not have any contingent value, but rather a metaphysically necessary value given the powerful natures of mass and acceleration. The only way for the constant to change would be if schmass were instantiated, since then the ratios between acceleration and schmass would be different to those between acceleration and mass. Constants, then, on this view are therefore nothing other than ratios of intensities between powerful properties.[187]

Assuming this way of linking a power's intensity with the constants of nature, the constants turn out to be metaphysically necessary. Nonetheless, just like the powers position

[185] We might be able to say it is a similar property to before since it might still have the pH level such that it is still acidic, however different acids have different properties.

[186] I owe the proceeding thought to Allen who comes close to explicitly endorsing this view elsewhere (2007, 113).

[187] Livanios (2014) critically discusses some problems for a powers view of constants but does not think of them as I suggest here.

concerning laws of nature, the way to interpret the necessity of these constants comes in two varieties, weak and strong necessitarianism.[188] As before, strong necessitarianism, and hence necessary instantiation is required, and it is to this we now turn.

5.4.3 - Necessary property instantiation

A powers view gives us at least weak necessitarianism, but strong necessitarianism is required for a necessitarian response. That is, we need it to be the case that not only given certain properties certain laws and constants necessarily obtain, but also that the properties that determine the fundamental laws and constants are necessarily instantiated. As such, strong necessitarianism seems to require necessary property instantiation. Therefore, I here suggest how one might make the case for this aspect of the strong necessitarian position, given that this is a view that is embraced and defended by a number of contemporary thinkers.[189]

One argument some have made in favour of strong necessitarianism has been based on adopting a Platonic conception of properties. Thus, Bird writes, 'we should think of properties as themselves being necessary existents, as would be appropriate on the Platonic (*ante rem*) conception of universals ... If that is the case then … every possible property exists in every possible world, and so every possible law holds in every possible world.' (2014, 285) What should we think of this type of reason? Whilst it seems Platonism happily accounts for laws and constants being the same in every possible world, it doesn't entail that the same worldly properties are instantiated in every possible world. The type of strong necessitarianism I require needs the further claim that a certain subset of the world's properties are necessarily instantiated. Platonism therefore gets us only halfway, providing necessary properties but not necessary instantiation, where reasons for adopting this missing element will be given shortly.

Another argument others have proposed for strong necessitarianism makes use of current debates over modal truthmakers. In recent years a new position has emerged which some have termed 'hardcore actualism' (Contessa, 2010). This theory is actualist rather than

[188] Power theorists may be asked further questions concerning the relationship between determinate and determinable laws and constants. This is something I bracket here but note that power theorists have sought to address this concern elsewhere (Tugby, forthcoming).

[189] For instance: Bird (2004; 2007, 50-59; 2014); Wilson (2013; manuscript); Bostock (2003); Oppy (2013b, 47); Smith (2001). The following list of scholars might also hold to strong necessitarianism, but their work leaves their adherence ambiguous: Leeds (2001; 2007); Edgington (2004); Vetter (2015).

possibilist but distinguishes itself from 'softcore actualism' in that its modal truthmakers are natural objects rather than abstracta, such as states of affairs or propositions. Because of this, the view is often characterised as Aristotelian rather than Platonic, where the powers version has it that the powers instantiated in this world provide the truthmakers of all metaphysical possibilities.[190] On this view, what makes it true that I could have been a professional tennis player is that a whole complex array of powers in the actual world could have manifested in a way that brought this about. However, due to the Aristotelian nature of this view, those alien properties that are unable to be brought about by the manifestation of worldly instantiated powers, what Vetter (2015, 269) calls 'super-alien properties', are deemed impossible. Thus, if the actual world contains powers that if manifested would produce a unicorn, then unicorns are possible. However, if the powers of this world are unable to bring about such a thing, then being a unicorn is a super-alien property and impossible. Some will no doubt be unhappy with such a consequence since they wish to allow for such super-alien possibilities, and thereby a greater range of metaphysical possibilities (Tugby, 2015). Yet why should we allow for them? As Borghini and Williams write,

> 'The objection being raised is that dispositionalism is somehow inadequate as an account of metaphysical possibility because it does not treat *S* as possible [for instance the thought experiment those advocating the strong-external-governing conception of laws appeal too]. But why should it? Not every logically possible state of affairs will turn out to be metaphysically possible. The space of actual dispositional properties divides the set of all logically possible states of affairs into two groups: those that are metaphysically possible and those that are not. … speaking of the possibilities we 'need' is very odd indeed. This implies that we know what is metaphysically possible, and that it is the task of an ontologically motivated account like dispositionalism to provide the truthmakers for that set of possibilities. This puts the cart before the horse.' (2008, 37)

Additionally, many powers theorists are unconcerned by the reduction of the modal landscape, since they claim that in order to adequately account for super-alien properties and be an actualist, one must employ abstracta to account for certain modal truths. Thus, Vetter

[190] For further explication of this view see: Jacobs (2010); Borghini & Williams (2008); Vetter (2015); Pawl (2017).

writes, 'it is not too hard to bite the bullet here, since the bullet is part of an attractive picture of properties … [rather than] appeal to Platonist universals or propositions' (2015, 270). The super-alien properties complaint, therefore, does not seem to me to be an overwhelming worry,[191] although providing arguments to the effect that these properties are impossible would certainly strengthen the hardcore-actualist cause.[192]

Nonetheless, just as Platonism was incomplete in providing a strong necessitarian account so too is hardcore actualism. Platonism required the extra thesis of necessary instantiation, because even though all properties exist across all possible worlds, the properties that are instantiated could vary. Hardcore actualism needs something similar since presumably there could have been fewer properties in the world,[193] and this might cause a problem for a strong necessitarian solution.[194] Therefore we need some positive reasons for adopting a principle of necessary instantiation for those fundamental properties that determine nature's laws and constants.

One reason is due to the following thought. Suppose you think there should be a reason that these specific properties, and hence these particular laws and constants, are instantiated. It seems that holding that they are necessary gives a satisfactory answer to this question. The reason for this parallels the thought as to why necessity is an adequate response to the fine-tuning argument, namely because necessity is able to stop explanatory chains whilst positing brute contingents is not. Thus, if the instantiation of these properties is necessary, then asking why these properties exist is just like asking why God exists when He is metaphysically necessary. If, however, one were to adopt weak necessitarianism, the reason that these properties rather than others exist would be contingent, as if the reason were necessary it would make everything else within this chain of reasoning necessary.[195] But then we would be left with a brute contingent fact as to why these laws hold and not others. A theistic weak necessitarian might have an easy answer here if one grants that libertarian free acts can be explanation stoppers, since they might hold that it is in virtue of God's free decision that these

[191] Dorr (2008, 47) makes a similar point for nominalists.

[192] Armstrong (1989) in the past tried to make an argument like this.

[193] Although Pawl (2017, 118-120) suggests this is questionable.

[194] Unless the properties remaining provide a very high probability for permitting life. Yet this provides a slightly different type of response to fine-tuning than the necessitarian one.

[195] Parallel to a common objection to the principle of sufficient reason (van Inwagen, 1983, 202-204).

properties are instantiated rather than others.[196] But non-theistic weak necessitarians, in order to avoid strong necessitarianism, will have to remain content with brute contingent instantiation.

Given that I'm trying to provide a response not based on brute contingency, necessary instantiation looks preferable if we think there should be a reason why these properties rather than others are instantiated. As Bird writes, strong necessitarianism provides 'an explanation of sorts. Being necessary, the fundamental laws could not have been otherwise … we cannot ask for an explanation of the usual kind at all, for the comparative question, 'why do we have these laws as opposed to some other set?', assumes what is false, that some other set is possible.' (2007, 59) Many theists should be on board with everything said here, other than the conclusion, since the motivation behind thinking properties are necessary is very similar to the motivation behind postulating God as an explanation of everything. Theists often complain about those who refuse to look for deeper explanations and instead posit contingent primitive brute facts. As such they should welcome Bird's insistence that we dig towards deeper explanations. Further, since it is the principle of sufficient reason (PSR) that is doing the work in this argument, with this being something theists regularly rely upon, they should also look favourably upon this.

A second reason one might adopt necessary instantiation is based on another consideration, one that I have already made use of throughout this thesis, namely simplicity or parsimony. Strong necessitarianism is a simple view, particularly when considering the ontology of laws and constants, as only powers are needed. Further, as I will discuss below, if holism is true then it may be that only one powerful property needs to be necessary since it will necessarily bring with it all the other properties, and as such there need only be one necessary being, much like the monotheists necessary God.[197] There is also no need for differing types of necessity on strong necessitarianism because there is no longer any physical or nomic necessity, and unlike weak necessitarianism no contingency related to the instantiation of

[196] For a defence of this see: Pruss (2006, 126-159).

[197] Perhaps this goes someway to block Leftow's (2017a, 328-332) thought that theists still have the advantage over the number and nature of fundamental entities when considering parsimony. For on both accounts there is only one in number and one in nature, with everything else being derivative on both accounts, e.g. God's thoughts might be many and of a different nature to God but they are not fundamental. Nonetheless, it should be acknowledged that whilst adding holism to the account isn't a significant cost, it nonetheless has some cost.

those properties related to laws and constants. Thus, if simplicity is seen as virtuous then strong necessitarianism is on solid grounds.[198]

A third reason for adopting necessary instantiation is that some think it avoids the notorious difficulties that plague modal epistemology.[199] Thus Wilson writes, for the strong necessitarian 'modal epistemology is continuous with ordinary epistemology. … Far from presenting a problem for modal [strong] necessitarianism, the unification of modal epistemology with general scientific epistemology that it involves is one of the strongest points in its favour. Modal [strong] necessitarians require no special epistemology for modal truths, and they need not rely on the problematic conceivability-possibility link.' (2013, 665) Given this virtue, we have another reason for preferring the strong necessitarian position to its weak necessitarian rival.

Holism also could provide one with grounds for thinking that if one fundamental property is necessary then all fundamental properties will be due to the interdependence of properties. For as Schaffer writes, 'If everything is internally$_{\text{essential}}$ related … Everything will be interdependent in a very strong sense — if one thing were to fail to exist, then everything would fail to exist.' (2010, 349) The position I spell out here doesn't require that everything is interdependent, but only that those things involved within the causal realm are—those things which account for the laws and constants of nature. I will have more to say about holism later, but for now it should be noted that holism fits incredibly well with a powers theory of things, and therefore this appeal should not be seen in any way as *ad hoc*.[200] Thus, for strong necessitarianism to work one might only need to think that one property is necessarily instantiated, perhaps space-time (Dasgupta, 2016, 398), with holism carrying all the other required properties with it.

Given all this, necessary instantiation, and therefore strong necessitarianism, has a number of arguments in its favour, relying on considerations based on the principle of sufficient reason, simplicity, modal epistemology, and holism. Maybe there are further reasons one

[198] Wilson (2013, 660-661) argues that strong necessitarianism also has the virtue of simplicity when addressing the argument from sustaining counterfactuals, since the answer why the counterfactually nearest worlds tend to have the same laws as the actual world is simply because *all* worlds have the same laws.

[199] For elaboration of some of these difficulties see: van Inwagen (1998).

[200] There are many powers theorists who are advocates of holism, for example see: Mumford (2004, 182-184); Williams (2010a, 94-101).

could give for this view, and this is something I think deserves further investigation.[201] However, what should be noted here is that there are some sensible reasons for holding to necessary instantiation and therefore strong necessitarianism. As such, strong necessitarianism seems to be a plausible option concerning the modal status of the laws and constants of nature.

5.4.4 - The proposal summarised

Summarising, the proposal holds that the world is composed of powers, at least in its causal aspects, and as such the laws and constants of nature are metaphysically necessary. Further, since we have seen that reasonable grounds can be given for adopting necessary instantiation we arrive at strong necessitarianism. This leads us to an alternative response to the fine-tuning argument. That is, despite its initial appearances the fine-tuning data couldn't have been otherwise because they are necessary, and as such the fine-tuning argument cannot get going given its reliance on contingency.

5.5 - Inference to best explanation fine-tuning arguments

How then does this response fare when a fine-tuning argument is formulated in terms of inference to the best explanation? Craig (2008, 161; 2003, 175) provides us with an example of a skeleton structure of this type of argument, which he formulates as follows:[202]

1. The fine-tuning of the universe is due to either necessity, chance, or design.
2. It is not due to necessity or chance.
3. Therefore, it is due to design.

If the necessitarian response is successful then contra Craig, the best explanation will be necessity rather than design. I have already given some reasons for thinking necessity a good explanation, but no doubt others will give opposing reasons as to why design is better. Perhaps one reason for thinking design better is due to objections that can be raised against the necessity explanation. I now look at some of these.

[201] Wilson (manuscript) has argued for strong necessitarianism based on the many-worlds interpretation of quantum mechanics and Vetter's (2015, 276) view also seems to lead to strong necessitarianism.

[202] Note that Craig inserts 'physical' before necessity in his construction, I have removed this since I'm interested in metaphysical necessity rather than physical.

One major objection to this view will be, 'but couldn't things have been otherwise?' The first thing to say is, yes things could have been otherwise given strong necessitarianism, although perhaps not as otherwise as many would like. If we adopt a libertarian view of freedom that endorses the principle of alternative possibilities, then it seems the world could have turned out different from how it has.[203] Sure, all the laws and constants would be the same, but the choices made by free agents would produce a different world. Further, certain non-super-alien properties could have manifested: those that could arise from the set of necessarily instantiated properties.[204] Yet despite this, strong necessitarians should have no hesitation in admitting that possibilities are radically reduced on their view. However, it seems we can imagine and thereby conceive of possible worlds where the laws or constants of nature are different. What should be said in response to this?

Firstly, as the discussion over the differing metaphysics of laws of nature showed in the previous chapter, there is radical diversity amongst philosophers over what can and can't be conceived of, and hence the range of possibilities there are. For instance, Humeans thought anything could follow anything.[205] Advocates of the strong external governing approach, by contrast, thought one could have the same properties with different laws, whilst a powers view rejected both of these thoughts since a property's identity doesn't vary across possible worlds. Ultimately all these views cannot be correct, and thus the conclusion to be drawn is that we can't always conceive what we think we can.

Second, we can draw a distinction between types of conceivability as Chalmers has done, such that some things are conceivable in some respects but not others. Thus, he distinguishes between primary and secondary conceivability, so that it is possible to say 'there is a sense in

[203] Another way one might get this result would be through adopting quantum indeterminism concerning laws, which Wilson (2013, 661) takes to be the best form of strong necessitarianism. There are broadly two indeterminist pictures one might give. One is a type of multiverse, perhaps given a many worlds interpretation of quantum mechanics, which is the type of strong necessitarianism Wilson thinks best (manuscript). The other view thinks indeterminism does not give one a multiverse, but rather actuality just traces one of the many indeterminist branches that is possible. This latter view however may not be sufficient to block the fine-tuning argument, unless the argument is formed that the laws *possibly* give a life permitting universe rather than *actually* do. This is because the indeterminism of the laws might result in the non-life permitting possibilities of the laws, rather than the life permitting possibilities, being realised.

[204] Perhaps one could get further permutations by employing Vetter's (2015) degreed notion of potentialities and formalism.

[205] Although this does not include logically contradictory anythings.

which ‘Hesperus is not Phosphorus’ is conceivable, and a sense in which it is not. The first of these senses corresponds to primary conceivability, the second to secondary conceivability.’ (2002, 157) The former of these two, primary conceivability, concerns epistemic possibilities, and therefore we can say that it is primary conceivable that the laws and constants have been different, just as it is conceivable that Water is not H_2O. Nonetheless, secondary conceivability is different because it is based on the idea that we hold the character of the actual world fixed and ‘we consider and evaluate counterfactual possibilities in the subjunctive mood.’ (2002, 158) When conceiving in this way we come to see as Kripke did, that ‘there is no coherently imaginable situation, considered as counterfactual, that verifies ‘Hesperus is not Phosphorus’’ (2002, 159), and as such this possibility it is not secondarily conceivable. It is in this latter respect that powers theorist contend that the laws of nature and constants could not be conceivably different from what they are. Thus, there is still a sense in which strong necessitarians can claim the laws and constants are conceivably different, but another sense in which they are not.

Nevertheless, some still might contend that it is secondarily conceivable that the laws and constants are different. Here it will need to be pointed out that we are often mistaken over what we think is conceivable, with one reason for this reason being that isolating our conceptions in order to assess them is extremely difficult. For instance, Hume’s idea that he could imagine something coming into existence without a cause needs to be isolated from other seemingly possible scenarios, such as being teleported or transported, and doing so seems extremely difficult.[206] Alternatively, it might be the converse that trips us up, in that we fail to see things holistically enough so as to see where essential dependencies lie. Our conceptual powers also seem in some way dependent upon our knowledge, and hence contradictions once hidden become obvious. For example, perhaps we thought that we could conceive of a mechanical wave, like a sound wave, being able to travel through a vacuum, but after receiving further information we come to see a hidden contradiction between mechanical waves and vacuums. Maybe then we think we conceive of the fact that no waves can travel through a vacuum, but upon further information we find out there is some type of contradiction here too, since electromagnetic waves can.[207] Conception then, is always open

[206] See Anscombe (1981a; 1981b) for further elaboration of this thought regrading Hume.

[207] Other more metaphysical examples could no doubt be given.

to hidden contradictions coming to light at some further time. All of this is to say that our powers of conception are by no means infallible, but actually highly fallible. Wilson makes this point well, writing, 'whether it is conceivable that like charges attract depends on us, and on our conceptual apparatus. Whether the relation between properties and their powers is necessary depends not at all on us or on our conceptual apparatus, but on properties and powers themselves.' (2013, 664)[208]

This can be seen forcefully in Heil's remarks about the apparent contingency of the world. He writes, 'what is it to 'appear contingent'? What does contingency look like? … [If] all the worldly truths [were] absolutely necessary, everything would appear just as it does now. How [then] could appearances provide any sort of indication of contingency?' (2013, 171) Thus, how things actually are depends not at all on our conceptual apparatus and intuitions, since conceivability is a function of how we think. Presumably if we had a different psychological make up, or mental powers, we would conceive of things somewhat differently, and perhaps end up thinking the world less contingent than many do today. Therefore, if we wanted to find out what is truly possible, we would have to overcome the limits of our conceptual faculties, somehow transcending them, endowing ourselves with a God-like power. Clearly this isn't possible. But then the question over whether things could have been otherwise, that is whether there could have been different dispositions and hence different laws and constants, turns out to be one over whether we *ought* to believe that there could have been, the 'ought' here being the 'ought' of epistemological justification.[209] The strong necessitarian has given reasons for thinking we ought not think there could have been other laws and constants, based on dispositional properties, the principle of sufficient reason, simplicity, and modal epistemology. Those who propose design must do likewise, that is give epistemological grounds for thinking we, with conceptual powers, are correct in thinking the laws and constants of nature are contingent, rather than just assuming it.[210] Given that many

[208] Gendler and Hawthorne (2002, 6) put it like this, 'on the face of it, the idea that conceivability is a guide to metaphysical possibility is extremely problematic.'

