# Theistic Metaphysics in the Postmodal Era

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**A thesis submitted for the degree of DPhil in Philosophy**

## Declaration

I certify that this thesis I have presented for examination for the degree of DPhil in Philosophy is solely my own work.

I confirm that Sections 1.1-1.3 draw on some material of my MPhil thesis for the degree of MPhil in Philosophical Theology. Although the arguments share the same underlying ideas, the ones presented here are raised through a postmodal lens, which is a distinctive topic of my DPhil thesis. Subsection 3.5.1 and Section 3.6 discuss a theistic account of properties which I have endorsed in my MPhil thesis. Again, the account is formulated by postmodal concepts proposed in my DPhil thesis. Accounts of modality raised in Sections 4.2 and 4.3, which have been discussed in my MPhil thesis, are also examined from a novel perspective.

I declare that this thesis consists of 68,937 words.

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## Abstract

This thesis will provide a distinctive way of doing theistic metaphysics in light of the recent *postmodal* revolution in metaphysics. In Chapter I, I will undertake the preliminary task of figuring out what metaphysical tools we may need in the inquiries of theistic metaphysics. I will propose three postmodal concepts for theistic metaphysicians: (i) the concept of grounding, (ii) the concept of divine causation, and (iii) the concept of structure. In Chapter 2, I will go through various issues with regard these postmodal concepts including their formal properties and their relations to each other, before applying them to first-order questions in theistic metaphysics. After the second-order reflections on the postmodal concepts in question, I will turn to their applications in Chapters 3-5. The focus of Chapter 3 is theistic accounts of properties. I will demonstrate how various theistic accounts of properties may be formulated in terms of these postmodal concepts. I will also propose my own theistic account of properties which draws on some metaontological considerations raised in this chapter. In Chapter 4, I will turn to issues regarding theistic accounts of modality. I will show how the postmodal concepts may shed new light on several traditional questions about God and modality. A number of theistic accounts of modality will then be evaluated from a postmodal perspective. In Chapter 5, the postmodal concepts will be applied to issues with regard to God and time. I will defend the coherence of various positions about the relationship between God and time. In short, Chapters 3-5 will demonstrate how these postmodal concepts may help formulate, clarify, and answer various first-order questions of theistic metaphysics. Finally, in Chapter 6, I will summarize the previous chapters and say something about the limits of the postmodal approach proposed in this thesis.

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# 1 Towards a Theistic Metaontology

There are various metaphysical theses, e.g. physicalism, nominalism, and modalism, in the literature. Whether they are true or not is many, if not all, metaphysicians' primary concern. However, in order to judge their truth or falsity, we'd better make sure that we understand these metaphysical theses clearly; otherwise, one and one's opponent might just talk past each other, or even worse, we might disagree over nothing because there is actually no intelligible thesis for us to dispute. So how should we undertake this preliminary task? I suggest that we should firstly have a look at what metaphysical tools, i.e. the concepts used to articulate metaphysical problems, we may utilize to formulate these metaphysical theses.[1] Let me elaborate more on this. Before the concept of grounding was introduced recently, philosophers tended to use *modal* concepts to capture the ontological dependence relation between entities. For example, some take physicalism to be the claim that all mental properties globally supervene on physical properties, i.e. that there is no pair of possible worlds such that the instantiations of physical properties (and relations) in these worlds are the same but the instantiations of mental properties in these worlds are different. Here supervenience is a modal notion understood in terms of possible worlds. Philosophers have noted that modal concepts have limits: they are, for instance, inadequate to cope with hyperintensional cases, e.g. the necessary coexistence of {Socrates} and Socrates. Surely the existence of {Socrates} supervenes on the existence of Socrates. But if ontological dependence were nothing more than supervenience, then Socrates would also depend on his singleton set because the former also supervenes on the latter. This could not capture the putatively asymmetric dependence of {Socrates} on Socrates. In light of this problem, some philosophers believe that we need some 'postmodal' concepts like *essence* and

[1] The proposed view and the phrase 'metaphysical tools' are borrowed from Sider (2020a).

*grounding* to capture the asymmetry here. For example, if the concept of essence is a metaphysical tool which one is happy to use, then one can say that the dependence is asymmetric because it is part of {Socrates}'s essence that it has Socrates as a member, but it is not part of Socrates' essence that he belongs to his singleton set.[2] Or consider another example, which is a classical issue of theistic ethics. Suppose that it is necessary that an action is right if and only if God wills it. If theistic ethicists only have modal concepts, then there will be no way to say that which one is prior to the other. But if the concept of grounding is accepted into one's metaphysical toolkit, then one can express the asymmetric dependence by saying that one of these facts is grounded in the other, and not vice versa. These foregoing examples show how the choice of metaphysical tools may affect our formulations of metaphysical questions and positions. Some formulations reflect our understanding of these questions and positions better, and some worse.

It is not my goal to carry out a study of what metaphysical tools we may use when we do metaphysics in general. Instead, what I would like to explore in this chapter is what metaphysical tools we may use to explain the dependence relations between God and other entities and formulate a variety of theistic theses which involve claims about (in-)dependence. For instance, I will ask questions about what metaphysical tools we need to use in order to formulate the doctrine of divine sovereignty and whether the dependence relation between God and creatures should be understood in terms of modal concepts or not.

Before starting the quest for metaphysical tools, let me briefly describe the plan of this thesis so that the significance and relevance of this quest will be easier to appreciate. The topic of this thesis is theistic metaphysics where the phrase 'theistic metaphysics' is understood in a broad sense. It covers at least two kinds of questions. First, it is concerned

[2] This is Fine's (1994) famous example.

with how God may be relevant to a variety of general metaphysical issues. This includes the study of theistic accounts of properties, modality, and so on. Second, theistic metaphysics is also concerned with metaphysical problems generated by the concept of God itself. For instance, one may ask whether the putative divine attributes, e.g. omnipotence and omniscience, are coherent or not. Clearly, the foregoing two kinds of inquiries are not mutually exclusive. Sometimes a question of the former kind may get entangled with a question of the latter kind. For example, when a theistic metaphysician proposes a theory of properties on which properties are necessary and abstract universals created by God, it is inevitable to ask how it is possible for God to create his own properties, e.g. omnipotence and omniscience, given the doctrine of divine aseity, which, roughly speaking, states that God exists on his own and thereby does not depend on anything.