[209] Thanks to Ralph Walker for this point.

[210] Heil makes a similar point, 'Why imagine that the idea that the laws could vary requires no defense? The fact, if it is a fact, that the laws would have been different, had things been different at the Big Bang, does not imply that the laws could have been anything at all.' (2013, 176)

acknowledge that conceivability is unreliable in assessing possibilities (Hill, 2016), this objection doesn't seem to me to be an easy knockout against strong necessitarianism.

Further, we can follow Bird and hypothesise a plausible reason as to why our powers of conception are unreliable. He writes, the 'link between imagination and possibility is explained by the adaptive benefits of such a link … [and given this we] have no reason to suppose that such a link should be reliable in delivering accurate judgements when applied to esoteric cases such as the contingency or necessity of laws.' (2004, 274 & 273-275) This suggestion seems parallel to the one Plantinga (2011, 307-350) makes in his evolutionary argument against naturalism. Plantinga solves the problem by suggesting God has made us in such a way that our faculties are aimed at truth, but for the many who don't think God exists or has done this, we might think that this provides us with a further, albeit weak reason, to think we are not reliable adjudicators of possibility through conception.

Theists should also be sympathetic to this thought, that we are not reliable adjudicators of possibility, since it is something they also emphasise. For instance, many theists think a universe consisting of sentient beings who forever suffer horribly and pointlessly against their wills is impossible. Yet as Leftow notes, this 'makes perfect sense. So it *seems* to describe a genuine possibility.' (2012a, 120) But if God necessarily exists and is necessarily omnipotent, omniscient, and perfectly good, then this is no genuine possibility, and the same will be true for countless other prima facie possibilities given God's necessary existence. Given this, many theists should have little to complain about with the strong necessitarian's insistence that conceivability isn't a reliable guide to possibility.

Another way to respond to this objection would be to adopt holism, and think everything is interdependent (Schaffer, 2010, 341-376; Williams, 2010a). This allows one to reject the thought that alternative modal possibilities can arise from free recombination (Armstrong, 1989). As Schaffer puts it, 'A disconnected pluralistic heap should be amenable to free recombination; failure of free recombination is thus the modal signature of an interconnected … cosmos.' (2010, 350) Since powers are usually thought of as interconnected and holistic,[211] holism might be seen as a natural consequence of a powers theory, and therefore this way of

[211] See note 200.

restricting the modal landscape shouldn't be seen as costly to powers theorists, but rather exactly what they should expect (Ellis, 2001, 249 & 287; Schaffer, 2010, 362-365).

One might object to strong necessitarianism on other grounds, namely that if the laws and constants are metaphysically necessary then scientific methodology of observation and experiment might seem unnecessary, with this thought to be an absurd consequence. However, the necessitarian will dispute this consequence. The reason for this is that the essences of powers which account for both the laws and constants are known *a posteriori*, and as such empirical investigation is vital to uncovering their nature. Finding out the exact nature of a power is extremely difficult, and so much experiment and observation is required in order to do this. Further, it has been argued by some that uncovering powerful properties is what modern science is most suited to do (Cartwright & Pemberton, 2013). As such, science is still required and metaphysical theorising from the armchair is insufficient.[212]

Another objection against strong necessitarianism is based upon arguing that necessity is not the type of thing that can be attached to property instantiation. One reason often given as to why God can be necessary whilst the universe not, is that God can exist in worlds where nothing physical exists, since He is incorporeal. By contrast, necessary instantiation, in my case, requires that at least some natural powerful properties are instantiated in every world. Perhaps not many properties will be required, especially if there is a reduction of current physics into something simpler. Nevertheless, it does seem that some of these properties, if they are to explain the laws and constants, must be physical and yet exist necessarily. Thus, if there are metaphysically possible worlds where there are no physical properties, then the type of properties I require to be necessary cannot be.

Unless the strong necessitarian can come up with an alternative response to this problem, they will simply have to bite the bullet, and hold that all possible worlds contain something physical.[213] Or put another way, there are no metaphysically possible non-physical worlds. However, this objection might be less worrying if we make a distinction between atheistic

[212] In addition to this most of those who advocate strong necessitarianism are philosophers who are very informed of, and interested in, accounting for scientific data and its methodology.

[213] Heil (2013, 174-176) notes that it is hard for us to imagine a world without space, yet space seems to have physical attributes, thus perhaps this bullet isn't as bad as it might first appear. Further, it might be that orthodox first-order logic, which assumes that at least one thing exists, can also come to the aid of those holding this view.

strong necessitarianism and theistic strong necessitarianism.[214] On the atheistic view, a bullet will be bitten, but on the theistic view it need not be. Before explaining why, I answer a worry some might have, namely why I am invoking God whilst at the same time critiquing an argument to His existence. One shouldn't be concerned by this since one can object to an argument to *X* even though they think *X* exists. Indeed, it might even be that because *X* exists and exists in a certain way that they need to object to the argument, with this being the case here. For the strong necessitarian theist, much like Leibniz and Spinoza, the world and its structural features are necessary due to something in the nature of God. Perhaps this something is due to His simplicity, or perfection?[215] This move should make it clear why I am not concerned by an 'opportunistic theist' availing the PSR for himself in order to argue for God's existence.[216] The reason is simple: the paper is merely questioning whether the fine-tuning argument is a good one, not whether God exists.[217] Given God, the theist can claim that there is possibly a non-physical world, but that is only because there is a possible world where God does not create.[218] If God creates, however, then what He creates will necessarily be exactly the same powerful properties that determine the laws and constants of our world.

This response is also useful in answering another objection alleged against the strong necessitarian response, namely that it might seem to provide an answer to the question behind the Leibnizian cosmological argument, 'why is there something rather than nothing?' This was not my intention, yet the fact that certain properties are necessarily instantiated might provide a reply to this argument as well. The theistic strong necessitarian can once again claim that the necessity here is conditional on God's creating, such that the fine-tuned laws and constants couldn't be different from what they are at all, but there could have been a world just with God. Hence the Leibnizian question still remains. The other response one could give, open to the atheistic or theistic view, is to distinguish between the possibility of

[214] However, combining theism with strong necessitarianism severely limits the modal powers attributable to God, such as many of those Leftow (2012a) ascribes to God in the most comprehensive study of God's relation to modality.

[215] Perhaps the most influential work on this topic is: Rowe (2004).

[216] Although non-theistic strong necessitarians might want to reject PSR-based reasoning since it might come to a theists aid. I should note that only Bird, of the strong necessitarians in the literature, argues for the view based on PSR, whilst all others think there are other independent grounds good enough to endorse the view.

[217] Della Rocca (2010) has argued quite persuasively that the PSR leads one to a theistic necessitarianism.

[218] Although this rests on a controversial assumption that God might not create, and this too has been questioned by some theists. For instance, see: Kretzmann (1988); O'Connor (2008, 111-129).

there being other possible worlds, and the possibility of there being no possible worlds. The thought here is that while it is true for strong necessitarians that in every possible world certain properties necessarily exist, there is still the possibility of nothing at all existing, where this is the possibility of there being no possible worlds. If either of these are correct then the Leibnizian question remains. Therefore, strong necessitarians would still have further work to do in replying to Leibniz.

A final concern one might raise against the necessitarian view as the best explanation is due to thinking that necessities should not be thought of as good explanation stoppers (Leftow, 2012a, 51-54). The worry here is that these necessities seem brute, and some take brute necessities to be bad (Dorr, 2004, 2008; Cameron, 2010). For instance, it is thought that asking of something that is necessary, why it couldn't have been otherwise, is not a terrible one (Jubien, 2009, 74-75). If a theistic strong necessitarian account is correct then we can see that there could be an answer as to why these laws and constants are necessary, namely because they bring about the best world and God can only bring about the best. Yet on the atheistic account there will be no further explanation as to why necessities hold, rather they are brute. However, theists who embrace the design conclusion but also object to the necessitarian response on these grounds may find themselves in a predicament. For Chalmers (2002, 189) takes it that the necessity of God's existence is a paradigm case of brute necessity, which Plantinga's (1967, 181-182) earlier comments would seem to bear out. Therefore, those theists who follow Plantinga appear to endorse brute necessities, and insofar as they find these sufficient explanation stoppers they too should find the strong necessitarian answer sufficient also to stop questions of explanation. Otherwise they will be guilty of double standards. Alternatively, some have sought to explain God's necessity, so that it isn't brute (Leftow, 2012a, 495-496).[219] These explanations, such as God is necessarily a perfect being, unfortunately don't seem applicable to necessary powers. As a result, an atheistic strong necessitarian must either deny that brute necessities are worrisome,[220] as many do, or find a way to explain their necessity further. By contrast the theistic strong necessitarian can either explain the necessity so that it is no longer brute or follow the atheistic response.

[219] However, Leftow (2017, 328-329) does think there is a sense in which God is brute, namely that God is perfect. Yet he thinks that God is less brute than naturalism.

[220] To investigate this in detail would take us too far afield into the relationship between explanation and modality.

Nevertheless, since any form of strong necessitarianism is enough to block the argument this worry can be adverted.[221]

As a result, I think the explanation of strong necessitarianism could plausibly be taken by some to be the best explanation in inference to the best explanation versions of the fine-tuning argument. I would favour the theistic version out of the two types, atheistic and theistic, but could understand why someone might favour the atheistic version, particularly if they have what they think are strong independent reasons for thinking God doesn't exist. I therefore suggest it isn't cut and dried that design is the best explanation here and that necessity, if it is a good explanation stopper, seems a viable contender, or at least one theists need to give more attention too.

5.6 - Bayesian fine-tuning arguments

The other way the fine-tuning arguments are formulated is in terms of Bayes's theorem (Collins, 2009; Hawthorne and Isaacs, 2017; 2018), where this contrasts with inference to the best explanation formulations.[222] The argument run this way can be stated as thinking that a life permitting universe, which requires fine-tuning, is more likely on theism rather than on atheism. As such, the life permitting universe confirms theism over atheism. The question for us is whether the necessitarian response is also effective in responding to this type of argument.

So to answer this question, it is vital to see that epistemic probabilities are essential for understanding the Bayesian approach, where these measure the degree of confidence we rationally should have in a proposition. This has a worrisome effect on the necessitarian response, since even if these specific laws and constants are metaphysically necessary there

[221] For other objections and replies to strong necessitarianism, see the papers where it is defended in note 189.
[222] There are many who think of these as distinct types of arguments, for instance Bartha states that there are three types of fine-tuning argument, Plantinga (2011, 222-224) agrees there are three, with the inference to the best explanation version being far more 'ambitious' than the Bayesian form (2016, 742-743). Collins also thinks that his Bayesian version of the argument is more 'limited' than an inference to best explanation form (2009, 209, 273-274). Hawthorne and Isaacs (2018) are also critical of explanation versions of the argument compared with probabilistic accounts. How exactly inference to the best explanation type arguments relate to Bayesian arguments is disputed (Henderson, 2017; Lipton, 2004, 103-120), however if one thinks Bayesian arguments are just more formal presentations of inference to best explanation arguments, the conclusion I draw in this section should be the conclusion I should have drawn in the previous section on the inference to best explanation form of the argument.

is no argument for this claim that renders it highly probable or absolutely certain. This is because metaphysical necessities do nothing to render epistemic probability claims high or certain. This is made obvious when considering identity claims. For instance, Superman is Clark Kent. Nonetheless it seems Lois Lane should assign as a low epistemic probability that Superman is Clark Kent, even though it is metaphysically necessary that Superman is Clark Kent. Given this, the mere fact that the laws and constants are metaphysically necessary does nothing to block this form of argument.

This is made clearer when we set out the argument more precisely. Hence take the argument for theism based on fine-tuning, where *T* refers to theism and *LPU* a life permitting universe, to be as follows:

$$P(T/LPU) = \frac{P(T) \times P(LPU/T)}{P(LPU)}$$

Put informally this means that the probability of theism given a life permitting universe is equal to the probability of theism multiplied by the probability of a life permitting universe given theism, divided by the probability of a life permitting universe. Here we are conditionalizing the probability of theism on the existence of a life permitting universe, since we know there is a life permitting universe as we live in one.[223] The place where the necessitarian response would come in is in trying to raise the probability of a life permitting universe, *P(LPU)*, so to diminish the ratio between a life permitting universe given theism and a life permitting universe in general, *P(LPU/T)/P(LPU)*. If it were to do this, then it would diminish the confirmation that a life permitting universe gives to theism. We can think of the general probability of a life permitting universe, *P(LPU)*, as asking what the probability of getting this evidence is in general, where this is understood as a function of all the different ways we could get this evidence. For our purposes we only need to plug in two mutually exclusive, but exhaustive ways this evidence could come about, one where strong

[223] Since we should only ever conditionalise on the most epistemic certain data, rather than mere possibilities, it is therefore highly likely that we should never conditionalise on strong necessitarianism as it will never be the most epistemically probable thing available to us in fine-tuning arguments.

necessitarianism holds and the other where it does not.[224] Thus, we can understand the probability of a life permitting universe, where *N* refers to strong necessitarianism, as follows:

$$P(LPU) = P(N) \times P(LPU/N) + P(\sim N) \times P(LPU/\sim N)$$

Put informally, the probability of a life permitting universe is equal to the probability of strong necessitarianism multiplied by the probability of a life permitting universe given strong necessitarianism, plus the probability of strong necessitarianism not holding multiplied by the probability of a life permitting universe given strong necessitarianism not holding. What needs to be the case to render the probability of a life permitting universe in general high, so to diminish the force of the fine-tuning argument, is that something in this formula makes it that the general epistemic probability of a life permitting universe is high. Since we are considering the necessitarian response we are interested in the first half of the formula. Here the necessitarian is likely to claim that *P(LPU/N)*, the probability of a life permitting universe given strong necessitarianism is very high, perhaps even 1. Nonetheless, the epistemic probability of strong necessitarianism holding seems to be extraordinarily low. As such it does nothing to boost the overall probability of a life permitting universe, *LPU*. For instance, suppose the epistemic probability of strong necessitarianism was 0.000001, then given that the probability of a life permitting universe on strong necessitarianism is 1, the overall probability of this conjunct of the equation for the general probability of a life permitting universe is 0.000001. We can see that necessitarian responses will fail similarly for other types of data too, and so this is not restricted to fine-tuning arguments. For example, suppose you come across some fingerprints at a crime scene, you might assign a certain probability for them being there in general. One reason they might be there is that the laws of nature make it necessary that this fingerprint be here. As such the probability that the fingerprint is here given these laws of nature is 1, but the epistemic probability that these laws of nature necessarily entail this fingerprint is extraordinarily low. Given all this, we can see that metaphysical necessity does nothing to block the Bayesian argument which relies upon epistemic probability. Things therefore look grim for the necessitarian on this construal.

[224] These two categories can be split into many further subtypes, but this further division does not concern us here.

What then can the strong necessitarian say in response? One thing they might say is that once we see the world is as they claim, then Bayesian reasoning is undercut by necessitarianism, since the objective chance of the laws and constants being as they are is in fact 1. This may well be epistemically surprising, but any surprise we feel should lapse. Responding to this, one might think this a big cost to pay given how prevalent Bayesian reasoning is. However, the main problem with this response is that it just doesn't seem possible that we could know with anything close to certainty that strong necessitarianism holds. As a result, the response doesn't even get going.

Another route the strong necessitarian might try is claiming that Bayesian reasoning is problematic and so shouldn't be adopted.[225] Whilst some no doubt think this way, it is fair to say that it is a minority view and as such will be thoroughly unconvincing for most. Finally, perhaps the last hold-out for the strong necessitarian is if there are other devastating criticisms particular to the Bayesian formulation of the fine-tuning argument that do not plague the best explanation style argument.[226] If there are then the Bayesian version will need to be dropped for the best explanation formulation. The difficulty here is that the concerns which might be brought to bear against the Bayesian version seem also to potentially frustrate the inference to best explanation formulation as well. As such the strong necessitarian response doesn't seem to hold up well against Bayesian style fine-tuning arguments. At the most, it would seem to provide some reason for increasing our credence's that the laws and constants are necessary. Yet it doesn't increase these nearly enough for it to be problematic. We might therefore suggest that given strong necessitarianism is impotent against the fine-tuning argument formulated in Bayesian terms we have another reason, along with Hawthorne and Isaac's criticisms, to prefer this style of argument over the inference to the best explanation version.

To conclude this section, suppose we somehow came to know that the laws and constants of the universe are as the strong necessitarian supposes. As a result, the epistemic probability of this would be 1, and as Collins writes 'epistemic probabilities are only useful in conditions of ignorance' (2005, 389) and hence applicable no more since we know the world to be as the

[225] For some potential issues see: Easwaran (2011).

[226] For instance: Plantinga (2011, 219-224); Manson (2000); McGrew, McGrew, & Vestrup (2003); McGrew, & McGrew (2005).

strong necessitarian claims. Still, we might be able to run an argument for theism based on this by asking whether it is likelier on theism than on atheism that there are necessary life permitting laws and constants. I suggest it would be likelier on theism than on atheism, perhaps for some reasons mentioned above regarding God's perfection, and hence strong necessitarianism of laws and constants confirms theism over atheism.[227] The argument will be much weaker than the fine-tuning argument, but it is an argument to theism nonetheless.

5.7 - Summary

The aim of this chapter was to show how the powers view of laws, with a few additional assumptions, can provide an alternative way to block the fine-tuning argument. The strong necessitarian's response is simple – there couldn't have been any other laws or constants, since the laws and constants are metaphysically necessary, and the fine-tuning argument requires that they are contingent. Yet the efficacy of this response, as we have seen, depends upon the way the fine-tuning argument is formulated. If given in terms of inference to the best explanation I claim the response could be potent to some. Yet when given to a Bayesian formulation of the argument the response seems impotent. As such I suggest those formulating fine-tuning arguments should do so in terms of Bayesian reasoning so as to avoid the difficulties of the necessitarian response. Given that this response to the fine-tuning argument can be overcome, it seems that theists need not be worried about the powers account of laws, since they can hold this view and also run fine-tuning arguments. Given this, I stand by what I said in the previous chapter, namely that theists should opt for a powers view of laws of nature.

We now turn to another reason for theists adopting an ontology of powers, in that I suggest it can provide the resources to overcome the Euthyphro objection to theistic meta-ethics. Whilst there have been elements which will have been of interest to the non-theistic power theorist in this and the previous chapter, I suspect that they will find the following two of most interest given that powers haven't, as of yet, been employed much in debates regarding axiology. I aim to show how they can be.