The overall aim of this thesis is to provide a distinctive way of doing theistic metaphysics in light of the recent *postmodal* revolution in metaphysics. As noted above, in the rest of this chapter, I will undertake the preliminary task of figuring out what metaphysical tools we may need in the inquiries of theistic metaphysics. As we will see later, I will propose three postmodal concepts for theistic metaphysicians. In Chapter 2, I will go through various issues with regard these postmodal concepts, for instance, their formal properties and their relations to each other, before applying them to first-order questions in theistic metaphysics. After the second-order reflections on the postmodal concepts in question, I will turn to their applications in Chapters 3-5. The focus of Chapter 3 is theistic accounts of properties. I will demonstrate how various theistic accounts of properties may be formulated in terms of these postmodal concepts. I will also propose my own theistic account of properties which draws on some metaontological considerations raised in this chapter. In Chapter 4, I will turn to issues regarding theistic accounts of modality. I will show how the postmodal concepts may shed new light on several traditional

questions about God and modality. A number of theistic accounts of modality will then be evaluated from a postmodal perspective. In Chapter 5, the postmodal concepts will be applied to issues with regard to God and time. I will defend the coherence of various positions about the relationship between God and time. In sum, these chapters will demonstrate how these postmodal concepts may help formulate, clarify, and answer various first-order questions of theistic metaphysics.

It is therefore fair to say that the (primary) goal of this thesis is not to defend any particular first-order position in theistic metaphysics.[3] Instead, the goal is to justify a postmodal approach to theistic metaphysics by the fruitful results of the application of postmodal concepts to this field, which we will see in this thesis.

Now let us start with the methodological inquiries regarding metaphysical tools before turning to first-order questions of theistic metaphysics. In the following sections, I will survey metaphysical concepts which may be used in theistic metaphysics and evaluate them by applying them to some relevant issues. These will include modal concepts (Section 1.1), the concept of grounding (Section 1.2), the concept of causation (Section 1.3), and the concept of structure (Section 1.4).

## 1.1 Modal concepts

The use of modal concepts, namely concepts used to express what could be or must be the case, was quite prevalent in the late 20th century. For instance, as mentioned earlier, philosophers of mind used them to define physicalism: all mental properties *supervene* on physical properties.[4] And philosophers of religion during this period made use of modal

[3] Nevertheless, I will still tackle many first-order questions and even provide my own preferred answers to some of them, though I do so mainly for the sake of illustrating the significance and usefulness of postmodal concepts.
[4] See, for example, Lewis (1983a).

concepts too. Plantinga's (1974) proposed the *modal* ontological argument while Mackie (1983) contended that the existence of God is *incompossible* with the existence of evils.

On the other hand, in the theistic context, it has been common to talk about the dependence relation between God and entities from the other ontological categories like (non-divine) concrete particulars, numbers, or sets. Thus, it is a natural thought that the dependence relation(s) in question may be understood in terms of modal concepts. For instance, one may understand an entity *x*'s dependence on another entity *y* as follows:

**Dependence$_N$** For every *x* and *y*, *x* depends on *y* iff *necessarily*, if *x* exists, so does *y*.

Alternatively, one may define creatures' dependence on God in terms of another modal concept, i.e. the concept of counterfactuals, in the following way:

**Dependence$_C$** For every *x*, *x* depends on *y* iff *x* would not exist were *y* not to create *x*.

These definitions offer theists some ways of understanding claims about dependence like "the whole physical universe depends on God".

The modal approach(es) to theistic metaphysics can handle all the cases of dependence of contingent entities on God as there is no problem for theists to hold that for any contingent entity *x*, necessarily, if *x* exists, then God exists, or that for any contingent entity *x*, if God were not to create *x*, then *x* would fail to exist. However, when it comes to necessary entities like pure sets, the modal approach seems to be in trouble. Some theists would like to say that everything, including every necessary entity, distinct from God depends on God, but God himself depends on nothing.[5] (The former thesis is usually called

[5] Recall that the aim of this chapter is to explore what metaphysical tools one may use to articulate various theses in theistic metaphysics. Thus, the present question is not whether they are true or not. Instead, the question is whether modal concepts can help theistic metaphysicians to formulate their view that both contingent entities and (non-divine) necessary entities depend on God, whereas God depends on neither of them.

"the doctrine of divine sovereignty", and the latter "the doctrine of divine aseity".)[6] Now according to **Dependence**$_{\mathbf{N}}$, God also depends on every necessary entity *x* because the conditional "if God exists, *x* exists" turns out to be necessarily true given the necessary existence of *x*. But this result is surely incompatible with the doctrine of divine aseity which says that God depends on nothing.

Can **Dependence**$_{\mathbf{C}}$ do a better job? Consider the following counterfactual: if God were not to create number 2 (which I suppose, for the sake of exposition, to be a necessary entity), then 2 would not exist. This counterfactual can be true as one may insist that God must create 2 in every possible world. Since it is impossible that God does not create 2, according to the standard Stalnaker-Lewis semantics for counterfactuals, it is (vacuously) true that if God were not to create 2, then 2 would not exist.[7] However, there is still a problem with **Dependence**$_{\mathbf{C}}$. If a counterfactual with an impossible antecedent is always true, then it is also true that if God were not to create 2, then 2 would still exist. This seems to suggest that 2 is an independent entity whose existence does not depend on God's activity of creation.

Now the proponents of **Dependence**$_{\mathbf{C}}$ might object that **Dependence**$_{\mathbf{C}}$ only says that an entity *x* depends on God if *x* would fail to exist were God not to create it. It does not imply that number 2 does not depend on God if 2 would still exist were God not to create it. However, theists who accept a robust (rather than vacuous) and asymmetric dependence relation between God and other entities may not be convinced by this reply. For they may insist that if *x* robustly depends on God, then it is *not* the case that if God were not to create *x*, *x* would still exist. Hence, if both 2 and God exist necessarily, then 2 is still independent in the robust sense.

[6] Some may use the term 'aseity' to cover both God's dependence on nothing and everything's dependence on God and leave the term 'sovereignty' to God's volitional control over every creature. Here I follow Mann's (2005) usage.
[7] See Stalnaker (1968) and Lewis (1973a).

Now we should notice that the foregoing problems can be understood in two ways. First, if we accept that the idea of dependence in question can be fully captured by modal concepts, then these problems may simply be taken to be first-order metaphysical problems of whether some theistic doctrines are true or not.[8] Second, we may also take them to be metaontological problems of whether modal concepts are fit to articulate these doctrines. Construed in the second way, the problems will lie in the modal definitions of dependence rather than the doctrines themselves. As noted above, what concerns me in this chapter is the latter. Therefore, the question which I am asking here is whether we can use modal concepts to make sense of the idea that non-divine necessary entities asymmetrically depend on God.

### 1.1.1 Impossible worlds

We have seen that the asymmetric dependence in question cannot be expressed by means of either strict conditionals or counterfactual conditionals (given the standard Lewis-Stalnaker semantics). Is there any other modal concept to which we may appeal? The concept of impossible worlds, one may think. If one can have some sort of non-vacuist semantics for counterfactuals with impossible antecedents, i.e. counterpossibles, conditionals like "If God were not to create 2, 2 would not exist" and "If God were not to create 2, 2 would still exist" may be assigned non-vacuous truth values which could reflect the robust and asymmetric dependence of 2 on God. Leftow has proposed such a semantics.[9] Roughly speaking, he posits a null world in which absolutely nothing exists. In

[8] There are several ways to address these problems understood in this way. For instance, one may modify the doctrines by restricting the domain of the universal quantifier to only contingent entities. See van Inwagen (2009). Or one may turn to some anti-realist views which deny the existence of necessary entities except God. See Craig (2017).