[227] Or in terms of inference to the best explanation: the best explanation of the necessity of the laws and constants is God.

Chapter 6 - A Powers Inspired way through Euthyphro

In this chapter I want to look at a perennial argument used against theistic ethics, the Euthyphro dilemma. For instance, Wielenberg writes that he has 'yet to encounter a discussion of the relationship between God and ethics that does not at least allude to the Platonic dialogue *Euthyphro*' (2005, 65), and that 'everyone recognizes that criticism of theistic approaches of morality begins with Euthyphro.' (2013, 95) How devastating this argument is, is hotly debated, but for some it is definitive, with Pigliucci, for instance claiming that 'the most convincing reason why gods cannot possibly have anything to do with morality was presented 24 centuries ago by Plato, in the … *Euthyphro* dialogue' (2013, 150). Whilst Antony asserts that 'the Euthyphro dilemma cannot be solved.' (2020, 68) As such the dilemma is evidently thought by some to be devastating to theistic meta-ethics and therefore is one that needs answering by those wishing to defend such a view. I'm going to suggest, in this chapter, that by thinking about the parallels as to how God creates laws of nature and how He creates goods, we can find a way through this dilemma. Special focus here will be on what we can learn from the powers view of laws, since it is the parallel, which hasn't been explored within contemporary debates, that I shall suggest provides the key to defusing the dilemma. I will then assume this moral theory, neo-Aristotelian goodness, which has been defended by many theorists and then explore how this moral theory provides an answer to the dilemma.[228] I also claim that this type of response can be spelled out in terms of powers alone, showing how powers can be employed within meta-ethical/axiological reasoning, something that hasn't been done within the literature. However, this will deserve a chapter of its own, and therefore I will discuss this in the following chapter. As such, this chapter will finish by responding to a number of objections which could be given against the type of response I am proposing. Before doing this, it is important we get clear on the dilemma and responses that have been given to it.

6.1 - The Euthyphro Dilemma

The dilemma, which appeared in the work of Plato, asked 'Is the pious loved by the gods because it is pious, or is it pious because it is loved by the gods?' Within contemporary work

[228] For some recent defences see: Alexander (2012), Oderberg (forthcoming), Almotahri and Hosein (2015).

on the issue the dilemma has been reformulated in three ways. First, it has been reformulated so to reflect the present-day prevalence of western monotheism, and therefore asks the same question but in terms of one God rather than a multitude. Second, whilst the original dilemma was interested in what the gods love, present day formulations are interested as to what God wills (Chappell, 2011, 63-67). Third and finally, the contemporary dilemma is posed in terms of 'the right' or 'the good' rather than piety. Given this, there are different formulations of the dilemma. For instance, some ask whether God commands an action because it is right/obligatory or whether the action is right/obligatory because God commands it (Millken, 2009, 150; Brink, 2007, 151; Quinn, 2006, 73-74; Grayling, 2013, 51; Wielenberg, 2013, 95; Swinburne, 1977, 203; Kurtz, 2009, 194; Mackie, 1982, 114-115; Ruse, 2015, 164; Smith, 2015, 308; Wierenga, 1989, 213-215) Others instead ask, whether God commands an action because it is good or whether the action is good because God commands it (Antony, 2009, 71-72; Davies, 2004, 273; Stump, 2010, 304; Copan, 2013, 92; Ward, 2013, 104; Craig, 2008, 181; Harris, 2011, 14). Finally, there are those not content with asking just one of the dilemmas and instead ask both (Oppy, 2006, 354, n.6; Zagzebski, 2005, 359; Mann, 2015, 316). The dilemma for theists is that if they take the first horn then what is right/obligatory or good is no longer dependent of God, being something independent of Him and a standard He must reach. By contrast if they take the other horn, God does create what is right/obligatory or good but it now seems as though the rightness/obligatoriness or goodness of an action is arbitrarily determined by God's will. Neither horn is one theists want to take and therefore theists have attempted to respond to the argument.

I suggest for the purpose of this chapter it will be helpful to think of the dilemma in two ways. The first way asks us to focus on individual acts, such that we ask if an act is right/obligatory or good and what it is that determines it as such. For instance, is it due to something outside or God that determined obligatory or good, or was it God Himself that determined it be so. Thinking about the dilemma this way isn't unusual since it is often put in terms of individual acts (Sinnott-Armstrong, 2009, 108; Wielenberg, 2013, 95). The theist then is supposed to choose between one horn of the dilemma which says that the reason the act is evil is because there is something outside of God which determines it to be so, or the other horn, that God arbitrarily decides the act to be evil. I want to suggest a way through this dilemma which says that the goods and evils of an act or being aren't arbitrarily decided by God, where this will

be based on a neo-Aristotelian understanding of goodness, whilst also not saying that there was something 'outside' of God which determined that this was so.

Nevertheless, this leads us to the second way I think it will be helpful to think about the dilemma in this chapter, namely whether there were any normative or axiological facts that guided God's action. For instance, one can ask of my account, why did God create the beings He did and thereby the goods and evils He did. Was this arbitrary or determined by something outside of God. As I said above, in terms of specific acts I wish to say that there were no normative facts outside God which compelled Him as to whether an act was good or bad for a creature and also that this choice was not arbitrary. This will be because I say the definitional essence of a being determines these things. Yet I cannot give this answer to the second question, namely why did God choose to create these beings, and did normative facts external to Him guide His action or was it arbitrary? I will comment on how I wish to answer this later in the chapter.

Perhaps one may wish to think of the Euthyphro dilemma just as asking this latter question, namely as to whether there is any point for God in which He is compelled by normative aspects outside of Himself or whether these were arbitrarily willed by Himself. If that is one's view then how I answer the second question will be more important than how I answer the first, but I take it that by setting it out the problem in these two ways, one will be able to see more clearly the differing components of the reply to the Euthyphro dilemma that I wish to give.[229]

6.2 - Theistic responses

One of the main strategies to overcome the dilemma has been to draw a distinction between rightness and goodness, deontology and axiology (Evans, 2013, 26, Baggett & Walls, 2011, 47; Millken, 2009, 151-152). With this distinction one can claim that some actions are good and valuable yet are not obligatory. For example, it would be good for me to become a philosopher, but it's by no means obligatory for me to do so. In fact, there could be instances where it is obligatory that I don't become a philosopher at that time, perhaps due to certain circumstances that this would lead to. With this distinction between rightness and goodness, one form of the Euthyphro dilemma can be answered, namely whether God commands an

[229] Given that clarity is a key virtue for philosophy this should be acceptable.

action because it is right/obligatory or whether the action is right/obligatory because God commands it. The way this is done is by claiming that God is good, in virtue of some conception of goodness, and that He couldn't command something presently atrocious to be obligatory due to His goodness.[230] That is, God's goodness puts on a constraint as to what He can command.

What should we think about this response? One thing we might worry about is the relation between rightness and goodness. A worry here is that if we make the two too distinct then why think that God's goodness will constrain what He obligates. For given their distinctiveness, why cannot He create a good to be wrong, or an evil to be right? Perhaps the thought is that God cannot do so, since it would be inconsistent for God to make an evil act right, or a good act wrong. But the question is, why is this wrong? There must be some sort of relation between goodness and rightness in order for this to be so.

This brings us to the second worry, namely the closeness of rightness and goodness. This is the opposite worry to the former, since now the concern is that if rightness and goodness are very closely related are they actually distinct enough for the reply to the Euthyphro dilemma to work. For instance, perhaps it wouldn't be good for me to give all my money to the poor but only to give some of it to the poor, since if I gave all my money to the poor, the goods of my family would be compromised, as too may the good of my health, etc. Yet it is because of this that it seems wrong to give all my money to the poor since it produces many evils. The thought then is that perhaps it is possible to work out from specific goods and evils alone what is right and wrong. Some, such as Oderberg (2000a, 53-63) and Feser (2015, 331-348), seem to support this contention by attempting to deduce rights from facts about good and evil alone.

Yet this still seems sufficient to defuse the dilemma, since even if rightness and wrongness is dependent on goodness they are still distinct, and as such the theistic answer to the dilemma given above goes through. After all, no one, even given the dependence of goodness to rightness, just thinks goodness is rightness. Further, it would seem God could still be required to distinguish some acts as right or wrong. For suppose there are two acts which produce the

[230] Evans (2013, 54) thinks divine command theory deals with rightness, but presupposes a distinct theory of goodness.

same amounts of goods and evils. Yet God could still wish to determine one was right and the other wrong due to some preference that He has. As such, this doesn't seem a strong objection to the response to the Euthyphro dilemma.

My main cause of concern here is that it doesn't answer the dilemma which I think is most pressing, namely the dilemma formulated in terms of goodness. I take it that this is a more fundamental form of the Euthyphro dilemma. It seems that some theists, for instance Evans, who make a distinction between right/obligations and goods also agree with this, as he writes, 'Even apart from God's command, stealing would then be bad and humans would have reasons not to steal.' (2013, 35) As such goodness is more fundamental, and therefore a dilemma formulated in these terms is more pressing. Asking the question in this way means that the typical response to the dilemma, which I gave above, is blocked. As such I will seek to answer the dilemma in terms of goodness (the domain of axiology) rather than in terms of rights/obligations (the domain of deontology), since unless one can come up with a sufficient reason why this dilemma cannot be asked it seems the more fundamental and most pressing.[231]

This type of dilemma has not really been addressed by theists, with most focusing on the dilemma concerning rights/obligations. In order to see how I will answer the Euthyphro dilemma it is helpful to remind ourselves as to how God creates the laws of nature, which I discussed earlier in chapter four. The reason for this is that it will enable us to see what the parallel moves are and which avenue we need to take.

6.3 - God and laws of nature

I suggest there are parallels between God's creation of laws of nature and God's creation of goodness. That there is some type of parallel between laws of nature, moral laws and God is not a view held only by myself, since this has also been explored by Murphy (2011, 14-44), although there are substantial differences between us.[232] For instance, Murphy (2011, 33-34) purposefully places the powers view within the camp of the strong external governing

[231] If one thinks that you can derive rights from goods, then my response alone will answer both types of Euthyphro dilemma. However, since this is highly controversial, I shall instead just aim at answering the more fundamental Euthyphro dilemma which asks the axiological question.

[232] Additionally, Murphy does not speak at all of the Euthyphro dilemma within his discussion.

position. This is a mistake. After all they are strongly distinguished within the laws of nature literature. Here are two other quick reasons for thinking that they should be treated as distinct positions. First, the strong external governing view and the powers view require distinct ontologies. Second, some within the powers literature, e.g. Mumford (2004), think that powers eliminate laws, but it is hard to make sense as to how this would be possible on the strong external governing view. Given this I treat them as distinct positions, and as such can draw more parallels than Murphy does. To see these parallels, it will help to very briefly recap what I said in chapter four concerning laws of nature.

On the Humean view of laws, which I think of as anti-realist, there are no connections in nature and laws are just descriptions as to what usually happens. On a second view, which I didn't discuss earlier, we could think of laws as necessary connections between Platonic properties/forms. I call this the Necessary Platonic view. This differs from the Platonic version of the strong governing view since the necessity that holds between the forms here is metaphysical necessity rather than nomic necessity, and therefore God does not have to do anything to determine what the laws are. On this picture laws are necessary and eternal and not governed by God, and all God needs to do for these laws to be seen is create categorical properties for them to govern. On the strong external governing view God creates the categorical properties and decides what type of laws govern the world by connecting universals/tropes together with a nomic necessity. As we saw earlier this allows God to create the same properties in different worlds, but with different laws governing them. This is something the final view, the powers position, doesn't allow. On this picture God creates powerful properties and in virtue of this gets laws of nature, since powers are essentially causal. God on this view can still determine which laws He gets, assuming strong necessitarianism is false, as He can decide which properties are instantiated.

On each view, God needs to do something different to get laws of nature, with God needing to do more on some pictures rather than others. On the Humean, Platonic and Powers view all God has to do is create categorical properties or powers and everything else is taken care of either by the contingent regularities or the necessary and eternal laws or by the powers themselves. By contrast on the strong governing view God has the most to do since He must create both the laws and the categorical properties which they govern. However, you might

be asking yourself what relevance does this have to axiology and how God creates goodness? It is to this we now turn.

6.4 - How God creates goods

Take the anti-realist Humean view to begin with regarding physical laws. The parallel I want to draw here is with anti-realist axiological theories. On these types of views God doesn't create anything in order to make something good, rather we determine what the goods are. Hence, just as there is no governance on the Humean view of laws, in this parallel there is no governance within the axiological realm either. All God needs to do is create non-modal/non-axiological properties and let agents determine what goodness is. On this type of anti-realist view the Euthyphro dilemma doesn't have any bite against the theist, since there is nothing objectively good or bad at all. Nevertheless, there are other problems for the theist here, such as what it means to say that God is good, particularly given that goodness here is dependent on what a group of humans subjectively determine this to be. Given this, and since theists are typically objectivists about goodness, we can reject this theory.

I take it that the necessary Platonic view of laws can be paralleled with a Platonic view of goodness.[233] Just as on the laws of nature version, where the laws exist eternally and necessarily apart from God, on the ethical version, there is something which determines what is good which exists eternally and necessarily whilst also being distinct from God. On this view, unlike the former, we have God needing to create categorical properties which are *governed* by these axiological laws which determine goodness.[234] In terms of the Euthyphro dilemma, this type of response takes the horn of the dilemma that concedes that there is a standard of goodness with which God must act in accordance. As I've already said within this thesis, this type of response will be rejected by many due to their worries of Platonism conflicting with God's aseity. Given this I suggest we should also reject this option, although it could perhaps be embraced as a last resort if all other views fail.

The strong external governing view of laws, I suggest parallels one taking the other horn of the dilemma, where God can determine what goodness is. As such it seems to parallel a divine

[233] Perhaps something similar to Wielenberg's 'Non-Natural, Non-Theistic Moral Realism' (2009).

[234] There might still be a sense in which God creates worldly goodness, since He still needs to decide which Platonic properties have worldly realisations.

command theory. Just as in the physical laws case, God can choose how different categorical properties are governed by strong external governing laws, such that in one world they obey some and in another world they obey others, something parallel happens within the axiological realm. That is, whilst in this world God has made certain axiological laws govern certain things, He could have made the same things and different axiological laws to govern them. On this type of picture God creates in two steps, where He either creates the axiological laws first and then what they are to govern second, or vice versa, where this again parallels the laws of nature case.

With all this said, we have one position within the laws of nature debate yet to be paralleled, namely that of the powerful laws view. The view that I want to parallel this with in the axiological debate, is what I will call the Neo-Aristotelian view of goodness, where this has been employed by both virtue ethicists and traditional natural law theorists.[235] On this view, just as it was internal to powers, i.e. part of its essence, what they did, and hence these provided governance to nature, this view holds that it is part of the nature of things what their good is. On this type of view, the good of the thing in question is its end, or what helps it achieve its fully flourished state.[236] I will have more to say about this, but for now it is important to note that on both the laws of nature and axiological laws parallel God creates in one step, since His creating powerful properties simultaneously and derivatively brings about laws, and His creating the nature of things with ends automatically determines what goods are. Likewise, whereas God cannot create the same powers and different laws, God cannot create the same natures with different goods since I take it that natures have an essence which cannot change.[237] As such God can only get different laws of nature if He creates different powers, and different goods if He creates different natures. I will have more to say about this shortly, but for the moment this should be sufficient.

With all this said here is another table, similar to the one I made concerning how God makes laws of nature, as to how He creates goodness.

[235] I use this qualification so to distinguish it from 'new' natural law theorists such as Grisez (1996), Finnis (2011), and George (1999).

[236] There are some more complexities to this which I will speak about more later in this chapter.

[237] Or at least essential aspects, where it is this which makes them identical across possible worlds.

Conception of moral goods	Are laws ontologically distinct from properties?	Items in ontology	Steps God performs to create	Governing internal/external to properties
Anti-Realist	No	1 entity (Categorical properties)	1 step – God creates the properties and we subjectively determine goodness	No governing role
Necessary Platonic	Yes	2 entities (Categorical properties and goods)	1 step – God creates properties since the goods are eternal existents	External
Strong External Governing views (Divine Command Theory)	Yes	2 entities (Categorical properties and goods)	2 steps – God creates goods and then properties or vice versa	External
Powers (Neo-Aristotelian Goodness)	No	1 entity (Natures)	1 step – God creates natures and goods are ipso facto instantiated	Internal

Before exploring my proposal further, I want to say some more about the strong external governing law parallel, divine command ethics, since it is the theory that has gained the most attention within the literature and to further emphasise how it is distinct from the powers/Neo-Aristotelian goodness view, contra Murphy (2011, 33-34).

6.5 - Divine command theory

As I noted, there have been a number of people who opt for this type of response to the Euthyphro dilemma, particularly in terms of rights/obligations, and it can also be thought about regarding how God grounds goodness. In its simplest form it says that goodness is determined by God's will.[238] This is much like the strong external governing view of laws

[238] This isn't to say it has to be grounded in God's will, as some have argued, it should instead be grounded in His intentions, desires, emotions, or attitudes (Murphy, 1998; Quinn, 2001; Miller, 2009a; Zagzebski, 2004; Jordan, 2013). I take it that nothing in what I go on to say would be changed if one substituted one of these for God's will.

where what the laws of nature are that govern things are also determined by God's will. Further, a reason to accept this type of axiological view parallels a reason to accept the strong external governing view of laws, namely that it magnifies God's power, with this seeming to be a reason why Ockham (*On the Four Books of the Sentences* II, q.19) and Scotus (*The Oxford Commentary on the Four Books of the Sentences* III, 58) adopted this meta-ethical view. However, this is also where the arbitrariness charge can rear its head, and whilst this might not have been a worry when thinking about laws of nature, it is one we should take seriously within the moral realm.

The reason this charge can be raised is due to the parallel with the strong external governing view where just as God can create the same things and different laws of nature to govern them, He can create the same things and have different moral laws govern them. But given that God can do this, it seems as though it might be arbitrary as to which axiological laws He creates to govern, just as it might be arbitrary within the natural realm which laws of nature govern the world. Further, on the strong governing conceptions of laws we require something to hold the identity of a property fixed so that we could thereby change the causal role of that property. On divine command theory we require something similar, such that we hold the act fixed whilst changing its moral status. In both cases, something must play the role of the 'quiddity' such that the identity of a property or act can stay fixed and yet its causal role or moral status be able to vary.