[9] See Leftow (1990). However, Leftow himself does not think that creatures' dependence on God should be analysed in terms of counterpossibles. Therefore, my criticism in later paragraphs should be not read as an objection to Leftow's own account of necessary entities' dependence on God, which is fully articulated in his (2012), but an objection to those who use Leftow's semantics for counterpossibles to understand dependence claims.

this null world, neither God nor creatures exist. And then he also postulates that the null world is the only impossible world in which God does not exist. That is, in all impossible worlds other than the null world, God exists. Therefore, the null world will be the closest (impossible) world where God does not exist. Furthermore, he presupposes that the null world is the closest world where God does not create necessary entities like number 2. According to Leftow's semantics, "If God were not to create 2, then 2 would not exist" is (non-vacuously) true because in the closest world where God does not create 2, i.e. the null world, nothing, including 2, exists. On the other hand, "If God were not to create 2, then 2 would still exist" is false according to the proposal because 2 does not exist in the null world. This is how the asymmetric dependence of number 2 on God is captured under Leftow's semantics.

In addition to the dependence of necessary entities on God, the concept of impossible worlds may be used in some other issues in theistic metaphysics. For instance, Pearce and Pruss use counterpossibles to analyse omnipotence.[10] They propose the view that an omnipotent being has (i) perfect freedom of will and (ii) perfect efficacy of will where perfect efficacy of will is understood as follows: *x* has perfect efficacy of will if and only if for all propositions (including necessarily false ones) *P*, necessarily, if *x* were to will *P*, *P* would be intentionally brought about by *x*. Pearce and Pruss's account of omnipotence may provide a way out of the dilemma of omnipotence and essential perfect goodness, i.e. the problem that nothing can be both omnipotent and essentially perfectly good because an omnipotent being can do everything logically possible, including willing something evil, but it seems impossible that an essentially perfectly good being wills anything evil. In order to reply to this dilemma, one can say that being omnipotent does not imply that it is possible that God intends to bring about something evil. According to this account, God's being

[10] See Pearce and Pruss (2012).

omnipotent only requires that if God were to will something evil, then that evil thing would be intentionally brought about by God. Since the conditional is a counterpossible, one does not need to accept that it is possible for God to will something evil. Therefore, God can still be both omnipotent and essentially perfectly good (as there is no possible world in which God wills something evil.)

Although the concept of impossible worlds seems a handy tool, I still feel uneasy about using it to understand the relevant dependence claims in theistic metaphysics. For it seems to me that the aforementioned semantics for counterpossibles is rather ad hoc. For instance, even if we assume with Leftow that the null world is the closest world in which God does not exist, many people, I suspect, will not have the intuition that the null world is also the closest world in which the sovereign God does not create 2. Since it is impossible that the sovereign God does not create 2 but 2 still exists, there seems to be some impossible world in which (i) God exists, (ii) he does not create 2, but (iii) 2 still exists. If there is such an impossible world, I am not sure whether it is closer than the null world to the actual world or not. Moreover, one may even contend that since this impossible world at least contains some existing entities like God and 2, it should be closer than the null world, which contains nothing at all, to the actual world, which also contains some existing entities. If so, then this impossible world will be the closest world in which God does not create 2. Therefore, the counterpossible "If God were not to create 2, then 2 would not exist" will turn out to be false.

Now there may also be an impossible world where God decides not to create 2 and 2 does not exist. The proponents of **Dependence**$_C$ might insist that this world is the closest world in which God does not create 2 since God's will to not create 2 is not thwarted in that world. However, this reply does not answer the complaint. Even if we admit that there is some reason, e.g. that the sovereign God's wills are perfectly efficacious, for holding

that this impossible world is the closest one, it is still unclear whether this reason outweighs some other relevant considerations, e.g. that a world with less violation of mathematical truths should be, other things being equal, closer to the actual world, which favour different answers. Our intuitions do not clearly indicate how to weigh these relevant factors.[11]

Of course, one can always put some constraints on the order of closeness between (im-)possible worlds to get one's intended result. Nevertheless, since the constraints will be determined by what claims about dependence one has already accepted, this confirms my point that this approach is ad hoc. In light of the foregoing ad hocery, I suggest that modal concepts, including supervenience, counterfactuals, and counterpossibles, at best serve as heuristic devices which help us grasp some dependence facts about God which we are already committed to.[12] But they should not be confused with these facts. To see how these facts should be understood, I now turn to the next section.

## 1.2 Grounding

We have seen that modal concepts are inadequate to cope with some cases of creatures' dependence on God. It is therefore natural to think that that theistic metaphysicians may appeal to some *postmodal* concepts to deal with these tricky cases. For instance, one may use the concept of grounding to capture the asymmetric dependence between creatures and God. Now let us have a look at how the concept of grounding may work for theistic metaphysicians.

Although talk of grounding is quite common nowadays, its connotation varies from philosopher to philosopher. There are two main variants in the literature. One is entity-

[11] A similar point is raised by Hill (2014).

[12] To avoid confusion, I would like to point out that what I contend here is not that modal concepts are completely useless in the inquiries of theistic metaphysics but that in order to formulate or articulate some important theses in theistic metaphysics (especially theses involving dependence claims about God and creatures), theistic metaphysicians need go beyond modal concepts and look for other concepts as their metaphysical tools.

grounding, a concept which applies to entities from any ontological category.[13] For example, an Aristotelian with regard to universals may say that universals are entity-grounded in their instances, namely the particulars which instantiate them. As a result, this concept of grounding may be used by Aristotelians to articulate their view that universals depend on their instances.

The other variant is fact-grounding which links two (or more) facts.[14] For example, we can say that a disjunctive fact is fact-grounded in its disjuncts. I myself think that the concept of fact-grounding is a more powerful tool than the concept of entity-grounding. For when doing theistic metaphysics, we may want to explain not only the dependence of creatures on God but also the dependence of *how* creatures are on God.[15] For example, a theistic metaphysician may want to explain by appealing to some facts about God not only (i) why Fido exists but also (ii) why Fido is tame. In this aspect, fact-grounding works better than entity-grounding.[16] Therefore, in the following discussion, I will always mean fact-grounding when I speak of grounding unless specified otherwise.

Another issue about grounding is whether it is unitary. Some hold that grounding is a unique metaphysical relation while others insist that when we talk about grounding, we are really talking about a variety of distinct metaphysical relations, e.g. realization, truthmaking, and set-formation. I am inclined to the view that there is a unique metaphysical relation of *grounding* and the other more fine-grained metaphysical relations are special cases of grounding. Specifically, I tend to think that these specific relations can

[13] See Schaffer (2009).
[14] See Fine (2001) and (2012), and Rosen (2010). Rosen takes grounding to be a relation holding between facts while Fine prefers to express grounding claims by using the sentential operator "… because …" so that one may stay neutral with regard to the existence of facts or propositions. The following discussion does not turn on this difference.
[15] This point is made in Mann (2005).
[16] To be sure, the theory of entity-grounding may be modified so as to provide a way to talk about dependence between facts, though this may also require a heavier ontological commitment. See Sider (2011), pp. 193-195.

be defined in terms of grounding and relevant metaphysical notions. For instance, we may define truthmaking in terms of grounding and truth: A fact *F* is a truthmaker for a proposition *P* iff the fact that *P* is true is grounded in *F*.[17] Likewise, set-formation may be defined in terms of grounding and membership: A plurality of entities *Es* set-forms a set *S* iff (i) the fact that *S* exists is grounded in the fact that *Es* exist, and (ii) *Es* are all and only *members* of *S*. According to this view, the same fact may ground different facts via different ways. For instance, the fact that Socrates exists grounds both (i) the fact that the proposition <Socrates exists> is true and (ii) the fact that the singleton set {Socrates} exists.

One of the advantages of the foregoing view is that it provides a simple answer to the question of intelligibility of the concept of grounding. Some might complain that since the concept of grounding cannot be defined in terms of some previously understood metaphysical concepts like supervenience, it is an unintelligible concept. Now according to the foregoing view, grounding can be understood, though not reductively defined, in terms of other metaphysical concepts with which we have been very familiar, say set-formation and realization. For it can be viewed as the *genus* of these fine-grained metaphysical relations. Even if we cannot define genera, e.g. mammal, in terms of species, e.g. dog and cat, the former can still be seen as the unifier(s) of the latter.[18]

On the other hand, Bennett has provided two counterexamples to the foregoing view.[19] The first concerns priority monism, i.e. the thesis that the cosmos as a whole which is

[17]See Schaffer (2010b) and Rodriguez-Pereyra (2005) and (2015).

[18] Another way to address the question of intelligibility of grounding is to point out that whether a concept is intelligible partly, at least, depends on whether we can gain fruitful results by applying it to various issues. For instance, in the last century, many people no longer found modal concepts mysterious after the development and applications of possible world semantics. Likewise, I suggest that to evaluate the intelligibility of the concept of grounding (and of the other postmodal concepts introduced later in this chapter), we need to discern whether these concepts can also generate useful results in theistic metaphysics, which will be the main topic of Chapters 3-5.

[19] See Bennett (2017), pp. 26-28. In fact, Bennett's own argument aims at the view that there is a unique 'building' relation of which grounding, among other relations, is a special case. However, her objection to the existence of a unique building relation also applies to my view here.

composed of every concrete entity is the only ungrounded entity.[20] If composition is a special case of grounding, then the cosmos will be grounded in its proper parts, and therefore turn out to be not ungrounded. Another counterexample is about downward causation, i.e. causation from higher-level events to microphysical events.[21] If causation is a special case of grounding, and downward causation is possible, then it is possible that some higher-level events, say mental events, are grounded in microphysical events (as the former are realized by the latter), and these microphysical events are also grounded in these mental events (as the latter may cause the former.) If grounding is, as many believe, asymmetric, then the possibility of downward causation poses another challenge to my view.

My reply to these counterexamples is simple. I do not think that composition and causation (including downward causation) are special cases of grounding. We will see why causation is not in the next section. Here I give some reason against composition as a special case of grounding. First of all, composition, unlike other metaphysical relations which I take to be special cases of grounding, does not relate facts but (non-fact) entities. As stated above, I prefer fact-grounding to entity-grounding due to its explanatory power. If composition is a special case of fact-grounding, then its relata should be facts as well. Now one might object that set-formation also relates entities rather than facts, but I still count it as a special case of grounding. My reply is that we can take the relata of set-formation to be existential facts about singleton sets and their members. For instance, we can say that for every *x*, *x* set-forms {*x*} just in case the fact that *x* exists grounds the fact that {*x*} exists. However, the same strategy does not work for composition because it is not always true that for every *xs*, *xs*, say fundamental physical particles, compose another

[20] See Schaffer (2010a).
[21] See, for example, Kim (1999).

object *y*, say a city, because the fact that *xs* exist grounds the fact that *y* exists. For instance, if composition is not unrestricted, then it is possible that *xs* exist but do not compose any further object. Therefore, some more facts, e.g. facts about the spatial arrangement of *xs* and other physical relations among *xs*, are needed to ground the fact that *y* exists. On the other hand, even if composition is unrestricted, there is still no reason for accepting the view that the fact that *xs* exist grounds the fact that *y* exists. For one may accept the thesis of composition as identity, which usually goes hand in hand with unrestricted composition, and therefore hold that the fact that *xs* exist does not ground the fact that *y* exists as the former fact is *identical* to the latter fact.

The foregoing argument is not decisive. However, it at least shows that we do have some reason to not take composition to be a special case of grounding. Now if one still disagrees with my view, they are invited to replace 'grounding' appearing in the following paragraphs with some fine-grained metaphysical relation which exclusively holds between creaturely facts and facts about God, say theological or divine grounding, as the discussion will not turn on the claim that composition and causation are not cases of grounding.[22]

Let us then turn to some applications of the concept of grounding. Given the concept of grounding, we have an easy way of understanding claims about (asymmetric) dependence of creatures on God by means of the following definition:

**Dependence$_G$** For every fact *P* and *Q*, *P* depends on *Q* iff *P* is grounded in *Q*.

In the tricky cases of necessary entities, theists can say that number 2 asymmetrically depends on God just in case that the fact that 2 exists is grounded in some fact about God, e.g. God's cognitive activity, but not vice versa.[23]

[22] This is the view proposed by Wilson (2014). Compare also Fine's (2012) view that there are three kinds of grounding: (i) metaphysical grounding, (ii) normative grounding, and (iii) natural/nomic grounding.
[23] See, for example, Menzel (1987). Menzel takes sets and numbers to be the products of God's cognitive activity.

The concept of grounding has also been applied to other issues of philosophy of religion. For instance, some provide new versions of cosmological arguments with the help of the concept of grounding.[24] The rough idea is that since God or facts about God can be the ground(s) of all other entities or facts, theists' ontology includes fewer ungrounded entities or facts than naturalists' ontology. According to Ockham's Razor (or Laser), we should accept a single ungrounded divine entity rather than a plurality of ungrounded naturalistic entities.[25]

Although the concept of grounding, I believe, is an indispensable and useful tool for doing theistic metaphysics, it seems to me that we also need some other tools. For consider the following two competing views within the theists' camp:

**Theistic Idealism** God's creatures are mind-dependent things, e.g. ideas in God's mind.

**Theistic Non-Idealism** God's creatures are mind-independent things, e.g. material objects.

Now if we take the dependence relation between creatures and God to be grounding, then we have to say that some facts about God, arguably God's wills to create such and such creatures, ground the existential facts about creatures. This provides a means to articulate **Theistic Idealism** as we are often told that the connection between grounded facts and their grounds is the tightest one. Fine writes: "…[grounding] is distinguished from [other explanatory relations] by being the tightest such connection…it is perhaps for this reason that we are not inclined to think of the truth of a grounded proposition as a further fact over and above its grounds…"[26] For instance, when we say that chemical facts, e.g. the existence of an $H_2O$ molecule, are grounded in physical facts, e.g. the relevant facts about

[24] See Pearce (2017a) and Deng (2020). To be sure, although Deng call his argument a 'cosmological' argument, he also makes it explicit that the conclusion of that argument, i.e. that there exists one and only one ungrounded entity, is compatible with naturalism. Thus, strictly speaking, his argument does not lead to theism.