In the laws of nature case we saw that this role was played by a quiddity, and in the moral case we could also have a quiddity play that role. Nevertheless, we don't necessarily need a quiddity to play this role within the moral realm, since we could say instead that the role of the quiddity is played by the non-moral properties of a particular act. As such it is these non-moral properties that keep fixed the identity of the act across possible worlds, whilst its moral status may vary. Thus on divine command we are able to say that it is possible that in one possible world God could will it that the being or act X had the axiological property of goodness, but in another possible world the very same being or act X had the axiological property of badness. Given this, the axiological property of a being or act isn't essential to the act or being, since if it was then God couldn't will that it be graced with differing axiological properties. What is key here is that the identity of the being or act cannot be linked with its axiological properties since they can vary across possible worlds, just as the causal role could

vary within possible worlds on the strong external governing law account of laws. Yet it is due to divorcing the moral aspect from the essence of an act or being that the charge of arbitrariness can rear its head.

The parallel between the two accounts is further strengthened by the parallel of some type of *sui generis* necessity that is required. Within the laws of nature this was nomic necessity, but within the axiological realm it is what Murphy calls moral necessitation (2011, 35-37). This then is the necessity that holds in a world, but not one that holds across worlds. As such it seems there are innumerably many things that God could link up with the moral necessitation relation, which again leads to the arbitrariness worry. Perhaps one might claim that God cannot link anything up this way, but regardless as to whether or not this is right, there seems numerous things He could link up if He so wished. Additionally, it looks possible, assuming haecceities, that God could make the goods of one being, say a specific human, different from those of another specific human, since He could link these distinct goods to different quiddities by moral necessitation. I take this to be a concerning consequence of the view, and again think it stems from divorcing what goods are from the nature of the thing to which the goods apply to. This is something that a Neo-Aristotelian theory of goodness resists, and it is through this resistance that I think another response to the Euthyphro dilemma opens up. Before turning to this let me briefly mention one further worry with divine command ethics regarding goodness, which may give us further reason to seek an alternative approach.

This worry relates to what we mean when we claim that God is essentially good. Given a divine command theory of goodness, all it would mean to say that God is good is to say something like God does whatever He commands. Koons argues that this saddles defenders of divine command theory 'with a notion of divine goodness that is empty of content.' (2012, 188) Divine command theorists have responded to this by claiming that by calling God good we should say that what is meant is merely 'a favourable emotional attitude towards God' (2004, 311; Adams, 1987, 113-116). This seems to me to be a response that many will find insufficient and as such it gives us further reason to look elsewhere for understanding how God creates goods. The view I will go on to give relies upon a neo-Aristotelian view of goodness, which I shall assume for the remaining of the chapter so to explore how it will provide an answer to the dilemma. I now turn to explicating this theory of goodness in more detail.

6.6 - Neo-Aristotelian goodness

There are several theories of goodness that people have proposed within the literature but I shall assume a theory that has been called a Neo-Aristotelian account of goodness (Chrisman, 2017, 65-71; Hursthouse, 2013) so to explore how it can respond to the dilemma. It should be noted from the outset that I have no intention of arguing for this type of theory, something many have done elsewhere.[239] The view is typically taken to be a naturalist meta-ethic of the good (Chrisman, 2017, 65-66; Harman, 2012, 12), although this has been questioned (Hursthouse, 2013, 3571). In any case I take this to be a widely held theory, although there are subtleties among those who advocate this view.[240] Nevertheless, there is a broad agreement amongst most of its theorists about the basics of such a view, where this is what will concern us here.

The name of the theory makes it clear that the view is inspired by the thought of Aristotle. He writes in his *Nicomachean Ethics*, 'Every art and every enquiry, and similarly every action and pursuit, is thought to aim at some good; and for this reason the good has rightly been declared to be that at which all things aim.' (*Nicomachean Ethics* Book 1, Part 1) Given this it has been argued that 'there is no such thing as being just good or bad, there is only being a good or bad so-and-so.' (Geach, 1956, 33) That is good and bad are made only in reference to specific ends or functions of things, and therefore what is good for *X* may not be good for *Y*. Teichmann for instance writes, 'In 'a good F', the concept 'F' will involve some sort of goal, or function, or role, or characteristic mode; hence being a good doctor, or a good parent, or a good neighbour, is a matter of doing what can reasonably be expected of a person with that goal, or function, or role, or characteristic mode.' (2011, 89) Given this goodness, or flourishing, on this type of account is often described as that which fulfils a being's natural functions or natural ends.

With this in mind we can distinguish between different senses of good. The first is the predicative account of good, where this claims that something is good simpliciter, X is good. The next is the attributive account of good, which says that something is a good X. We also have a sense of goodness where something is good for X, what I shall call the relational

[239] For some recent defences see: Alexander (2012), Oderberg (forthcoming), Almotahri and Hosein (2015).

[240] As I've said previously, I take those who hold to an Aristotelian virtue ethics or a traditional natural law theory will think about goodness in this way.

account of goodness. Finally, we have another type of goodness which claims that something is good in virtue of X, what I'll call derivative goodness. It seems to me that one could think all types of these goodness's exist, however many Neo-Aristotelians deny that there is a predicative type of goodness (Kraut, 2011), and so since I am assuming their thought, I shall follow suit. As such I shall only be interested in the latter three types of goodness, attributive, relational, and derivative, and primarily interested in the first of these three.

I take the relational and derivative type of goodness to be in some way dependent on the attributive type of goodness. The reason for this is that I hold that something is relationally good when it helps some X achieve its end, where achieving its end is thought of as satisfying the attributive type of goodness. Similarly, something is derivatively good on this view when that X helps it to achieve its final end or function. Note here that when I speak of function, end, or nature, these are not meant to be taken as statistical concepts, but rather are inherently normative.[241] Additionally these concepts are teleological, in that there is an end point or goal to these functions or ends. Note further that here I do not mean to adopt an evolutionary account of function or teleology. To those who worry about this, I have a number of things to say in response. First, since I'm assuming the truth of a Neo-Aristotelian theory of goodness I might not even need to defend this. Second, one could claim that function within this theory is being used in a different way from how biologists use it, and therefore it doesn't compete with the evolutionary use of function (Hacker-Wright, 2013, 123-124). Further, given that pluralistic theories are pretty popular in a number of areas in philosophy today (Edwards, 2018; Godfrey-Smith, 2010; Jaworski, 2011, 290-296), this alone may be a sufficient reply. Finally, one could just argue against an evolutionary account of function by showing it to be insufficient (Pruss, 2013, 104-105, 426-427, n.10; Plantinga, 1993, 194-215; Rea, 2002, 108-127), and then adopt a different compatible account. This should be enough to reply to worries regarding the use of function, and I will have more to say about teleology later.

Given this account of goodness one should note that goods are not limited to persons,[242] for as Chappell states, 'goods are not, or not essentially, aspects of human flourishing. What they are essentially is this: they are the ideal standards that apply in the different normative

[241] For some discussion of the use of 'nature' within these kinds of theories see: Oderberg (2005).

[242] Linking *goodness* with *being* makes it easier to see how different types of substances can be called *good*, for attempts see: Feser (2014b); Oderberg (2014b); MacDonald (1991).

dimensions. Things can be worse or better in ever so many different ways; and the variety of goods corresponds to that variety.' (2004, 108) As such this theory of goodness is expansive and can cover many different domains.

All of this may seem a little abstract and so an example will help flesh this out further. A plant that is fully grown and strong is a good plant since it has fulfilled its nature, and therefore we can say that it is attributively good insofar as it is fully grown and strong.[243] Things are good for the plant, its relational goods, insofar as they help the plant grow and flourish, such as water, light, air, etc. Without these the plant would wither and die, which clearly would not be good for it. On the typical neo-Aristotelian view this is because things, such as this plant, have natures and these determine what the end or flourishing of the object is and what it is that enables this object to fulfil this end. Let me also add that these natures have essential aspects to them, and as such many think this position holds to a position that requires object essentialism.[244] I'm happy to allow this, and so when I speak of natures one can interpret me as meaning what others mean by object essentialism. Note however, that the essentialism I mean to assume here is not the modal essentialism of Kripke (1980) and Putnam (1973; 1975), but rather the definitional essentialism of Fine (1994), Lowe (2018) and Oderberg (2001).

6.7 - How does this help?

With this said we can see how a neo-Aristotelian view of goodness will parallel the power's view of laws of nature and then also why it helps with the Euthyphro dilemma. Starting with the former, notice that on this type of view of goodness the nature of a thing determines what it is to be a good X and what is good for X, since the nature determines a thing's natural appetites and end. This means that one cannot make two identical natures with different end points or appetites. If one did, then we would just have two different natures not one type with two instances. As such, every world in which the same type of nature is instantiated it will have the same goods. Not even God can change this, since it is inherent and essential to the nature itself. This is just like the powers view of laws, where God cannot create the same powers but get different laws, since the lawhood of a power is just built into its nature/essence. Additionally, just as on the powers view of laws, God does not have to create

[243] I suspect there are many other things the plant will need to be, but I will let the plant biologists fill this out.
[244] One can also interpret this as there being a 'natural kind' essentialism.

multiple things in order to determine the goods of the world, rather all God needs to do is create natures since they by themselves contain all that is needed to determine the world's goods.[245]

With this in hand we now turn to exploring how this may help answering the Euthyphro dilemma. It will be remembered that above I distinguished two different ways of asking the dilemma, one related to specific acts and another as to whether God is ever guided by axiological properties. I speak to each in turn.

On the first way of thinking about the dilemma we want to know whether the way God determines the axiological properties of beings or actions is arbitrarily dependent on His commanding a certain thing or dependent on something external to God. On divine command theory, just as on the strong governing conception of laws, God could create the same things within the world and yet arbitrarily determine what was good and evil for them. Yet on the neo-Aristotelian view of goodness I have just explicated this isn't possible. When God creates a world of things with natures, the goods of the world are set by the natures God instantiates and as such not even God is able to change them. Thus, whilst on the divine command theory we could ask whether God could have made it the case that something which was bad for some X in this world would be good for that same X in another world and would typically have to give the answer yes and find a way to show that this was unproblematic, on the neo-Aristotelian view the answer is no. God could never make it the case that this same X has different axiological properties in different worlds, since the axiological properties of a thing are set by its nature, something even God can't change. Thus, the arbitrariness worry as to whether God could have made anything good or bad for any specific being or act X is bypassed. As such on my view the prohibition to not to murder is not arbitrary since the reason it is evil is because it goes against human nature and hence prevents our flourishing.

This type of response, however, looks like we have taken the horn of the dilemma where axiology is external to God and constrains His action. It appears this way since on the view I have given the goodness of some being or act seems to be determined by something external to God, namely the being or act's definitional essence. I am unsure whether we actually have taken this horn of the dilemma, and whether we have or not seems dependent upon how the

[245] See previous chapter for more on this.

natures of beings or acts relate to God. For on some views as to how natures relate to God they do not seem to be external to Him.

One option that would make the natures of creatures external to God would be to embrace something like a purely Platonic view of them, such that they exist as independent eternally existing abstract objects. If this were the only option then it would seem that the axiological properties, which are essential to these platonic objects, are external to God. Yet there are other options we can take so that we can say that the definitional natures are not independent of God, as on the Platonist picture.

Take for instance the traditional view as to how God relates to these types of abstract definitional natures, namely conceptualism, which holds that these natures 'are necessarily existing, uncreated divine ideas that are distinct from God and dependent on God.' (Welty, 2014, 81) Given this they 'exist eternally in the infinite divine intellect, as the archetypes according to which God creates the world.' (Feser, 2010, 146; 2017, 87-116) This is what Leftow has called a 'deity theory' where, 'God's nature makes necessary truths true or gives rise to their truthmakers' (Leftow, 2014, 435). On this option, it isn't clear to me that we have taken the horn of the dilemma where axiological properties are external to God, since the definitional natures which contain these properties are internal to God's mind, and only have their existence in virtue of being God's thoughts. However, some object to this type of view (Leftow, 2012), and as such one could opt for a different type of view instead.[246]

Having spoken to the first way of thinking about the Euthyphro dilemma I now turn to the second way, which asks whether God's decisions are ever guided by axiological properties. This is a good question to ask my account since it does seem that the view leaves us with an arbitrariness of sorts. For we could ask if God could have made a world where there were different goods and evils. To this the answer would have to be yes, God could have done so. But note that the only way God could have done this would be by creating different natures. Thus, the arbitrariness worry would be as to why God chose to create the specific natures that He did create, and hence instantiate the goods and evils which these natures bring with

[246] For instance, one could adopt the view of modal truth's that Leftow puts forward (2012; 2014) or adopt a number of different proposals as to how God relates to abstract objects, which would allow a reply to this worry. For a good overview of the different positions see Craig (2016; 2017)

them.[247] This seems to me a different question from the first way of thinking about the Euthyphro.

Before providing an answer to this way of thinking about the dilemma let me further note how this answer above is unlike the Platonic view, which is associated with the horn where axiological properties are external to God. On the Platonic view the goods of the world are set and cannot be other than they are. Yet as we have seen, on the view I am giving here this isn't the case, since the goods of the world are dependent upon what God wills. For if God wills a certain group of natures, Y, then the goods of the world would be X. Yet if God willed a group of natures P, the goods of the world would be Q. God can thus bring about different goods across possible worlds, unlike on the Platonist view. Yet unlike the divine command theory view He cannot do so by willing a group of natures Y have the goods Q, as in divine command theory. I turn now to providing an answer to this alternative way of thinking about the dilemma.

Here is one way we might set up the latter dilemma, world X has natures Y such that the overall goodness of the world is Z, whilst world P has natures Q and an overall goodness of the world which is R. How does God choose which world to create? One thing we need to remember when asking this question is that the Aristotelian view doesn't allow that there is a type of absolute goodness, predicative goodness, which we can rank the worlds so work out which world is preferable. Instead what we can ask for a ranking which is determined by the attributive goodness of a world, where this goodness is made in reference to specific ends or functions of things. Yet the function of a world is largely, if not wholly, dependent upon the God and His purpose for it as creator of it.[248] Yet what this purpose is is very difficult to say and will likely be given different answers from different religions. Further, God's purpose for the world is likely to be very complex, which although is something He can grasp, given His omniscience, is something that we cannot given our finite intellects. It therefore seems very difficult for us to grasp the purpose of God and therefore provide an ordering of worlds based on their attributive goodness.

[247] Some of these goods and evils will only be possibly instantiated, since it will require the objects/beings to do certain things such that the goods and evils actually occur.

[248] One may think of it as analogous as to how we humans determine what the attributive goods are of artefacts we create.

Having said that, let us make an educated guess that something like hell world, where all people experience permanent suffering and never are redeemed and end up in hell is a world worse than a world where people experience a world with goods and evils and some go to heaven. Why should God think the latter is preferable to the former? Here is one suggestion. Typically, God is thought to be a perfect being and given this is perfectly good. In virtue of this God is also taken to be perfectly loving, since love is a good thing. You might also be partial to account of love given by Aquinas defended and employed recently by Stump (2010, 85-107) and Pruss (2013, 8-48). On this account 'the nature of love, love requires two interconnected desires: (1) the desire for the good of the beloved, and (2) the desire for union with the beloved.' (Stump, 2010, 91) As God is perfectly loving He will have these desires. Further, it seems likely and rational for God to prefer that His desires are realised rather than frustrated, particularly if He knows what the outcomes will be, as in many accounts of omniscience, or has good probabilistic knowledge of the outcomes. That His desires are realised we might take to be a non-moral preference of God, and whilst I take it to be rational at worst it is non-rational rather than irrational.[249] What determines that God would prefer to satisfy His desires may be guided by His nature or perhaps His personality,[250] but it doesn't seem to be irrational for Him to do so. This then sets up an ordering of worlds, where the ordering is based upon how likely it is that God achieves His desires which flows from His loving nature.

Given this ordering which worlds will God create? One option would be to say that God must create the best world, so in this case, given our view of goodness, the one He knows will achieve His purposes the best or the one He thinks is most probable to do so.[251] Yet that there is a best world for God to create has been disputed (Leftow, 2005a; 2005b). We might instead think that there are multiple worlds which give the highest amount of attributive goodness such that God could possibly create any of them to best achieve His purposes. Perhaps He knows which these are, or instead knows that the probability of Him achieving the His purpose for creation is equal among very many possible worlds and so once again there is no best for Him to create. As a result, it seems that God can choose arbitrarily between these worlds

[249] For defence of God having non-rational preferences see Leftow (2012, 267-271; 2017b).

[250] There has been recent interest in thinking about God's personality and how this affects certain discussions in philosophy of religion. For some discussion see Rea (2018).

[251] A worry for some with this type of approach is as to whether God can be thought free (Rowe, 2004).

which He is to create. Yet it seems to me that this isn't a worrying or irrational arbitrariness. Rather it is a non-rational choice between multiple equally good options.

It maybe that the nature of love alone and the fulfilling of the desires arising from it is not enough to give God a choice over many possible worlds, but as I have previously said I would suggest the purpose God has for the world is far greater than characterised by love alone. Given this I think there are likely multiple purposes God has for His creation and it is also very probable that these will interact with each other such that God has to make multiple trade-offs. For God may want to achieve purpose Y and purpose X, yet He cannot fully satisfy Y without wholly neglecting X, and so He must make a trade off either to satisfy Y and neglect X, or perhaps partly satisfy both Y and X, etc. The point will be that the overall attributive goodness of different trade-offs will likely be equal even though what happens in the worlds will differ, and as such it would seem that given multiple trade-offs there would be very many worlds that God could create since they equally satisfy His purposes. As a result, it seems God can make a non-rational choice as to which of these worlds to create, and whilst this is arbitrary it doesn't seem worryingly arbitrary to me.

One might push back that the purposes God has for the world might be arbitrary and therefore the worrying arbitrariness horn rears its head again. My response to this is that firstly, some of God's preferences come from God's perfect nature and therefore we should resist finding this worrying. Further since God is said to be perfectly rational they will all cohere in a rational, likely holistic way, which again seems to constrain His choices somewhat. Any other preferences God has, say coming from His personality, may also be thought arbitrary, since they are traits God just has, but since they will be constrained by God's nature and those preferences or desires shouldn't concerning.

Given all this, the world which God chooses to create will be based on the goodness of that world, but it will depend upon the attributive goodness of it, which is grounded in the purpose God has for the world and how well that world fulfils it. It is therefore not based on something outside of God, such as some type predicative goodness by which God orders His choices. Thus the reason why God might not create beings with natures that, whilst good in certain respects but overall cause more harm in the world, will be because the worlds in which these natures find themselves in frustrate the overall purpose God has for creation and as a result He does not create that possible world. As I have said, there are a range of worlds which will

best bring about God's purpose or function of the world, with this purpose being based on aspects of God's nature and preferences. Which of these He creates is a non-rational decision, but to my mind it is one that is non-worrying, and will not allow that certain good actions in one world be evils in another, as in divine command theory.

With all this said let me recap the overall picture. On this view, based on a neo-Aristotelian account of goodness, God cannot change the natures of creatures because they are definitional in nature (Fine, 1994; Oderberg, 2001; Lowe, 2018), and as such are metaphysically necessary. Nevertheless, God still determines which goods there are in the world by determining which natures He makes. The options God has for choosing which natures He can create, both individually and jointly, however, are determined by His purpose for the world and how likely it is to be achieved, whilst His purposes are based largely upon His perfectly loving nature. God, on this view, could only change the goods that are instantiated within the world either by destroying some/all the natures that are in the world and repopulating it with different ones, or by creating different creatures with different natures such that other goods and evils were instantiated in the world. Yet it will not be possible for God to create all possible natures either individually or jointly since some may frustrate His purpose for the world such that they are not feasible for Him to create. Given this, we have another response to the dilemma, which was brought to light by thinking about the parallel of the powers view of laws of nature for the moral realm.

I think that we can do more than merely learn lessons from the powers account of laws, since we can plausibly convert this type of approach so that it is based on the ontology of powers alone. However, spelling this out will have to wait until the next chapter. For now I want to address some objections which might be raised against this type of account.

6.8 - Objections

6.8.1 - Can God make a nature with different goods that is indistinguishable from another nature?

This worry is as to whether God could make a nature which is extremely similar to another, say human nature, such that they *appear* indistinguishable from each other, but nonetheless have different goods. Following philosophers love of schmass, I shall call this possible nature to be that of a schuman. The answer I will need to give to this question is no. I allow that if

you change the nature of the Schuman slightly from human then they will likely have slightly different goods, and if you change it drastically they will have drastically different goods. If one claims that it is imaginable that there could be a Schuman with seemingly the same nature as a human but with different goods, I will have to reply as I did in the previous chapter, that imaginability doesn't entail possibility and that we need to be cautious in thinking conceivability does as well. Some might worry that this is quite a bullet to bite, since the internal nature of things radically restricts the modal landscape, but this shouldn't be of much concern to power theorists given that this is a feature of their view and one they don't find problematic.[252]

Nonetheless, I might be able to give a different reply to this concern. Suppose human nature is what it has been traditionally thought to be, namely being a rational animal.[253] I assume this is the case here. Given this a Schuman, if it is to have a different nature, and yet be human will need to have a different rationality. However, rationality seems holistic in nature, and as such it might have a necessary structure such that it cannot be altered. This is somewhat speculative, but nonetheless it does seem to me that it may well be the case. Theists can also add that God is perfectly rational, and thereby His nature determines what rationality entails. Given this perhaps there cannot be different types of rationality, rather there is only one type which is determined by God's rational nature. If this is right, then it wouldn't be possible for schumans to have a different type of rationality to humans, since there is no other type. They could have schrationality, which would be different, but then it wouldn't be rationality and the worry would be defeated. As such if I'm right about this then it would mean that the only way schumans could differ from humans would be in their biological makeup, since their rational makeup would be the same. However, this would allow schumans to have different goods from humans, given their differing biological appetites and therefore goods. Nevertheless, the rationality of the schumans, as it does for humans, will constrain how these appetites are realised, and it is likely that in virtue of this many of the goods, even biological

[252] I discussed this in a slightly different context in the previous chapter.

[253] Some, Oderberg (2007, 103-105) and Hacker (2007, 313), have claimed that this nature allows aliens to have a human nature as long as they are both rational and an animal.

ones, will apply to both natures, e.g. through not purposefully murdering other rational animals, etc.[254]

6.8.2 - Limiting God

This objection parallels one we have met already within discussions regarding the laws of nature. Nevertheless, it is one that has been lodged against the type of answer I've given here (Taylor, 2007, 97-98). One option for me is to state that determining what the full range of God's power is a tricky affair, since there are numerous issues within discussions of God's omnipotence (Leftow, 2011b). Given this, this objection by itself shouldn't be thought a killer blow to my account. However, I think the objection can be overcome by claiming that the content of natures is metaphysically necessary, since it is essential to them, and explications of God's power typically do not range over Him having the power over metaphysical necessities. As such we shouldn't think that God's power is limited on this type of account, and instead hold that this type of objection is misplaced once one understands what the view I'm giving claims.

6.8.3 - Teleology

My view requires that one adopts a teleological conception of nature and many will think this unacceptable. I however think this is something theists should see as a benefit to the view since nature being inherently teleological has a strong pedigree amongst theists. To see if what I require is problematic we need to first become clear on what I require. Teleology seems to come in different varieties. The early moderns thought of nature as a giant artefact (Lehoux, 2006, 528; Harrison, 2008, 16-18, 20; Plantinga, 2011, 77), and therefore took teleology to be externally imposed, just as it is on other artefacts. Thus take the components of my watch, they are not inherently directed to tell the time, but rather they have been manipulated externally such that they do tell the time. This, however, is not the historic conception of teleology I am after. Instead the teleology I require is one that is internal to

[254] The reason for this is that the Aristotelian view brings with it a robust conception of rights, where these are largely determined by one's goods. One of the highest goods is the right to life, which is often associated only with rational animals but others take it to have a wider application, and is not one that can be taken away lightly. It may be defended, as in self-defence, but very rarely is removed. However, murder requires rationality, since it is an intentional killing of someone for at least an insufficient reason. As such, the biological differences will not change both the right to life and the evil of murder. I assume this type of account due to my taking on the Neo-Aristotelian view, but for further details see Oderberg (2000a; 2000b).

objects or properties (O'Rourke, 2004, 35; Mirus, 2004, Ariew, 2002, 11-12) which seems more in line with the thought of Aristotle and Aquinas. With this distinction between internal and external teleology in hand we can make a distinction between teleology and design. As McGrath writes, 'Teleology must be distinguished from design, despite their frequent conflation in popular writings. Design is to be understood as conscious intent and artifice applied externally to the order of nature, in order to achieve some end or external goal; teleology can be interpreted simply as evidence of function or purpose within nature, as an expression of natural laws and natural order.' (2011b, 189) Given that all I require is an inherent teleology the question as to whether this has been designed can be bypassed, or at least is one we can leave until another time. For we might hold with Aristotle that inherent teleology is basic and has no further explanation, or follow Aquinas and think there is a deeper explanation of it. All I require is that God is able to implant inherent teleological natures into things.[255]

We can also make more distinctions amongst types of teleology, for teleology, so it has been argued, exists in five categories; basic causal regularities, complex inorganic processes, basic biological phenomena, distinctive animal life, and in human thought and action (Feser, 2010, 149-152). At its most basic level, as Aquinas saw,[256] teleology explains why X always does Y rather than Z, T, U, V, etc.[257] It therefore seems to be normative in nature, and this is all the conception of goodness I am advocating requires.[258] This doesn't mean that there aren't higher levels of teleological behaviour to be found in human thought and action (Sehon, 2005), but that the conception of goodness I am advocating does not rest on these more complex types. Given this, I think this level of teleology should be acceptable to most.[259]

[255] Whether a distinction between external and internal teleology can be drawn for God's creation has been a matter of debate (Schmid, 2011).

[256] Summa Theologica I, q.44, a.4; Summa Theologica I-II, q.1, a.2; Summa Contra Gentiles III, 2.

[257] Some take Aristotle to have a similar level of basic teleology that applies to everything, not just biological entities (Witt, 2003, 49; Marmodoro, 2014, 13; Dudley, 2012, 25; Scharle, 2008a; 2008b.

[258] I shall have some more to say about this in the next chapter.

[259] It has been argued by some, that anyone who accepts a governing view of laws of nature is committed to nature being teleological (Artigas, 2000, 129; Hoffman, 2009, 300).

6.8.4 - Evolution

Another objection is based on evolution. Assuming that the broad outlines of the typical theory of evolution by natural selection is correct, and that there is no fundamental conflict between evolution and theism,[260] one might worry that my theory conflicts with evolution by requiring both essential natures and teleology (Pope, 2005, 153-154; Hull, 1976, 174). I address each in turn.

The initial worry is that if species change, which it is claimed evolution shows, then essentialism about natures is false. There have been many replies to this type of concern (Walsh, 2006; Oderberg, 2007, 201-240; Devitt, 2008; Boulter, 2013, 98-115; Austin, 2019; Feser, 2019, 400-432; Dumsday, 2012; 2019, 112-122), however it isn't clear that this should be a problem for those who think there are essential natures. Whilst essentialism does entail that some being cannot go from being one type of species to another type without changing its identity, it doesn't seem that evolution actually requires this either. For as Oderberg writes, 'In biological evolution no *individual* organism transmutates into anything. What is supposed to happen is that mutation in parental gametes gives rise to offspring which, through natural selection, come to form a population belonging to a new species.' (2007, 205) All that seems to be required in evolution is that one animal of a certain species is able to have offspring that is of a different species. But here there is no species transition that takes place in either animal, that is they are either one species or another and don't change what species they are during their existence. Given this, there doesn't seem to be any worry here for the essentialist. Additionally, Boulter (2013, 116-132) has recently argued that the modality that is required within evolution is best made sense of within an essentialist framework, and as such this provides us further reason for thinking that it is not incompatible with evolutionary thought.

Turning to teleology, the worry here is that evolution, so we are regularly told, works by random selection and as such it seems that it cannot be teleological. However that evolution is teleological is a position held by many (Gilson, 1984; Stove, 1995, 258-306; Davies, 1999, 121-122; Walsh, 2008; 2015, ch.9; Ariew, 2007; Ayala, 2000; Perlman, 2010; Shapiro, 2011, 137; Cunningham, 2010, 131-177; Lennox, 1993; Walsh & Ariew, 1999, 273-274; Bedau, 1993;

[260] For some defences of this see: Sober (2014), Ruse (2001), and Plantinga (2011, 3-63).

Jablanka, & Lamb, 2005, 87-88; Feser, 2019, 406-420; Austin, 2017; Pruss, 2013, 102-108; Toepfer, 2012, 113-119).[261] As such Walsh can write, that 'the biology of the twenty-first century reveals that teleological explanation, and its attendant metaphysics of goals and purposes, are an indispensable part of understanding the process of evolution.' (2014, 213) Further, this is no new thing, for even Darwin's bulldog, Thomas Huxely, was keen to note that even though Darwin's theory removed Paley's type of teleology, evolution itself bears witness to a 'wider teleology' (Darwin, 1887, 201) rooted in the structure of the universe. For one thing, evolution seems to rely upon the goal upon the preservation of life and the production of offspring, both which seem to be in some sense teleological.

Additionally, whilst random mutation is important for the variability aspect within evolution, and is one of the driving factors of diversity, we shouldn't forget that there is a selection aspect too. This, however, isn't random. As palaeontologist Asher writes, 'evolution by natural selection is not random. If it were, and the constraints of development and environment had less impact on how animals evolved, we would expect to see far more differences in form and function of anatomical and genetic features across animals and plants. … A truly random process of generating animal diversity would show more variety' (2012, 206). Environmental issues, adaptability and other factors determine which random accumulation of genes are best suited to the environment and these genes are then able to be passed on due to their being possessed by the more dominant and thriving group of beings and in this sense, evolution has a teleological goal, producing substances that are best suited to survive and perhaps even thrive in certain environments. As McGrath writes, 'while chance might be the engine of evolutionary development, it does not determine the outcomes. Chance powers the search engine; it does not, however, dictate what is found.' (2011b, 192) It is true that if the environment changes then it is likely different species will become dominant since the species best suited to this new environment will most likely have different features, but this shouldn't trouble the teleologist, since this is what they should expect if evolution has a teleological structure.

[261] Pinsent (2013, 361-364) suggests there is some stripped down version of teleology present in physics, but given this then it seems that there is likely to be teleology insofar as biology relies on physics. Hawthorne and Nolan (2006) also suggest another way in which the world could be teleological.

Finally, convergence within evolution (Conway Morris, 2003; 2015), the view that evolution will result continually in certain forms/structures of organisms, in contrast with Gould's (1991, 292-323) idea of radical contingency, the view that rerunning the evolutionary clock would result in extremely different organisms, has become popular within evolutionary thought. However, if the idea of convergence is correct then it too looks like this is further reason to think evolution has some type of teleological structure inherent within it.

It seems to me that the problem evolutionary theorists have with teleology is that they think of it as inherently external and requiring some type of foresight, rather than seeing teleology as internal to things or a system itself. Godfrey-Smith, for instance writes, natural selection is 'driven by local short-term advantage, not by any progressive tendency or foresight.' (2014, 31) Likewise Ayala notes that 'Natural selection has no foresight, nor does it operate according to some preconceived plan.' (2000, 25) This would only be a problem if teleology essentially involved foresight, however as I said above this is by no means required.[262] What is essential to me is a normative aspect, and this it seems, is something evolution as a system possesses. Godfrey-Smith implicitly seems to affirm this feature when he writes, 'In most cases of natural selection, some types decrease in numbers, and some types *increase*. Selection filters out some variants and amplifies others.' (2014, 42) Filters and natural systems are in some sense teleological without requiring some type of foresight, and if this is correct then it seems enough to enable the theory of goodness I am advocating to get off the ground.

6.8.5 - Fact/Value Confusion

Some might object to my account by claiming that I am confusing facts with values, since the natures of things, the facts, shouldn't be confused with axiology. Again, there have been many replies to this type of objection (Martin, 2004; Putnam, 2002; Peterson, 2013, 114-115; Kainz, 2004, 69-79; Hare, 1967; Foot, 2001, 24; Oderberg, 2000a, 9-15). Since I take it that natures are essentially normative this objection doesn't hold. That is, I take it that the teleology inherent in a nature is such that it determines what it ought to do. So a sunflower seed when put in soil and watered is teleologically directed towards growing, producing a flower and seeds, where this is what it is for it to fulfil its nature and become a fully formed sunflower.

[262] This isn't to say that a theist need say this, since they could hold that God has foresight over the evolutionary process. For perhaps He brings about the species He wants by bringing about certain environments within the world, or maybe in other ways.

Given this, I agree with Oderberg that 'nature is not value free, but value laden and that there is no way of describing the world accurately that omits natural normative teleology' (Oderberg, 2010b, 65).[263]

6.8.6 - What is God's goodness?

Earlier I criticised how God's goodness was thought about on divine command theory. Naturally, one should ask me the same question, namely on my view what do we mean when we say that God is good. Since I have wrote that for something to be good is for it fulfil its nature and thereby fulfil its end, how does this apply to God? For does God need to fulfil something in order to become good? The answer here will largely depend upon what type of theological system one is most inclined to. For on some theological pictures, such as process theism, it does look as though God might have to fulfil something, and insofar as He does His goodness increases. I'm not inclined to adopt this picture, rather I would hold that God is good because His nature is fully fulfilled, that is, He is fully flourished.[264] This means that in God there is no aspect of Him which isn't fully realised, as there is in creatures who are always seeking to realise their end state of flourishing. Rather, God is always in this final fully flourished state.

We can also say that God is prefect through following Davies who writes that 'Aquinas always distinguishes between "perfect" and "good." On his account, a perfect X lacks nothing that it could have in the way of attributes or properties fulfilling it (perfective of it), considered as what it is.' (2011, 33) Given this, a perfect thing is something within its fully flourished state, such that there is no improvement to be had, whilst something is merely good insofar as it aids a thing's flourishing. God then is a type of being that lacks nothing since He fully fulfils His essence and as such He is perfect in Aquinas's sense, which he conveyed by calling God *actus purus*.[265] There is thus no function of aspect of God's nature to be fulfilled. Further, God

[263] Another way one might see this is by arguing that without any type of directionality/teleology there would be no goodness (Oderberg, 2010b, 49-58), although this may only show the weaker claim that directionality/teleology is a necessary condition for goodness.

[264] There is another question as to whether God has a nature or essence, which often arises in some discussions of divine simplicity. I bypass this additional difficulty here, since it would take us too far afield in debates of simplicity.

[265] One need not adopt the *actus purus* conception of God to think this, since one might not buy into the act potency metaphysics on which it relies.

is necessarily perfect since His essence is necessarily fully flourished, since He is never not in this fully flourished state.[266]

This conception of God has led some to worry that since God is fully fulfilled and actual He cannot change, with some comparing Him to a motionless stone (Moltmann, 1974). This, however, is exactly the wrong way to think of this conception of God as *actus purus*. Rather one should think of it as claiming that God is so dynamic in nature that nothing more can be added (Weinandy, 2000, 119-120; Emery, 2009, 63-64). An analogy here might be helpful, where we think of a particle in an empty box that is sped up to such an extent that it seems to fill up all the space in the box constantly so that nothing else can be added, with the box therefore appearing full rather than empty. There is thus an overflow rather than a lack since nothing more can be added to the particle (in terms of speed and area covered) and the box. Thinking about God being *actus purus* in this way should not lead to the worry that God is like a stone, although it should be acknowledged that adequately conceptualising God as *actus purus* is difficult at best.[267]

6.8.7 - Godless ethics

A penultimate objection that I consider is that my answer to the dilemma opens up 'the possibility of *doing ethics without any reference to God*' (Idziak, 2004, 296; Murphy, 2011, 74).[268] The worry is that theistic meta-ethics shouldn't allow for this, but rather it should fully depend upon God. In one sense it is true that my account allows for this, for one can know what the goods of the world are by getting to know what the natures instantiated in the world are and what is required for them to reach their ends. By contrast, on divine command theory it seems that we need to be told by God, or some source, what the goods of the world are, since these are determined by God's commands. As such, epistemologically divine command theory requires God more than my solution does. Yet my solution is less dependent on God

[266] One might ask what God's nature is such that it is fully fulfilled. This would require a major detour into exploring at least the traditional attributes of God and the correct formulations of them, as well as exploration into God's purposes, which is not something I can get into here.

[267] I said above that it might be possible to hold a predicative account of good on Neo-Aristotelianism. If one did this then they could also say that God is good in this sense. However, the worry here is that the predicative account of good might mean one can no longer make the moves I have in order to answer the dilemma. Further, allowing this type of good in this case will open up the charge as to why it shouldn't be allowed in other cases, since restricting its use without a reason to do so seems *ad hoc*.

[268] Original italics.

metaphysically, as can be seen by this thought experiment. Suppose God doesn't exist, yet there is still a universe filled with natures and my view of goodness is correct. Now consider another world where there is a universe with things in it, God also doesn't exist and the correct view of goodness is one where it is determined by God's commands. The thought here is that in the first universe there will still be goodness, but in the second universe there won't be. As such, goodness depends more on God on divine command theory than it does on my view.