[25] For relevant discussion on Ockham's Razor, see Schaffer (2015).

[26] Fine (2001), pp. 15-16.

fundamental micro-physical particles which constitute that $H_2O$ molecule, we tend to think that there is a very tight connection between the existence of that $H_2O$ molecule and its physical grounds . Likewise, if grounding is the relation holding between God's mental events and the existence of creatures, then their connection will be very tight too.[27] This may be one way to understand **Theistic Idealism** as the connection between one's mind and ideas in one's mind is a very tight one.[28, 29]

However, in order to articulate **Theistic Non-Idealism**, we have to find a way to *loosen* the connection between God's mental facts and the creaturely facts. A way leads to the result that creatures, once being created, might continue existing on their own. Grounding just cannot do the work because facts about creatures as being grounded in God's mental facts can never be free-floating outside God's mind. Therefore, we need another concept to explain the relation between God and mind-independent creatures. A natural candidate here is *causation*. One may say that creatures are caused by God's willings to exist. Now in cases like that the striking of a match causes the forest fire, not only are causes and effects distinct but also effects may continue occurring after causes cease. Hence, causation seems to be the moderate connection which we are looking for.[30] I now turn to the concept of causation in the following section.

## 1.3 Causation

[27] Compare the phenomenalist view that ordinary objects, i.e. those objects which we tend to take to be material, are nothing over and above, so to speak, our sense data. One may also use the concept of grounding to articulate this view: all physical properties/facts, or properties/facts which we take to be physical, are grounded in our mental properties/facts.

[28] See this sort of theistic argument for idealism, see Greco (2017).

[29] Some might think that this way of formulating theistic idealism will lead to the consequence that all classical theists are idealists because (i) classical theists hold that God sustains the universe in being, and (ii) God's sustaining the world should be understood in terms of grounding, as suggested in Pearce (2017a) and Segal (forthcoming). My reply is that not every classical theist need accept (ii). Especially, for those who believe that God's conservation of the universe is nothing more than continuous creation (and creation in general is understood as causation rather than grounding), there is no need to accept (ii).

[30] See also Audi (2020) on the difference between causation and grounding. On the other hand, for the similarity between causation and grounding, sometimes called 'metaphysical causation', see Schaffer (2016) and Wilson (2018).

It is noteworthy that the concept of causation here cannot be understood in terms of counterfactuals as we have seen that modal concepts are not fit to articulate the claims about creatures' dependence on God. Instead, let us take it to be a primitive concept which cannot be analysed in other terms. Given the primitive concept of causation, one may understand the connection or relation between mind-independent creatures and God as follows: God's creative willings *cause* (but not ground) the existence of these mind-independent creatures. For instance, those who believe that God creates mind-independent physical objects may hold the existence of an electron $e_1$ is caused by God's willing that $e_1$ exists. Given the concept of causation, the dependence relation between God and creatures may be understood in the following way:

**Dependence$_{CA}$** For every fact *P* and *Q*, *P* depends on *Q* iff *P* is caused by *Q*.

Therefore, we have a way to articulate **Theistic Non-Idealism**: creatures are objects whose existence is caused by rather than grounded in God's mental facts.[31]

Although the primitive concept of causation provides a way of articulating **Theistic Non-Idealism**, there are still concerns about whether it is a tool which we should adopt to understand the relation between God and his creatures. In the following subsections, we will see three reasons against using it to understand the relation between God and mind-independent creatures. Then I will suggest that these worries lead us to adopt a similar but different concept—divine causation—to do theistic metaphysics.

### 1.3.1 Causation and fundamentality

Let us start with the first reason. Consider a physicalist view which consists of the following two claims: (i) that there are not only physical facts but also chemical, biological, and psychological facts (but, of course, no supernatural ones), and (ii) that all facts other

[31] Recall that **Theistic Idealism** is the view that creatures are ideas whose existence is *grounded* in God's mental facts.

than physical facts are ultimately grounded in physical facts. The proponents of this view may also hold that there are different levels of reality. The bottom level consists of only physical facts while the higher levels consist of chemical, biological, and psychological facts respectively. We often hear that those facts of the bottom level are called 'fundamental facts' and that physical facts are claimed to be *more fundamental than* chemical ones which in turn are more fundamental than biological ones which in turn are more fundamental than psychological ones.[32] Given **Dependence$_{G}$**, one may have a straightforward way of understanding the talks of levels and fundamentality: a fact *F* is more fundamental than another fact *G* if *G* depends on *F* where dependence is understood in terms of grounding.[33]

Likewise, a theist who is committed to the view that creatures are caused to exist by God's willings would also like to assert some claims about levels of reality and fundamentality. For instance, one may hold that the bottom level consists of only facts about God, and these fundamental facts are more fundamental than facts about creatures. This seems a quite common view shared by many theists. So how can the theists who accept that the relation between God and creatures is causation rather than grounding explicate the talks of levels of reality and fundamentality? Given **Dependence$_{CA}$**, one may have a straightforward way of understanding the talks of levels and fundamentality: a fact *F* is more fundamental than another fact *G* if *G* depends on *F* where dependence is understood in terms of causation. If so, then facts about God willings be more fundamental than facts about creature because the former cause the latter.

Now here comes the problem. Schaffer points out that if we understand talk of fundamentality in terms of causation, then it will lead to some counterintuitive consequences.[34] One of them is that we need to accept that a fact may be more fundamental

[32] More on the notion(s) of fundamentality, see section 2.4.
[33] Note that this is only a sufficient condition. It is not my intention to propose a detailed theory of relative fundamentality here.
[34] See Schaffer (2020).

than another fact even if they supposedly belong to the same level of reality. For instance, in the process of the combustion of hydrogen, the existence of $H_2$ and $O_2$ (in conjunction with other chemical facts) causes the existence of $H_2O$ which is also a chemical fact. Thus, the existence of $H_2$ and $O_2$ is more fundamental than the existence of $H_2O$ though all of them are chemical facts.

Now some might reply that there is nothing wrong in saying that the former is more fundamental than the latter as $H_2$ and $O_2$ are *homonuclear* molecules, namely molecules composed of only one type of element while $H_2O$ is a *heteronuclear* molecule, namely a molecule composed of two or more types of elements. Then one might insist that homonuclear molecules are more fundamental than heteronuclear molecules because the latter have more complex structures.