How should one respond to this? One option would be to claim that the view I've given here depends on God very intimately. Suppose that divine command theory is true. A question we might ask it how long does God need to be around to account for goodness? The answer seems to me to be not very long at all. That is God could be deist in nature, setting everything up and then having nothing more to do with the world. By contrast, although controversial, one could claim that God is required continually on the view of goodness I have given here. The reason for this would be because we take (something like) Aquinas's fifth way to be defensible, and as a result God is required to direct irrational things to their ends continually, or in other words God is required to make sense of the continual teleology exhibited by non-rational things. This therefore does take sides on a debate I mentioned above, namely whether this type of teleology needs an explanation, and holds with Aquinas that it does. Nevertheless, in order for this type of response to work one would have to defend something like Aquinas's fifth way, and whilst there have been some recent attempts to do so (Feser, 2013; Rooney, 2013), many are still sceptical that it can be done.[269] As such if this is defensible then perhaps we can say that my view is more dependent on God than a divine command theorist view is, due to it requiring a continual dependence.

Another option would be to claim that we shouldn't take this to be problematic. A reason you might think this is that you take God's existence to be metaphysically necessary and as such

[269] Another option may be to claim with Murphy that 'every good … is a divine likeness' (2011, 160), where God is by definition perfect goodness and the ends of natures resemble Him in some way. However, I'm hesitant here, since it's not clear to me that the view of goodness I'm assuming will allow for this. Further, even if it does it also is open for a divine command theorist to say something like this and therefore my view is no better off than theirs in this regard.

He cannot fail to exist, and therefore the thought experiment above is an impossibility.[270] Alternatively we could say that we shouldn't think this is problematic because it is this very feature of the view that allows it to navigate through the dilemma, whilst it is the feature of goodness being more dependent on God, which gives us one of the problematic horns within the Euthyphro dilemma. As such, we should revise our thought as to whether this is really problematic.

6.8.8 - Ontological baggage

A final worry is that we have ontological baggage here (Pope, 2012, 82; Ward, 2013, 73-74) and given my insistence on parsimony this should count against the theory. For instance, I've been making use of the essential natures of objects within this chapter, and it isn't clear that something like divine command theory requires this. God, rather than commanding over natures, on that view, could just command over individuals. This would also allow Him to set different goods for different individuals, which is also something some may deem preferable. I think this is a valid type of objection to my view, however in the following chapter I am going to try to explicate a neo-Aristotelian theory of goodness where all that is required is an ontology of powers. If I can do such a thing, then this complaint of ontological baggage will be misplaced since I am assuming an ontology of powers as my minimal ontology. As such I defer readers to what is to come.[271]

6.9 - Summary

O'Grady sums up the proposal I have nicely when he writes, 'in creating the world, God creates beings which exhibit a structured teleologically oriented existence. Goodness is inscribed, so to speak, in their structure, and as they seek to develop and perfect themselves, they operate in a good fashion.' (2014, 194) God doesn't make something good by willing it, nor does He will it because it is good, as the two horns of the dilemma would have us think. Rather in creating natures, the goods of the world are set. What goods there are in the world

[270] A reply here would be something that even though this is impossible, if it were possible it would give us the wrong result. I'm unsure how persuaded we should be by this.

[271] Suppose what I say in the following chapter isn't successful, one might also claim that simplicity considerations shouldn't take priority here since it might be that one cannot explain what is needed to be explained unless there is some more ontology in the picture. As such, the use of 'baggage' here would just be thought a pejorative term, rather it is required ontology in order to make sense of something we want to explain.

is set by God, but the content as to what makes them good is not, with this being set by definitional natures. Whether we can make sense of all this in a purely power metaphysic will be the job of the next chapter to investigate.

7 - Powers and Neo-Aristotelian Goodness

The purpose of this chapter is to explore whether a powers-based ontology can ground the Neo-Aristotelian account of goodness I gave in the former chapter. I admit from the outset that this chapter is the most speculative of the thesis and an area in which more and future work should be done. However, I think it is helpful to sketch out how powers might play a role within a theory of value, since this isn't something that has been explored, and therefore despite the chapter not filling out a whole theory of value, providing a sketch seems worthwhile. To do this I will first very briefly recap the account of goodness I'm seeking to explain. I will then explain why powers might be useful when thinking about this type of goodness, which is something that has not been explored within the literature. I shall outline how powers have traditionally been employed when thinking about this type of goodness, and why I will be opting for a different account. Following this, I shall attempt one way that we could think about powers and goodness, however after this unsuccessful attempt, I will try another way in which powers might account for goods. Finally, I will conclude the chapter by thinking about the lessons we can learn about the explanatory benefits of powers in regard to simplicity.

7.1 - Neo-Aristotelian goodness: a very quick recap

The view of goodness I am interested in holds roughly that goodness is '*that which satisfies a thing's natural appetites*, or *that which fulfils a thing's nature*.' (Oderberg, 2000a, 37) In this chapter I shall be interested, specifically, in natural goodness,[272] where this might contrast with such things as artefactual goodness.[273] Given what I've said about goodness, it should be clear that it is tied to teleology, and because my interest is in natural goodness, the type of teleology it is focused on is intrinsic teleology.[274] The reason for this is that fulfilling a nature is a teleological goal to which some subject is intrinsically aimed at (Feser, 2014a, 88; Oderberg, 2013, 376). Further, as will be remembered from the previous chapter, I shall also

[272] This terminology is from Foot (2001), who I take would be in broad agreement with the general outlines of the theory of goodness I lay out here.

[273] Perhaps it will turn out that my account here can also work for artefactual goodness, but this isn't something I explore here.

[274] The goods of artefacts, I take it, will be determined, as far as I can tell, by extrinsic teleology.

be taking nature to be a normative concept rather than a statistical one. One must also recall, again from the previous chapter, the different types of goodness which my account will speak to, namely the attributive account of good, which says goodness enables one to say that something is a good X, what I call the relational account of goodness, where something is good for X, and finally what I call derivative goodness, where something is good in virtue of X. Whilst my interest is primarily in the first of these three, the latter two can also play a role since I take them to be dependent on the former. For something is relationally good when it helps some X achieve its end, where achieving its end is thought of as being that which the attributive type of goodness is about, and something is derivatively good when that X helps it to achieve its final end or function, which again is to do with the attributive account.

Given this we can say of a plant seed, that there is something inherent to its nature which determines its goods and evils. A good plant will be one that flourishes, literally by producing a flower, actualising many of its natural appetites, growing, producing seeds, etc. Something is relationally good for the plant when it helps it become a good plant, such as water, soil, nutrients, sunlight, etc. and bad for the plant when it hinders this, such as pouring acid over it. Finally, something is derivatively good for the plant if it is a feature of the plant which helps it fulfil its flourishing. For example, the leaves of the plant are derivatively good since they allow for photosynthesis to take place which benefits the whole plant. Also note that given this there is a hierarchy of goods on this view, where the characteristic or highest function plays the more primary role in determining what the goods are (Besong, 2018, 51). A highest good is also useful in providing a way to work out which good is to be preferred when certain goods conflict. As Cronin writes, 'sometimes there are, even in one being, a great number of appetites and it is even possible that these may be in partial conflict with one another—that will prevent the satisfaction of another … in such cases it is often not easy to say whether the object that gives rise to such diverse effects should be called good. The obvious rule to be followed is that the … appetite corresponding to the farther off end, should take precedence,

and that the "good" should be determined by reference to it.' (1930, 87-88) In my terminology, the farther off good is the highest function or primary end,[275] of the object.[276]

Finally, let me say something about how this theory of goodness interacts with moral goodness. It does so insofar as the achievements of these goods interact with one's intentions and rational decisions in regard to whether and how one is to fulfil their nature (Besong, 2018, 77; Cronin, 1930, 102). For example, a bad human being is one who's nature is not realised, for instance through being malnourished, etc. This is not to say that they are morally bad, since malnourishment may not be their fault. But if one purposefully makes themselves malnourished then this is morally bad for them, since they are purposefully frustrating their nature. Further, killing another person, other than in self-defence, even if it allows one to fulfil their nature in ways, is a morally bad act since through doing this it frustrates the primary end of the other person. The reason for this is that the neo-Aristotelian conception of goodness has a strong conception of rights, where rights on this view are required in order to protect beings to enable them to achieve their flourishing. Thus, Oderberg writes, 'since human beings are by nature bound to pursue the good—that is, rationally bound, bound on pain of incoherence or a kind of metaphysical deviance—they must have a *right* to do so.' (Oderberg, 2013, 377) Given this it is thought that natural rights are conferred on individuals so that they can pursue the good. Since for many neo-Aristotelians the highest good is that of life, since it is required for the possibility of accomplishing all other goods, it requires protection and as such they hold that there is a right to life of all beings.[277] It is for neo-Aristotelians an inviolable right and given that rights entail duties, the right to life entails that 'there is a correlative duty on everyone else not interfere with the pursuit of the good life protected by that right.' (Oderberg, 2103, 378) As such even if killing another being were to further my nature, it would still be impermissible for me to do so given this right to life. Yet I am able to kill in self-defence because my right to life is in danger and therefore I can protect it, even when in particular circumstances this will result in the death of the aggressor.[278] There is much more that could

[275] Also sometimes called the dominant end (Cronin, 1930, 94).

[276] This is a view fairly widely held amongst Neo-Aristotelian theories of goodness, 'Goodness for a thing is thus determined by its nature, and more especially by its characteristic natural function or purpose.' (Besong, 2018, 50)

[277] For more on these types of restrictions see Oderberg (2000a).

[278] For more on all of this see Oderberg (2000a; 200b). I will just be assuming this theory of goodness and then explicating how I think it can be grounded in powers.

be said here, as well as whether this type of account can speak to other types of goodness, such as epistemic and aesthetic goods, but whether this can be done and how the account precisely bears on these and moral goods will have to wait for a further occasion. This isn't because I think there is no hope of the theory achieving this, but so not to complicate matters too much in the early stage of an already ambitious project.[279] Restricting the account to natural goodness is plenty to be dealing with already.

7.2 - Powers and teleology

It might be strange to hear that I am attempting to use powers within debates about axiology, since they have all but been ignored within contemporary ethical theorising, or at least contemporary discussions of powers have been.[280] The one place this work has specifically been employed within the domain of ethics has been to do with questions of deontology, where how powers might interact with rights has been explored by Robinson (2011; 2013; 2014).[281] Yet, since my concern is with goodness, axiology, rather than rights, deontology, I shan't comment on this literature. However, I think there is an aspect of powers that has been overlooked which enables them to be used in our theory of goodness, namely their directedness.

That powers are directional is widely accepted, with Place writing that directedness is 'in some sense' a feature of powers that any theory must account for (1999, 227). Non-reductionists about powers think this is the case even if a power never manifests, since they take it that powers are essentially directional. Nevertheless, whilst the directionality of powers is pretty much universally held, how this is to be explained varies.

A number of different proposals have been given which attempt to explain the directionality of powers, with some characterising it as a type of 'physical' or 'natural intentionality',[282] and

[279] After all, providing a meta-ethics of goodness is a very large project indeed.

[280] There are a few exceptions to this (Anjum, Lie & Mumford, 2013; Smith, Lewis, & Johnston, 1989) but the accounts differ from what I'm doing here.

[281] Dumsday (2016b) also has an interesting paper as to how 'dispositionalism can lend support to moral nonnaturalism by rendering more understandable (and less odd) the claim that the human mind has access to nonnatural, transcendent, prescriptive and eternal moral truths.' (2016b, 110) However this has more to do with epistemological access to ethics rather than value itself.

[282] Molnar (2003, 60-81) uses 'physical intentionality', Heil (2003, 221), 'natural intentionality', and Martin (2007, 178), Place (1996), and Borghini (2009) use intentionality.

Lowe (1989, ch.8) in terms of a type of normativity. Whilst the latter has received little discussion, the former has been challenged by a number of theorists (Bird, 2007, 114-126; Oderberg, 2017), with some of these difficulties being replied to by Bauer (2016). I, however, will rely on a different explanation of this directionality, namely that powers are in some way teleological.[283]

Firstly, note that this teleological aspect of powers need not imply or require conscious awareness, something that I discussed in the previous chapter. This is not to say that there are no powers which have conscious awareness and are teleological, since Lowe's (2013) postulation of the will as a rational free two-way power which freely determines how it acts, seems to be such a power.[284] Rather all that is required is that there is an end state or goal of a power. Before one objects that this is a rather obscure explanation of a power's directedness, an objection which has been raised in the literature,[285] let me make it clear that this view has been adopted by numerous theorists. Here are a few specific examples:[286]

> 'causal powers are inherently teleological.' (Koons, 2017, 15-16)
>
> 'dispositions are understood as *teleological*, or goal-directed properties—ones which are dynamically orientated toward those ends.' (Austin, 2019, 41)
>
> 'It is impossible to consider the structure of a disposition without bringing the concept of teleology into the discussion. A disposition, of its very nature, is tending towards a '*telos*' or end.' (Lisska, 1996, 99)
>
> 'to have a disposition *just is* to be in a state directed at a certain teleological end.' (Kroll, 2017, 20)

[283] Some use the language of finality instead of teleology but they mean to imply the same thing by it.

[284] Similar things might be the case for other mental powers.

[285] Manley and Wasserman (2017, 48), for instance, think directedness is more understandable than teleology. One reply would be that directedness just is a teleological notion, and indeed a number of people have said something like this (Artigas, 2000, 129; Gill, 1989, 184; Hoffman, 2009, 300), although not directly in reply to Manley and Wasserman.

[286] Note that in this literature, powers and dispositions are used equivalently, as far as I can tell.

From this, and the numerous other examples I could have given,[287] we can see that this type of approach has a number of adherents.[288] Further, it might also be the case that those who try to explain powers in terms of functions (Mumford, 1998; Whittle, 2008), might also be reliant on a teleological account of powers, since functions are often thought of as inherently teleological. We might also be able to say something similar for the intentional accounts of directedness as well, as if those who claim that intentionality is just a special case of teleology are correct, then those who hold an intentionality account of powers may too be implicitly committed to the teleological account (Haldane, 1999, 41; Lisska, 2016, 70; Okrent, 2000, 204; 2007; Coffey, 1914, 441, n.1; Bauer, 2009, 239; Koons, 1998, 559).[289] As such it could be that there are many others who will end up holding a teleological view of powers.[290]

As I suggested earlier, goodness within neo-Aristotelian thought relies on natures with natures themselves being teleological. Thus, something is a good X insofar as it fulfils its nature, and something is good for X insofar as it helps the nature become fulfilled.[291] My claim is that powers can play the role of natures since they too can be thought of as teleological.[292] Further, since teleology is often linked to notions such as function and normativity (Koons, 2000, 167; Okrent, 2000, 204; Loux, 2014, p.162, n.30; Koons & Pickavance, 2017, 91), powers might also be thought to play a role in these concepts.[293] For instance Bauer writes, 'to ascribe

[287] Oderberg (2017); Austin (2017, 376); Hannegan (2018); Lisska (2016, 121); Marmodoro (2014, 13); Witt (2008, 130); Feser (2014a, ch.2 ;2014b, 93); Lammont (2009, 880-881); Austin & Marmodoro (2017). McKitrick might also be an advocate of this view, since she writes, 'Insofar as dispositions are directed at their manifestations, a teleological directedness seems like a plausible way to go.' (2017, 42) However, it's unclear that she herself adopts this view.

[288] Further, in so far as many power metaphysicians do not attempt to explain this directedness, perhaps there are more closeted teleologists out there.

[289] I make no judgement here as to whether this is correct.

[290] It strikes me that metaphysicians will not be worried about the evolutionary worry concerning teleology, which I noted in the previous chapter, since evolution doesn't seem to affect the directionality of powers, as powers were around and teleological long before evolution began.

[291] With some caveats, as per the killing example above.

[292] By natures here I mean to encompass object essentialism and substantial form, rather than property essentialism.

[293] There are those who think the notion of teleology that informs our metaphysics of powers does not or may not be able to perform this role, although they give no explicit reason why they think this (Kroll, 2017, 22-23; Austin, 2019, 137). This contrasts with claims like that of Kenny, who writes, 'Any teleological explanation must involve an activity which can be done well or badly, or an entity for which there can be good or bad. … There are two ways in which things may have purpose: they may exist to serve a purpose, and they may act for a purpose.' (1988, 78)

a *telos* to some item or behavior is to describe what it ought to do.' (2009, 243)[294] If this is right, then teleology just brings some type of oughtness with it. This claim is one that needs more work done to establish it. Here I ask my reader to grant me this for the sake of argument.

With this aspect of powers now explicated I will be able to start to give a metaphysical grounding for the Neo-Aristotelian theory of goodness which takes inspiration from Lisska's interpretation of Aquinas's theory of natural law, that holds that 'disposition has, as a part of its very nature, a tendency towards a specific end. This end, when realized, contributes to the well-being of the individual.' (1996, 105) The idea then is that goodness is thought of in terms of fulfilment, and the fulfilment in my case, will be the fulfilment of powers when they manifest.

Let me note one final distinction here between powers that have a definite end state, and those which do not. This distinction comes from Aristotle's use of *entelekheia* and *energeia*, fulfilment and activity respectively (Beere, 2009, 162). I take it that either of these ways is a way that powers could be teleological; those with a terminus completion point and those whose end is performing their activity. As such both of these types of powers can/could play a role in the theory of goodness I will give. Further, it is important to note that some powers take time to reach their completion point such that we could say that they have only partially manifested. I take it that this might be able to provide us with a way of making sense of degrees of goodness, where something is less good when it is further away from its completion point, whilst something is more good when it is closer to its end point.[295] I won't have much more to say on this aspect of the theory here, but I note it so to show the potential of the theory in explaining different aspects of goodness.

7.3 - Powers and the standard neo-Aristotelian goodness account

Before attempting to give a view as to how powers alone can ground neo-Aristotelian nature goodness, let me briefly note how powers, if they have been used at all, have been employed

[294] Explaining how teleology, or directedness, function and normativity relate to each other more fully, is something I seek to explore in the future, as I'm aware there are objections as to how these relate (Silverstein, 2016).