There are several problems with the foregoing reply. For one thing, it is unclear whether the structures of homonuclear molecules must be more complex than the structures of heteronuclear molecules. For some homonuclear molecules, say diamond, seem to have more complex structures than some heteronuclear molecules, say methane. For another, this reply is incompatible with the claim that causes are more fundamental than effects. Let us look at the process of electrolysis in which the existence of $H_2O$ (in conjunction with other chemical facts) causes the existence of $H_2$ and $O_2$. In this case, the existence of $H_2O$ becomes more fundamental than the existence of $H_2$ and $O_2$ (given that causes are more fundamental than their effects.) Therefore, some heteronuclear molecules with complex structures, e.g. $H_2O$, are more fundamental than some homonuclear molecules with simple structures, e.g. $H_2$ and $O_2$. Moreover, this leads to a very strange result that events of the same type, e.g. the existence of $H_2O$, will be sometimes more fundamental and sometimes less fundamental than events of another same type, e.g. the existence of $H_2$ and $O_2$.

Another counterintuitive consequence of the view that causes are more fundamental than effects is that in a world where the universe begins with an initial singularity like the Big Bang, the only (absolutely) fundamental facts, i.e. facts which are less fundamental than nothing, would be facts about the initial state of the universe as they are the only uncaused facts. However, Schaffer complains: "supposing that there is a 'fundamental physical level'… surely some of the fundamental stuff persists past the initial conditions."[35] Indeed, we do not tend to think that the existence of an electron will become less and less fundamental through the passage of time.

### 1.3.2 Causation and perfect efficacy

I now turn to the second reason. Note that causation is an *external* relation, i.e. a relation whose obtaining does not supervene on its relata. Suppose that Suzy's throwing a stone is a cause of the breaking of a window. It is possible that these two events still occur, but the former is not a cause of the latter. (Consider a world in which these two events occur, but there is a wall between Suzy and the window, the latter of which is broken by a stone thrown by Billy instead.) Now if causation is an external relation, then its externality in principle leaves room for the possibility that God's willing that *P* fails to be a cause of *P*. That is, God's willings might be thwarted. However, if God is omnipotent or his willings are perfectly efficacious, then there will be no room, even in principle, for the possibility that God wills so and so, but it turns out otherwise.[36] Thus, it seems that the relation between God and creatures has to be internal rather than external.

One might object that although causation does not supervene on a partial cause and its effect, it does supervene on a full cause and its effect. Thus, the relation of *full* causation

[35] See Schaffer (2020), p. 738.
[36] See Pearce (2017b) for relevant discussion though his conclusion there is that we should take the relation between God and creatures to be grounding rather than causation.

can still be an internal relation as its relata are full causes, rather than partial causes, and their effects. If so, then perhaps we can use the concept of full causation to explain the relation between God and mind-independent creatures.

Unfortunately, this response fails because full causation may not supervene on full causes and their effects either. First, if laws of nature are contingent, then a full cause may fail to cause its effect. If laws of nature were different from the actual ones, then it might be the case that a pair of events which consists of a full cause and its effect in the actual world occur, but the causal relation does not hold between them.[37] If so, then the relation of full causation may not supervene on its relata. Second, consider again a pair of events which consists of a full cause and its effect in some possible world *w*. Then consider another possible world *w'* which is an *occasionalist* duplicate of *w*, i.e. a world in which all creaturely events in *w* also occur and stand in the same spatio-temporal relations to each other as they do in *w*, but they stand in no causal relation to each other as God's willings are the exclusively full causes of these creaturely events.[38] In *w'*, the same pair of events still occur but they no longer stand in the causal relation. In this case, the relation of full causation does not supervene on its relata either. Of course, the proponents of the concept of causation might resist the foregoing counterexamples by rejecting the contingency of laws of nature and the possibility of occasionalism. However, as we are now looking for concepts which are fit to articulate various positions in theistic metaphysics, it is not dialectically preferable to rule out these positions, which seem perfectly coherent, in advance.[39]

[37] It is noteworthy that as Schaffer points out, laws of nature themselves are not causes but part of the background circumstances. Thus, they cannot be part of the full causes. See Schaffer (2020), p. 733.
[38] More precisely, they do not directly stand in causal relations to each other. But in a derivative sense, they may stand in some causal relation to each other as God's divine willing may be their common cause.
[39] Admittedly, the second reason will not move those theists who believe that God's power is weak enough to the extent that his willings may be thwarted by some external matter. However, it seems to me that such a weak God could not play any significant role in our metaphysical inquiries as there is no substantive difference between a weak God's causal power and any other creatures'. Therefore, this weak God seems to

### 1.3.3 Causation and creation *ex nihilo*

The third reason concerns creation *ex nihilo*. We may notice that there is a contrast between (i) God's willings' bringing about creaturely events and (ii) creaturely events' causing other creaturely events. In the latter case, causation usually, if not always, consists in the change of things which have already existed. For instance, chemical facts about $H_2$ and $O_2$ cause the existence of $H_2O$ as electrons move around and form new orbitals. Yet the list of all fundamental physical entities before and after the process remains the same: electrons, nucleuses, and so on. There are neither new fundamental physical entities produced nor old ones annihilated in this process. Moreover, even in the cases of pair production and annihilation, the creation of matter/antimatter or energy still comes from something, e.g. photons or electrons/positrons, which have already existed. Therefore, creaturely causation never brings about anything new *ex nihilo*.

However, this situation is quite different when it comes to God's willings' bringing about the existence of creatures. The key idea of creation *ex nihilo* is that God did not use anything which has already existed as materials to create the universe. Neither were God's willings converted to the existence of creatures. Instead, creatures came into existence *out of nothing*. Therefore, the concept of causation does not seem to mark the uniqueness of God's willings' bringing about the existence of objects.

### 1.3.4 Divine causation

We have seen three reasons why the concept of causation is an inadequate tool to characterize the relation between God and mind-independent creatures. I now suggest that the foregoing problems can be solved if we posit another metaphysical concept: divine

belong to the same level of reality as other beings. If stones, chairs, and all other things with limited causal powers do not play any special role in one's metaphysical inquiries, neither should a weak God.

causation.[40] Let us call the primitive causation discussed above 'ordinary causation' to make an explicit distinction between these two concepts. I now take divine causation to be a relation holding between two events/facts. Moreover, as its name suggests, it is a necessary condition that one of its relata, namely the divine cause, must be a fact about God. For instance, God's willing that an electron *e* exists can be a divine cause of the fact that *e* exists, whereas the fact that *e* exists cannot be a divine cause of the fact that a fluoride ($F^-$) exists.

We now can see why the three problems raised above can be handled. Recall the case about relative fundamentality in 1.3.1: a cause should belong to the level of reality to which its effect also belongs, and thereby cannot be more fundamental than its effect. The same problem does not occur in the cases of divine causation as there is nothing wrong in saying that a divine cause, e.g. God's willing that there is a physical universe with such and such properties, is more fundamental than its effect, e.g. the existence of a physical universe with such and such properties.

Moreover, there are some other differences between divine causation and ordinary causation. For one thing, divine causation is an internal relation while ordinary causation is an external one as it is hard to imagine a case in which divine causation does not supervene on its relata given that one of its relata is some of God's mental events. This addresses the second problem, i.e. the problem that an external causal relation leaves room for the possibility that God's willings are thwarted. For another, a divine cause can bring about its effect *ex nihilo* while no ordinary cause can. Hence, the distinction between divine causation and ordinary causation also helps us explain why there is a difference between

[40] Disclaimer: what I claim here is not that these problems can be solved *only if* this concept is posited. There may be more than one way to deal with these problems. Nevertheless, it is not my aim to explore all options here. The point here is simply that these problems push, though not force, theistic metaphysicians towards positing the concept of divine causation.

God's willings' bringing about the existence of creatures and creaturely events' causing other creaturely events.

In fact, divine causation, in many crucial aspects, is more like grounding than ordinary causation. For instance, both divinely causal claims, e.g. that *P* divinely causes *Q*, and grounding claims, e.g. that *P* grounds *Q*, track the relative fundamentality among facts. Also, both divine causation and grounding are internal relations. The main difference between divine causation and grounding lies in the fact that divine causes can bring about their effects *ex nihilo* while grounded facts come into being not *ex nihilo* but out of their grounds. For instance, the singleton set of Socrates comes into being out of Socrates himself. Thus, divine causation may be understood as a fine-grained metaphysical relation along with the other relations mentioned above, e.g. set-formation and realization, though it is not a special case of grounding.[41]

I do not take any of the foregoing reasons to be a decisive argument for the justification of divine causation. However, recall that the aim of this chapter is to find useful metaphysical tools which may help us articulate various theses in theistic metaphysics. Let us now see whether the concept of divine causation may be such a tool. Consider **Theistic Non-Idealism** and the following three theses:

**Fundamentality** Creaturely facts are less fundamental than their divine causes.

**Perfect Efficacy** God's willings are perfectly efficacious in the sense that they can never be thwarted.

**Creation Ex Nihilo** God's willings bring about the existence of creatures *ex nihilo*.

The conjunction of the foregoing four theses does not seem a very unpopular view in theistic circles as many theists believe that God created the material, mind-independent

[41] Some might think that there is another difference between grounding and divine causation which is about their relata. Grounding, as I am using this concept here, applies only to facts, whereas it seems that divine causation can hold between God himself and effects. This involves the issues about event/agent causation which I will come back in section 2.2.

universe *ex nihilo* with his perfectly efficacious act of creation. However, if we only have the concept of grounding or the concept of ordinary causation, we will not be able to articulate this view. For, as noted above, the concept of grounding cannot be used to articulate **Theistic Non-Idealism** and **Creation Ex Nihilo**, and the concept of ordinary causation fails to accommodate **Fundamentality**, **Perfect Efficacy**, and **Creation Ex Nihilo**. Instead, the concept of divine causation, as we have seen, can do all that quite well. I therefore suggest that we should at least give the concept of divine causation a chance to prove its value in theistic metaphysics.[42]

Besides its ability to articulate the foregoing view, I believe that the concept of divine causation can generate fruitful results in theistic metaphysics. In the remaining chapters of this thesis, we will see how this concept can be applied to various metaphysical issues, including the issues of God's relation to properties, modality, and time. For now, let us focus on some issues of philosophical theology. By doing so, we may have a better grasp of the concept of divine causation.

### 1.3.5 Applications

The concept of divine causation can be used to formulate various theistic doctrines. First, we may formulate the doctrine of divine sovereignty in terms of the concept of divine causation (in conjunction with the concept of grounding). As mentioned above, this doctrine is usually understood informally as the following claim: everything distinct from God depends on God. The dependence relation is taken to be a relation between entities in this informal gloss. However, as noted above, theistic metaphysician care about not only

[42] One might wonder why not take the concept of divine causation to be a concept defined in terms of a generic concept of causation, which covers both divine causation and ordinary causation, plus some conditions, e.g. those regarding **Fundamentality** and **Perfect Efficacy**. The advantage of this reductive view is that we do not need to add another primitive concept to our ideology. However, due to the issue regarding the so-called purity principle raised in section 2.2, we will see that there are good metaontological reasons not to adopt the reductive view.

the dependence of creatures on God but also the dependence of how creatures are on God. Thus, we need to reinterpret this doctrine as a claim about dependence between facts about creatures and facts about God. As divine causation and grounding both relate facts rather than entities,[43] they may be used to formulate this doctrine as follows:

> **Sovereignty** For all creaturely facts *P*, *P* is either (i) divinely caused by some fact(s) about God, or (ii) grounded in some fact(s) which is divinely caused by some fact(s) about God, or (iii) grounded in some fact(s) about God.[44]

We need clause (ii) here because arguably God only creates ungrounded entities like fundamental physical particles, and all other entities simply arise from certain arrangements of these ungrounded entities. For it seems that God does not need to have a different willing to divinely cause a chemical fact if all physical facts which ground that chemical fact have already been divinely caused by God's willings.[45] On the other hand, clause (iii) is added to this definition so that it leaves room for **Theistic Idealism**. For both theistic non-idealists and theistic idealists can accept **Sovereignty**.

Second, we can use the concept of divine causation to handle issues concerning occasionalism and creaturely, or secondary, causation. Occasionalism is the view that God's mental events are the sole causes of creaturely events, and no creaturely events are causes of any creaturely events. Now if the doctrine of sovereignty is understood in terms of the concept of ordinary causation rather than the concept of divine causation, then the doctrine of sovereignty will likely collapse into occasionalism. For if every creaturely fact

[43] As noted above, whether divine causation only relate facts is a controversial issue which I will come back later.

[44] Here I assume that grounding is transitive. Thus, if a biological fact *B* is grounded in a chemical fact *C* which is in turn grounded in a physical fact *P* which is ungrounded but divinely caused by some divine fact *D*, then *B* will still count as a fact which is grounded in some fact, namely *P*, divinely caused by some fact about God. For those who reject the transitivity of grounding, it is easy to revise (ii) by using the idea of grounding chains.

[45] Recall the slogan prevalent in the literature on grounding: When God created the universe, all he had to do was bring about things which are ungrounded.

is ordinarily caused by some fact about God, and God's willings are perfectly efficacious, God willings pre-empt or trump all other creaturely facts. That is, these creaturely facts, which are taken to be putative causes, are actually causally idle; otherwise, some creaturely effects will be overdetermined by facts about God and creaturely facts. Hence, there seems to be no room for causation among creaturely facts unless some sort of systematic overdetermination is possible. This is the exclusion problem of secondary causation.