[295] If there are such things as intensities of goodness, perhaps a powers account can make sense of these as well, since powers are said to vary in their intensity (Manley & Wasserman, 2007; Vetter, 2015, ch.3; Mumford & Anjum, 2011, 26). How exactly this would be done, I'm unsure, but I'm equally unclear that it needs to be.

within theories of this type of goodness at present. For instance, Oderberg, speaks of an appetite being 'used in the traditional scholastic sense of natural tendency, inclination or disposition (speaking loosely)' (2015, 77; 2014, 346), where one way of understanding what he means here is that he is speaking of powers.[296] Besong (2018) explicitly, however, does mention powers, although he doesn't give anything like an account as to what they are or make much reference as to how they are used. However, in both of these accounts of goodness, there is another category within the ontology that plays the key role, that is a functional nature or essence of an object.[297]

The conception of essence at work here is one where it determines what it is to be a good token of that type. Powers play a role insofar as they are things that the essence of the object might produce, and through the manifestation of these powers it might help realise the end of the essence so to make the object a good instance of its kind and/or be good for it.[298] However, here it looks like the real work is done by the essence/nature of the object. Yet, this type of essence is different to the type that power theorists attribute to powers. The latter need only claim that properties, namely powers, have a nature or essence, whereas the former view has to add the additional claim that objects have these too.[299] Many are less willing to adopt this type of view, since thinking this is far more controversial than the property essentialism that powers require. It also adds another item into our ontology, namely the natures/essences of objects.[300] However, it would be nice to see if this item within

[296] Equally, he could be using dispositions to mean something different from power, where it is thought more like an inclination of something, where I might have a disposition to become angry if I haven't eaten in a while.

[297] Sometimes this is spoken of in terms of a substantial form, and as such is explicitly hylomorphic.

[298] It is important to note that the powers here are 'natural' rather than 'accidental', since the fulfilment of an essence focuses on what comes from a being's nature/essence, rather than elsewhere. Thus, using somewhat slightly different language Cronin writes, 'When such tendency springs out of the essence of an object and is not the result of accident or of some mere passing desire the appetite is spoken of as natural.' (Cronin, 1930, 103) Similarly Besong notes that, 'A natural inclination … is a disposition or tendency that we have due to our nature as human beings. So, if someone were born with the tendency, say, to compulsively poke her own eyes (a condition known as oculodigital reflex) that tendency would not count as a natural inclination because the tendency *does not come from human nature* as such, but from a natural defect.' (2018, 78)

[299] Or at least certain objects.

[300] I am supposing here that functional essences would need to be reified, as they are in most hylomorphic theories.

our ontology could be removed, so to have an ontology that is more minimal and less controversial.[301]

This then, I take to be, a brief description of the standard metaphysical account which is given for most Neo-Aristotelian views of goodness, and the way in which powers, if employed at all, play a role in it.[302] What seems clear to me is that if powers play any role at all it is merely a derivative one since it is the essence/nature of the object that is of primary importance.[303] Further, on this account since this essence/nature is teleological, powers do not seem as though they are required to explain the teleological aspect of the neo-Aristotelian view of goodness. Rather, one may be able to have a reductive explanation as to what powers are in terms of categorical properties and still adopt a neo-Aristotelian view of goodness since the object's essence/nature would be sufficient. As such, in order to see if it is possible to give an account of this goodness in terms of powers alone, I will need to remove an object's essence/nature from the ontology to see how powers alone can do.

7.4 - Powerful tropes and no objects

Here is one easy way to remove essences/natures of objects, assume that there are no material objects and that there are only tropes.[304] Thus the world only has individual tropes and nothing else within it. Further, since I want to explore whether powers alone can provide the basis for neo-Aristotelian natural goodness, I will assume a purely powers theory.[305] To do this I shall assume part of Marmodoro's view,[306] which holds that all there is in the world are physical powers, what she calls power tropes (2017a, 110).[307] With this in hand, let's

[301] One can see that powers and the essence of objects are distinct aspects of an ontological view by noting that differing modal theories can be given either in terms of powers or an objects essence (Contessa, 2010). However, this isn't to say one couldn't have both in one's ontology.

[302] It also isn't clear to me that this type of theory can only work with a theory of non-reductive powers, for perhaps reductive theories of powers will also be able to do the job, since even if this removed the teleology from powers, teleology would still be there in virtue of the essence of the object.

[303] Oderberg (2013, 376) seems to make this clear.

[304] This isn't to say this is the only way to do this, for Armstrong's (1997) states of affairs ontology also doesn't have objects. Whether it can be translated into powers isn't something I explore here.

[305] This differs from the previous view, which we might say had at least a two category ontology, essences/nature of objects and powers.

[306] I say part since Marmodoro does think that these power tropes can compose things, yet here I am assuming there to be no material objects and there only ever be power tropes.

[307] This could be adapted so to be a powerful qualities view instead, were one to prefer it.

consider how a neo-Aristotelian theory of goodness might go on these background assumptions.

Relying on what I have already said, the nature of a power determines what it is for a specific power to be a good instance of its kind and flourish, where its flourishing is it reaching its end, namely its manifestation. This is the attributive good of the power. However, there are also things that are good for the power, namely that which helps it reach its end, where this is the relational good of the power. Note also that on this view the bearer of goodness is the power trope itself, rather than some object which it is a power of, since we are currently assuming there are no material objects there are no objects which the power is a bearer of. However, there are some obvious worries with the account.

Here is one: assume that we should maximise goodness and that every instance of goodness is equal in value to every other. Given this, the thing we should all be doing constantly is bringing about the manifestations of multiple powers, for instance shattering glass, etc. This seems a weird result and as such there is likely something wrong with the view. However, here is one response to it. One could claim that many manifestations of powers require that other powers cease to manifest. For instance, the powers which manifest in order to keep the glass bottle together structurally ceases manifesting when the glass is shattered. As such perhaps most manifestations typically conflict with others, where this will also carry over to goods. Yet if this happens in pretty much every instance, then perhaps the level of goodness within the world remains roughly constant, since the ceasing of one good, the manifestation of a particular power, allows for the activation of another and thereby another good. Perhaps the overall goodness of a world will vary somewhat, since one power ceasing its action might cause many other powers to manifest, hence bringing about more goodness. This reply, however, seems insufficient to answer the utilitarian worry, and further, if it did then it leaves us with another worry over the world having a fairly constant level of goodness, something that many will want to reject.[308]

It seems that also, given our presuppositions, we will struggle to say that one type of power manifesting is better than other types. Perhaps one could reply that there are degrees of

[308] I take it that this will be based on intuition, with many thinking that the level of goodness in the world varies quite considerably. But insofar as it is based on intuition is it defeasible.

perfection within manifestations, such that some powers have more perfect manifestations than others. As such, perhaps we could say that some powers are intrinsically better than others when they manifest, and therefore we should promote their manifestations rather than others. This, whilst possibly a viable response, is rather speculative and will not be something I explore further here. Another option would just be to claim that it is brute that some powers are more valuable than others, but this seems like an option we should embrace as a last resort. Given this difficulty of saying that some powers are better than others, it seems we have another difficulty with the view currently under consideration.

Another difficulty which I will spend more time on, is that the account seems far too permissive. The reason for this is that all powers are directional entities, it is part of their nature that they are teleologically directed towards their manifestation, and as such all powers would therefore seem to be involved in goodness. Those who worry about permissiveness will wonder whether it's actually true that every power's manifestation makes it a good instance of the type of power it is and further whether they have goods in the form of those things that aid the power in manifesting. Does the manifestation of negative charge repelling other instances of negative charge mean that the power has flourished such that it is a good instance of its kind? Further, is the bringing near another instance of negative charge good for the initial instance since it allows both instances to manifest their powers of repulsion? I suspect many will want to say no, and that if the theory forces you to say yes then so much the worse for the theory, it should be rejected. What is therefore being asked is how we should restrict what the theory says is good. Before I turn to how we might bring about some type of restriction, first suppose that one is not worried about permissiveness. Why might one lack this concern?

The first thing to note is that some neo-Aristotelian theorists of goodness think that some seemingly strange things count as goods. For instance, Oderberg speaks of instantiation as a good (2014, 347-349), whilst others think of existence as a good (Cronin, 1930, 90; Oderberg, 2014, 349-353). Given this, it might be that goods we initially thought of as strange and needing rejecting are in fact not so odd and therefore shouldn't be rejected. Further, note that given these two types of goods, powerful tropes are good insofar as they are instantiated and exist. This, however, doesn't get to the heart of the issue regarding the theory of goodness I'm pushing which is based on the teleological directed manifestation of a power.

However, there are ways we might be able to adapt what has been said in order to allow that all of these manifestations are goods. This is because a number of Neo-Aristotelians, following Aristotle, think something is good insofar as it is in a state of actuality, where this is better than being in a state of potentiality.[309] Although controversial, if this thesis about actuality and potentiality is correct then on some views of powers it looks as if the manifestation of a power will be good for it, since a manifestation is an actuality. For instance, this is the case on Oderberg (2007, 130-143) and Feser's (2014a) view of powers, where a power that isn't manifesting is a potency and a power that is manifesting, or has manifested, is an actuality. Equally, if you hold a slightly different view, like Marmodoro's (2017b, 58-60), where a power's manifestation is an internal transition from being in a state of potentiality to a state of actuality, such that the very same power can be in both states (at different times and in different circumstances), it seems one will get a similar result regarding the goodness of manifestations.[310]

Nevertheless, even if we take these cases as showing a manifestation is good for a power, note the reason why we are saying this. It seems that what is happening is that we are selecting a property, say that of having more existence or being in actuality, and claiming this is good, and insofar as a power's manifestation brings this state about the manifestation of a power is good. This seems different from how I had set up what made the power's manifestation have value, namely in fulfilling its end. However, a number of Neo-Aristotelian theories of goodness seem to allow for this, namely postulating certain fundamental goods, and insofar as something brings these about they, or the objects to which they belong, are good. For instance, Oderberg gives such a list, which when thinking about persons includes the goods of life, knowledge, work and play, friendship, and religion (2013, 377). Whilst theorists sometimes disagree as to what the list of goods should include, life, at least for living organisms, will feature. Supposing such a category could be stretched, or that something like actuality could be placed on this list, then given this type of Neo-Aristotelian theory of

[309] This is one reason why on the classical theist picture of God, God is pure actuality with no potentiality.

[310] This is different from Oderberg and Feser's view, which seems more to say that the manifestation of a power, which is a potency, produces something different, an actuality, rather than being an internal transition of the power.

goodness, one is able to see how manifestations, at least on some theories of powers, will turn out as being goods.

I note here that it is less clear to see how this type of approach would work on another popular conception of powers, what I will call jumping view. On this view what happens when a power manifests is that another different power/s is/are produced (Mumford & Anjum, 2011; Bird, 2007).[311] This is prey to an objection by Armstrong (1997, 80), the always packing never travelling objection, which claims that if the manifestation of a power only results in another power then there is never any motion since there is no movement from potency to act, rather all we have is one potency after another. On the jumping view then, the reason why the same move cannot work is that there is no variability in the existence of the power, or no movement from potency to actuality. As such the actuality or existence move won't work. This doesn't mean that the jumping view would have to deny that the manifestations of powers are good, since one could just say in virtue of the definition of Neo-Aristotelian goodness given in terms of powers, the manifestation of the power just is its good. Nevertheless, I'm unsure many will be persuaded by this.

There is another potential worry that arises from the jumping account, namely as to what turns out to be the bearer of goodness. For it seems we want to say, on the view where there are only powerful tropes and no material objects, that attributive goodness is attributed to the power itself when it manifests. Yet it doesn't seem that this is possible on the jumping view of powers. On this view when the power manifests it jumps into another power. Yet this means that power which manifests, is no longer around, during or after the manifestation, but rather we have a new power instead. As such we can't attribute goodness to the initial power since it is no more once it manifests, as it has turned into another power. This might lead to another related worry, that on the jumping account it seems we will have to say that a power which destroys itself, something all powers by manifesting do, are achieving their good. Is this really something we want to say?

Perhaps we shouldn't be worried by this type of conclusion, to see why, I turn to the realm of artefacts and think about a bomb. Given a neo-Aristotelian account of goodness, for the bomb

[311] As Marmodoro says, 'On such views, when manifesting, a power is replaced by another power, which is also in potentiality.' (2017a, 112)

to function well is for it to cause a big explosion in certain situations, where the type and effect of the explosion will vary due to the type of bomb it is. A bomb that doesn't explode when it ought to is a bad bomb, since it hasn't fulfilled its end.[312] Suppose the bomb is a good bomb. Having achieved its end it will have obliterated itself, since this is part of what happens when a bomb achieves its end. What, though, do we attribute the goodness of a bomb to, since the bomb, having achieved its end is no more. Perhaps saying that we saw it *was* a good bomb, since we are aware that it has achieved its end, and that the fact that it no longer exists doesn't matter for attributing goodness to it.[313] Much the same will have to be said for the jumping powers view, since the manifestation of the power is just the bringing about of a new and different power. However, it seems that we are having to say that something like self-destruction is a good, and this seems to be in tension with what I said above, namely that many theorists take existence to be a fundamental good. I'm unsure how we resolve this tension, other than by rejecting existence as a good, or by claiming it is a good that can be overcome, or by thinking self-destruction is never a good. In any case, I note here that if one were to take a jumping view of powers, then if one wanted to hold that manifestations of powers were good it is likely that they would be committed to the claim that bringing about one's own destruction, due to reaching one's teleological end, is a good thing.[314]

Having explored how one might try and say that *any* manifestation of a power is a good for that power in virtue of being the end of that power, let's turn to those who think that this account is indeed too permissive and think about how one would restrict the domain of goodness. One option might be to say that only powers which belong to living beings can be said to be good in virtue of their manifestation. Yet on a theory where there are only powerful tropes it's unclear to me how we might go about saying there are living 'beings', since this seems to require the existence of some type of objects.[315] Perhaps we could say that only some types of power tropes are living, rather than relying on objects. But in virtue of what

[312] Note that a bomb may be fulfilling its end by not exploding in certain circumstances and exploding in those circumstances would make it a bad bomb. Something similar might be able to be said for powers.

[313] There would also be a problem if the bomb still existed, since insofar as it exists, we would never be able to say that it was a good bomb.

[314] This will be the case on any view where a jumping view of powers is adopted, meaning that one could restrict the domain of goodness, but as long as these types of powers played a role this would still be the case.

[315] Perhaps one could opt for some type of bundle theory, but whether this would do the job I suspect would be disputable.

are these tropes living as opposed to not living? Perhaps we could claim, as some do (Oderberg, 2007, 177-200; 2013; Shields, 2012; Feser, 2014, 90-91; Rosenkrantz, 2012; Koren, 1955; Okrent, 2017, ch.2; Des Chene, 2000, 57-63), that the living exhibit some distinctive type of teleology, which distinguishes it from the non-living.[316] What is important about this type of teleology, so say it's advocates, is that it is self-perfective. Yet it is hard to see how a power itself can be self-perfective, other than merely by achieving its end. But if that's the case then we haven't restricted the domain of powers at all. If we build more into the notion of self-perfection it's hard to see how powers can be self-perfective since the typical examples as to what this would look like refer to objects, not singular tropes.[317] Thus, for instance metabolism is used as typical example of something displaying this type of teleology since 'it appropriates ambient sources of nutrition for its own flourishing.' (Shields, 2012, 177)[318] As such I don't think that there will be any power tropes that will be able to satisfy a robust notion of self-perfection.[319]

A final way to go follows a similar direction as the life move, but this time claims that there is a more general type of teleology which certain powers exhibit such that only they are those which are good in virtue of their manifestation. What type of teleology is this? I have no idea. Further, I find it difficult to make sense of differing types of teleology, unless one just means by it teleology plus some other feature. This is partly because I'm unsure we have a good reductive grasp on what teleology is, hence my happily accepting it as non-reductive. Nevertheless, it is by no means a novel claim that there are distinct types of teleology (Feser, 2010), and so perhaps there is a type that only some powers have, in virtue of which their manifestations are good.[320] Suppose a view like this can be spelt out, such that there is a metaphysical difference in the type of teleology some powers have as opposed to others. Still

[316] Oderberg, who elsewhere advocates a universal type of teleology which powers exhibit (2017), does say of the teleology which characterises life that it 'is a kind of teleology, but metaphysically distinctive in what it does.' (2013, 213)

[317] Since some who speak of life and employ this criterion, for instance Thompson (2008), don't give it metaphysical import they might be able to overcome some of these worries. However, I think life probably should have metaphysical import and so would not myself take this move.

[318] For more examples see the references above.

[319] Perhaps one could opt for a different criterion of life, but I leave this suggestion here, although others are welcome to explore it.

[320] Perhaps another option would instead be to say that there are different degrees of teleology rather than types, and then adopt Davison's (2012) view of value. However, I'm unsure how to make sense of differing degrees of a singular type of teleology.

a question might arise as to how we could know which powers were axiologically relevant as opposed to not. Suppose empirically there was no detectable difference, one could still reply to the objection that insofar as it is an epistemological question, one I admit I cannot answer, it by no means defeats the theory since all I'm attempting to offer is a metaphysical picture as to how this might go. Although I think there is a sense in which this is a sufficient answer, I grant that the fact that I cannot answer it would be a reason for many to reject this way of restricting the domain of powers that are relevant to goodness, since they would take it that an adequate theory should enable us to know which powers can be said to be good when they manifest and which when they manifest have no relation to goodness.

Given this, and the problems these theories have when trying to restrict the domain of goodness, let me offer one final suggestion as a way forward. This is through introducing objects back into the theory. I suggest that by doing this we might be able to restrict that which is appropriate for value, and also gain the additional benefit that value will be attributed to objects rather than properties, which many will find much more plausible.[321] As a result on this type of view the object would be the bearer of value rather than the property, much like many think objects are bearers of causal powers. Nevertheless, one might worry that by suggesting this I'm giving up on a purely powers-based account of goodness, and that God will have to create multiple kinds of things. I hope that this won't be the case and now turn to explaining why.

7.5 - Powerful objects

In the previous section I tried to restrict the domain of powers relevant to goodness based on holding that there were no objects and only powerful tropes. The view given there was one I don't want to adopt, but I suggested that the addition of objects might make the view more plausible. Nevertheless, a worry emerged that by adding objects back into the mix I might be forfeiting my intended goal of trying to explain a theory of neo-Aristotelian goodness in terms of powers alone. Marmodoro here is helpful on the two options that are available to us and how we should proceed:

[321] Oderberg might be one who doesn't find the view more plausible due to this latter feature, since he thinks we should see that it is valuable to give a theory of goodness without it being a theory of goodness for something (2014, 353-354).

> ‘either assume objects and show them to be powerful; or assume powers and show how objects consist of them. Power Structuralism follows the second path; the present paper aims to show how objects are built out of powers.’ (2017a, 110)

As we assumed the former earlier, here we shall attempt the latter, so as to explore whether this gives us a sufficient metaphysical underpinning for a restricted neo-Aristotelian view of goodness, which is wholly grounded in powers.

How then are objects supposed to consist of powers? There may well be a number of options here,[322] but for the purpose of this chapter I once again rely upon the work of Marmodoro as providing such an account, which I shall assume here is correct.[323] Even if one dislikes this account and prefers others, Marmodoro’s account will help us see what I take is required in order to satisfactorily restrict goodness, and insofar as these other accounts achieve this they can be adopted instead.

On Marmodoro’s view powers can form structures due to ontological interdependencies between other powers (2017a). Note that she doesn’t think these structures need reifying, unlike many who posit things such as substantial forms (Koons, 2014; Koslicki, 2018, ch.1 & 3). Marmodoro also supposes that there are two different types of structures, physical structure which *unites* and metaphysical structure that *unifies*. The idea here is that there are different structures of powers which allow for varying types of interdependencies within the structures.

Physical structures of powers, for Marmodoro, are much like dependences between parts of artefacts. Each part has its own individual nature and is brought together with other parts so to compose an artefact. For example, the individual parts of my watch each have their own natures, such that the nature of the glass differs from the nature of the spring, etc. Yet the pieces are brought together in a specific way so to achieve a certain end. Nevertheless, the unity here isn’t thought to be strong. The reason for this is that the parts still have their own

[322] For instance the work of Jarworski (2016) and Rea (2011) who both appeal to powers in their view of composition might provide us with all we need. Perhaps too would a powers inspired view of Keinänen and Tahko’s (2019) work. It might also be that Paul’s (2017) ontology, again interpreted in terms of powers, will also give us all we need, although I am somewhat sceptical of this.

[323] Marmodoro speaks of this type of account briefly in a number of places (Marmodoro, 2017b; Austin & Marmodoro, 2017; Marmodoro, 2018), but for the fullest explication see (Marmodoro, 2017a).

individual natures, and these natures haven't changed when they are brought together to compose my watch. Rather all that has happened is that the individual natures of the parts are organised in such a way that they produce the desired function of the artefact by collectively exploiting the individual natures of the parts. Hence, the parts are united together for a common goal, but they are not unified. What we have on this view is not some object which is metaphysically one, the artefact, but rather something that is still many. For Marmodoro what has been said of the artefact here can be equally said of the power tropes and their composition, and as such physical structures of powers do not give unification.

However, for Marmodoro, metaphysical structures do bring about the oneness of an object. She claims that in these type of structures powers unify rather than merely unite. Yet what is meant by unifying here? Again, we can use another example and then translate it into power talk. The example I will employ here is that of digestion. Suppose I eat some chicken. The chicken originally had a certain structure, and when it goes into my body it retains some of that structure, albeit that it will now be broken down into smaller parts. My body, however has a different structure from the chicken, and hence we do not have anything that is unified and therefore one, but two individual structures that may be united in some way, for instance through contact. However, in the process of digestion the parts of the chicken lose their structure and gradually become parts of my body. That is the chicken is no more, since the structure of the chicken is replaced by the structure of my body. This is what Marmodoro calls re-individuation, since the structure which once identified the chicken is no more and instead what identifies that matter which was once the chicken is now the structure of my body. This provides a stronger unity than the unity in the artefact example above, and as a result Marmodoro claims that the chicken can now be said to be unified within the body, since there are now no longer two things but one thing, namely the body.[324] Once again, the thought here is that what was true of the chicken and the body can equally be true for individual power tropes.

With this distinction in mind I can also explicate Marmodoro's distinction between a structural power and a substantial power. The idea here is that when powers come together into physical structures, the unity is due to a structural power. What we have here is still an

[324] Mamodoro and I have spoken about this at greater length elsewhere in Aquinas's ontology of substances are artefacts. See Marmodoro and Page (2016).

aggregate of many powers, since structural powers do not unify, yet there is still some type of ontological dependencies between these powers. By contrast, a substantial power unifies, such that multiple powers become one. In this case there is a change in the individuation criteria of the multiple powers, such that there is also a change in their ontological status. No longer are they a multitude of powers, but rather they are reidentified and therefore unified into one power. Thus the result is not like the artefact or structural powers where there are still a multitude of things, yet a united object, but rather an individual object/power which is one, not having parts with differing natures, and therefore unified.

Given this, we have two ways before us, wholly reliant on powers alone, in thinking about objects. First, we have objects which are characterised in virtue of structural power, and also objects that constitute a substantial power.[325] How do these approaches fair in restricting the domain of powers which are relevant to goodness?

Start with the former, a structural power view, where an object is a plurality of powers which are physically united. On this view, we could restrict those powers whose manifestation is a good to only those which compose a structural power. The main worry with this view is that it might still be too permissive, for Marmodoro seems to allow that very many types of things satisfy this condition,[326] and therefore we have too many objects before us and powers whose manifestation we wouldn't want to claim is good. One way we might be able to overcome this worry, is by specifying that those structural powers which are relevant to goodness are those whose component powers are functionally interconnected.[327] On this account, many structural powers are ruled out, since not all of them have functionally interconnected powers. Also, this view seems to parallel to a significant extent the standard accounts of natural goodness, where what is good is determined by some type of functional essence.

[325] An example Marmodoro gives of the latter is a dog, writing, 'The difference between the two ways of individuating the dog is that on both, there is the structural power of the dog. But the work of the mereological-power ontologist stops here, when she identifies the dog with the structural power, which is an aggregate of interrelated powers. By contrast, the substantialist power ontologist goes further; she turns structured aggregates into individuals; the structural power of dog comes to constitute a substantial power, the dog, as a diachronic power.' (2017a, 122-123)

[326] She writes, 'Merely physically united powers are a plurality of many, just like the grains of sand on the beach.' (Marmodoro, 2017a, 118)

[327] Marmodoro seems to allow that there might be structural powers such as this (2017a, 119).

An additional worry I have with this type of account is over what determines the function within a structural power, which it must be remembered is just a plurality of powers. On the substantial power account, it is clear that as the powers have been re-identified and therefore unified, with a substantial power emerging, that the substantial power determines what the primary function of the object is. But in the structural power account when the powers are discrete and ununified, what determines the function? Perhaps such a feat cannot be accomplished without there being a substantial power. For functions, at least between parts, seem to require some type of holistic arrangement, which Marmodoro suggests is a feature of substantial powers. Take my watch, for example, the pieces by themselves don't have the function of telling the time, it is only once they have, in a sense, been reorganised in such a functional way, that their powers contribute to telling the time. Nevertheless, it does seem true to say that my watch is less unified than say some natural object, such as a tree. The powers of the components of the watch, don't seem to have changed intrinsically, but act in the same way. Rather all that has happened is that an agent has arranged them in such a way that they can perform some holistic function. However, Marmodoro's substantial power requires that the powers of the components are re-individuated in terms of the substantial power, and therefore the watch, although has a holistic function, has no substantial power. As such perhaps I'm mistaken, maybe a substantial power isn't required for this type of function and therefore structural powers alone can do the job.

Nevertheless, there is a worry with this type of view. The difficulty here is that even though we might have some type of functional arrangement in structural powers, this need not be unified. As such there could be competing functions, where the manifestations of each would be good. How then do we decide which function should be preferred to be accomplished? It seems from structural powers alone that we cannot. However, the substantial power view does not leave us with this result. On this position, all the powers of an object are holistically unified, and as such we can say that there is a primary function or end which the substance has. Yet given this, we can now answer questions which arise due to conflicting functions, since the function we should promote is that which is in line with the primary function or end of the object.

I therefore assume that if one wants to restrict the domain of powers which are relevant to goodness one should do so by saying that it is only powers that constitute a substantial power

which play a role in natural goodness, where the primary function, or directedness, of those powers is determined by the substantial power itself. As I've already stated, this type of view, where there is something that determines everything else in terms of what is the highest good, and the lower goods, is typical to the neo-Aristotelian account and therefore is not a drawback to the theory. As we have also seen, this feature allows us to work out what is best when there are conflicting goods, thus being a benefit of the theory rather than a drawback. As such any view of powers which can provide us with objects, unified functions for the object, and a primary function for the object will be acceptable for my view here.

Yet, although there are questions to be raised as to some of the particularities of the response,[328] it might be that for some this account will still be too permissive, since as Oderberg has argued elsewhere it seems like certain types of cycles are natural and perform a holistic function (Oderberg, 2008), and it's unclear we want to attribute goodness to these. Suppose Oderberg is right that these types of cycles have such a function and further that we don't want to have to claim that the rock cycle achieving its end is a good, what are we to do? I suggest we play the life card, claiming that there is a distinctive type of teleology that characterises certain powers, such that it is these types of powers that are involved in natural goodness, rather than others.[329] This time, since we have objects, and not just lonely power tropes, we don't need to worry about the fact that properties can't be robustly self-perfective by themselves, since all our properties/powers, have bearers, namely the object, constituted by the structural power and which is the substantial power.[330] As such on this more restrictive view, the powers which are relevant for natural goodness, are those which have this distinct type of teleology, what some call immanent causation, and constitute a substantial power.

It seems to me that if one wants a restricted account of neo-Aristotelian natural goodness founded on the metaphysics of powers, then this is a plausible way to go. However, I note that some may now have the worry that my account is too restrictive. For surely it is good that I give money to charity, or save someone from a burning building, yet do we want to say these are self-perfective as the life criterion requires such that the manifestation of this power

[328] Such as how do we determine what the highest good is.

[329] Some might worry that there is no hard distinction between life and non-life. My view claims that there is and that supposedly borderline cases can be answered.

[330] At least this is Marmodoro's view (2017a, 122), and I remind you that we are assuming it to be correct.

is good? Perhaps we can. For if we say that the substantial power of a human, at least in part, is characterised by its teleological directedness towards being a fully realised rational animal, where the structural powers that constitute this power are directed towards this end, we might be able to. Note here, that one could think of this substantial power as one which never has a definite end point manifestation,[331] and thus is an activity, which as I noted above is teleological. Alternatively, one might think there is an end point, but that all human beings are in the process of achieving the end. All this to say that the end of rationality need not be met in order for the view put forward here to work.

On this view then we could say that charity, empathy, braveness, are all rational capacities which need to be manifested in order for a human to reach their good or final end of being a fully realised rational animal, the primary end of the substantial power. That is these are components of this final end, and in manifesting these individual, or perhaps more complex and fine-grained powers, we are exhibiting a self-perfective power since they bring us closer to achieving our primary end. If this move is successful, then it seems as though there are many *prima facie* goods we will be able to account for and as such we can bypass the restrictiveness concern.[332]

Nevertheless, some might still think I have restricted the account too much, and therefore perhaps one will be able to incorporate earlier aspects of this chapter so to give a less restrictive account, although I make no claim that this is possible. In doing so one might also come up against the objection that the account is being made too complex and therefore the parsimony motivation for the account might be weakened. I suspect whether this is the case will depend on what types of parsimony one is after, such as explanatory, quantitative, or qualitative. Since the parsimony I'm after is just one where the ontology contains powers alone, as long as this criterion is met, this complexity elsewhere will have little effect on me.[333] Let me further note that what I called the standard metaphysical account of neo-Aristotelian goodness, which relies on essentialist theories of objects, will also have to restrict the domain of goodness, since objects with essences, for many, covers a large class and not all will want to say that these objects can be thought of as good.

[331] Perhaps one's rational abilities can grow without end.

[332] We might be able to say something similar for other types of goodness, such as for some epistemic goods.

[333] For instance, I do not mind having at least two types of powers within the ontology.

7.6 - Powers and neo-Aristotelian goodness

With all this said, I hope I have begun to show how a neo-Aristotelian theory of goodness might go which is grounded in the metaphysics of powers alone. It would be a mistake for me to say that I have shown this account to be wholly successful, since the account needs extending beyond natural goodness and there are many other worries and questions which need answering. For instance, we might ask how we are to work out the teleological directedness of the substantial power,[334] how we can ascertain whether something is living, whether the essences of powers have determinate teleological ends or not,[335] what badness is on this view, how we can account for other types of goodness (such as epistemic and aesthetic goodness), and many other things. Nevertheless, I note here that these types of worries and questions are also ones that typically also apply to standard accounts of neo-Aristotelian goodness and its metaphysical grounding, and therefore I don't take my account to be worse off than the more standard account. Despite this, I acknowledge that in with the incorporation of powers there are additional questions to be asked, such as whether the types of powers one allows has any relevance for how the theory would go, for instance what should be said about multi-track powers,[336] or even whether they should be allowed,[337] and further exploration as to how we are to make sense of degrees of goodness. However, I do think I've shown that it is fairly plausible that a neo-Aristotelian account of goodness, at least natural goodness, can be based on a metaphysics of powers alone. Given this, the response I gave in the previous chapter can also be translated into a power-based response. As such the worry about ontological baggage is overcome.

[334] Austin and Marmodoro provide the way I would want to try to answer this writing, 'Discerning what's "of the nature" of a power is no esoteric enterprise—it merely requires an appeal to the same standard we utilise in judgements of this sort in the empirical sciences: namely, non-random regularity.' (2017, 175)

[335] Marmodoro (2018, 40 n.28) mentions something akin to this final concern.

[336] For instance, Austin and Marmodoro (2017, 176) think we should say that the structural power of an organism has multiple teleological goals. Questions therefore arise as to whether these goals have the same value, or how it is that some have differing values. Some of these questions might also be applicable to more traditional object essentialist views as well.

[337] For instance, Besong (2018, 73), even though he doesn't discuss this question, would seem to think not, writing, 'Each power has *one* natural object that it is oriented to and one natural function with which it has been designed to achieve the object it aims at.' (Italics my own)

7.7 - An economical God

I want to finish this chapter by drawing a few things together. In this thesis I have suggested that ontological parsimony is important to metaphysicians and philosophers of religion, evidenced in Schaffer who writes, '*Do not multiply entities without necessity!* Few principles are as pervasive in contemporary metaphysics.' (2015, 644)[338] I also mentioned previously that Leibniz (1686, Section 22) thought that being economical was a perfection. If this is right then a perfect God, which most theists take God to be, is likely to create in an economical way. Before showing what one can claim in virtue of this fact, I remind the reader of the distinction Rodriguez-Pereya (2002, 204-210) made in thinking that there are two types of parsimony which are virtuous, quantitative and qualitative ontological economy. For our purposes, quantitative ontological economy concerns the creative steps God performs, and qualitative ontological economy refers to the number of entities other than God. I summarise the results in the table below.

[338] Other evidence for this is that having as few categories in one's ontology as possible is seen as virtuous (for instance see Paul's (2017) one category ontology), often at the expense of explanatory power. Within theistic debates Swinburne (2004, 52-66) is perhaps the greatest advocate of simplicity as a guiding principle.

Conception of physical laws and goods	Are laws ontologically distinct from properties?	Items in ontology	Steps God performs to create	Governing internal/external to substances
Anti-Realist (Humean)	No	1 entity (categorical properties)	1 step – God creates only categorical properties, we spot regularities and subjectively determine goodness	There is no governing role at all
Strong Platonic	Yes	3 entities (categorical properties, laws and goods)	1 step – God creates only categorical properties since the natural and axiological laws/goods are eternal existents	External
Strong External Governing (Divine Command Theory)	Yes	3 entities (categorical properties, laws and goods)	3 steps – God creates natural laws and then axiological laws/goods and finally categorical properties or vice versa	External
Powers (Neo-Aristotelian Goodness)	No	1 entity (Powers)	1 step – God creates powers and thereby natural and axiological laws/goods are automatically instantiated	Internal

On the anti-realist view concerning laws of nature and goodness, God only creates things with categorical properties, or categorical properties alone. This is because there is no governing role for either physical laws or goodness, since both turn out to be human constructions. As such this view is quantitatively economic since God creates in one step, and qualitatively economic as there is only one entity, categorical properties. As noted earlier, most theists are realists both in the natural law and axiological domain and as such they will reject this

position. The strong Platonic view similarly has God creating in one step, since He only needs to create categorical properties, and thus it is likewise quantitatively economical. However, there are three items within its ontology, eternal physical laws, eternal goods and categorical properties, and therefore it is not qualitatively economical. Further, we have seen reasons why theists will reject this view, due to the self-sufficient nature of both the laws of nature and goods.

The two views theists can most plausibly choose between are the strong external governing laws view, divine command theory and the powers accounts. I group the former two views together into what I will call the governing conception. On this view God creates in three steps, laws of nature, axiological laws, and those things which are subject to the laws and goods. As such this view is neither quantitatively nor qualitatively economical. By contrast, on the powers view God only needs to create powerful properties, since these endow the world with both laws of nature and natural goods. This position is therefore quantitatively and qualitatively economical which may give us further reason to prefer it to the governing view. Perhaps one could mix and match positions to make an improved combination, e.g. the Humean position for laws and divine command theory for goods, however this would still mean that God creates in two steps, with two entities being created, categorical properties and goods, and therefore is less quantitatively and qualitatively economical than the powers position. As such due to parsimony reasons, and possibly perfection reasons we should think the powers view best and most likely as to how God would create.

8 - Conclusion

In this thesis I have attempted to show how a metaphysics of powers, an element of Neo-Aristotelian metaphysics, can aid philosophers of religion. I have done this by showing their uses in a number of distinct areas which will be of interest to theists, such as in thinking about the Trinity, how God creates laws of nature, the Euthyphro dilemma, and as to what God might need to create in order to get value within the world. These diverse applications of a power ontology have shown that it is capable of speaking into many different issues, many of which haven't been explored by philosophers who are interested in such an ontology.

One of the reasons I suggested theists might like what I have said about these topics is that they provide something of a unified response to all of them, rather than discrete responses to each. That is, I require only powers, whereas other such answers to each question might need different ontological commitments. Thus, insofar as one thinks unification and simplicity is a virtue this will provide a good reason to adopt my account over others. However, it is worth pointing out that if one was to adopt every answer I have given within this thesis then a very specific view of powers would be required. Most of these specifics are due to the chapter on the Trinity and many of the theses I require there, but an additional feature of powers was required within the previous chapter, that of being teleological. Thus, to adopt all of what I've said here, one must at least endorse a theory of powers that holds that there is at least one qualitatively multi-track power, that powers are teleologically directed towards their manifestation, that a power in potentiality is numerically the same as it in actuality, that powers can exist independently of categorical properties, and that some powers necessarily manifest. It is therefore here, that the complexities in my position will arise.

Perhaps it will be that some will find one or more of these features of powers unacceptable. Insofar as they do they will be unable to embrace all that I have said here, however that need not mean that they cannot embrace much or some of what I have said here. In any case, at the very least I hope to have shown them what a power ontology can do, particularly one that accepts such claims. At the very least, because of this, I hope that this process has provided some motivation for others exploring what power ontologies can do within philosophy of

religion, and theories of value as well, even if the specifics of the power ontology differs from the one I have given here.

My long-term success then, is to be measured, in part, by whether philosophers of religion and metaphysicians, who read this thesis, see the potential, or power, within a power ontology for philosophy of religion and seek to explore this further. I think I have prized out some of the power of this approach, but I suspect that given further work this metaphysics could turn out to be much more powerful for philosophers of religion. However, I leave uncovering this both to other people and another time.

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