Fortunately, once the concept of divine causation is put into action, theists may have a way to accept the doctrine of sovereignty without also embracing occasionalism. Given the distinction between divine causation and ordinary causation, we may say that a creaturely event can have both a divine cause and an ordinary cause, instead of two competing causes *simpliciter*.[46] This is not a case of overdetermination because the effect in question is not related to its divine cause and its ordinary cause via the same relation. The rejection of overdetermination is based on the causal principle that events at most have one sufficient cause where the term 'cause' here is understood as ordinary causation. I admit that the principle seems quite plausible when it is confined to the realm of material creatures. However, it remains silent on whether sufficient divine causes also exclude ordinary causes. As we have noted, divine causation is a relation which is quite dissimilar from ordinary causation. It is unclear why this principle should be applied to divine causes, which are outside the realm of material creatures, as well.[47] The exclusion problem of secondary causation therefore turns out to be less compelling. Now as **Sovereignty** requires only that every (ungrounded) creaturely fact is *divinely* caused by some fact(s) about God, this

[46] This is another reason why theistic metaphysicians may *not* accept the reductive view on which the concept of divine causation and the concept of ordinary causation are defined in terms of a generic concept of causation. For if the reductive view is true, then those who believe in creaturely causation will still face the problem of overdetermination between two competing generic causes.

[47] The point might be clearer if we consult the following analogy. The law of conservation of energy says that the amount of energy of an isolated system always remains the same. Nevertheless, this law is not incompatible with God's intervention which brings about more energy into the system because God's intervention is something outside the isolated system. See Larmer (1996) for a view on miracle of this sort and Overall (1997), (2003), and (2006) and McDermid (2008) for criticisms.

doctrine is compatible with the causal principle that every creaturely fact at most have one sufficient (creaturely) cause.[48]

Third, the concept of divine causation may help formulate deism, i.e. the view that God only created the universe and then left it alone without conserving it. Again, if the relation between God's willings and creaturely facts is ordinary causation rather than divine causation, then we will have a hard time defining deism. Deists want to say that God's willings only cause the existence of the universe and relevant facts about it in the moment of creation but no other creaturely fact in any later moment. Now if causation is transitive, then God's willings will cause not only the creaturely facts in the moment of creation but also creaturely facts in later times as the facts about the universe in the moment of creation are causes of creaturely facts in later times. In fact, if all (ungrounded) creaturely facts have causes, then for each creaturely fact in some time later than creation, there will be a causal chain leading back to facts about the universe in the moment of creation. These causal chains will then ultimately lead back to facts about God. Given the transitivity of causation, God's willings will also be causes of all creaturely facts no matter when these creaturely facts occur. Therefore, this way of articulating deism requires the further assumption that causation is not transitive. This is an additional price for deists as it is a controversial issue of whether causation is transitive.[49]

Or one might appeal to the distinction between immediate causes and mediate causes. Given such a distinction, deism may be formulated as the view that facts about God are immediate causes of the creaturely facts in the moment of creation but not immediate

[48] Now a related issue about ordinarily causal facts, e.g. the fact that a creaturely fact *F* (ordinarily) causes another fact *G*, may emerge. Since these ordinarily causal facts, if any, are also creaturely facts, they are either divinely caused by some facts about God or grounded in some facts divinely caused by some facts about God according to **Sovereignty**. If the former, then ordinary causation (or, more precisely, their instantiations) is also something divinely caused by facts about God, e.g. God's willing that *F* ordinarily causes *G*. If the latter, then ordinary causation may be more like a Humean concept, which can be understood, say, in terms of the global pattern of creaturely events divinely caused by facts about God.

[49] For the discussion of the transitivity of causation, see Paul and Hall (2013), ch.5.

causes of latter creaturely facts. Because immediate causation is not transitive, this view will not lead to the consequence that facts about God are immediate causes of all creaturely facts. The problem with this move is that the distinction between immediate causation and mediate causation seems to be a context-sensitive one. A match's firing may be viewed as an immediate cause of a candle's shining in a context where my striking the match is taken to be a mediate cause but not an immediate one of the candle's shining. However, in another context, what is taken to be the immediate cause of the candle's shining may be the lighting of its wick instead of the match's firing. If the distinction is a context-sensitive one, it is problematic to formulate deism in terms of it, as deism should be a position whose truth/falsity or connotation do not vary from context to context.

Now there is an easier way for deists to avoid the foregoing problems. If they adopt the concept of divine causation, they may say that facts about God are divine causes of all and only creaturely facts in the moment of creation, and no other creaturely fact in any later moment is divinely caused by facts about God. As divine causation and ordinary causation are different, it will not follow that facts about God are also causes, either divine or ordinarily, of all other creaturely facts in all later moments.

I hope that the foregoing applications indicate that this concept can help theistic metaphysicians address not only second-order questions of how to formulate theistic doctrines and positions but also first-order questions like the exclusion problem of secondary causation. Therefore, I suggest to theistic metaphysicians that we may keep the concept of divine causation in the metaphysical toolkit, and revisit various issues of theistic metaphysics in the light of it (as we will see more in Chapters 3-5.)

After seeing the usefulness of the concept of divine causation, I now turn to another metaphysical concept which has been attracting metaphysicians' attention for the past few years: structure.

## 1.4 Structure

One of Lewis's crucial contributions to contemporary metaphysics is his introduction of the idea of natural properties, which has been applied to various metaphysical issues.[50] He writes: "Sharing of them [natural properties] makes for qualitative similarity, they carve at the joints, they are intrinsic… there are only just enough of them to characterise things completely and without redundancy."[51] Sider generalizes the foregoing idea to all other kinds of sub-propositional concepts besides those expressing properties and relations.[52] For instance, he suggests that we can say not only that a predicate, or a concept expressing a property, carves reality at its joints but also that a logical connective/concept, say conjunction, carves reality at its joints (given that reality contains logical structure at which conjunction gets). Thus, for any sub-propositional concept, we can ask whether it carves reality at its joints. Sider calls this generalized notion 'the concept of structure': If a concept/expression carves reality at its joints or gets at reality's objective structure, then we may say that it is structural.

One major difference between the concept of structure and the concepts of grounding/divine causation is that the former is sub-propositional or sub-factual while the latter are propositional or factual. To say that the concepts of grounding and divine causation are propositional or factual is just to say that it is facts instead of their constituents which are grounding/causal relata. On the other hand, the sub-propositional concept of structure applies to constituents of propositions rather than whole propositions. Despite this difference, there is some connection between the concept of grounding and the concept of structure. Sider suggests that all ungrounded truths (or more precisely all truths expressing

[50] See Lewis (1983a).
[51] Lewis (1986a), p. 60.
[52] See Sider (2011), ch.6.

ungrounded facts) are written purely in structural terms.[53] For instance, the fact that Oxford is a city cannot be ungrounded because it involves the concept of cityhood, which is arguably not a structural concept. (More on the issue of purity in the next chapter.)

In the previous two sections, we have seen how two propositional concepts, namely grounding and divine causation, may be used in the inquiries of theistic metaphysics. One may wonder if we can apply the sub-propositional concept of structure to issues of theistic metaphysics as well. I think so. For instance, some theologians believe that we can make true predications about God's intrinsic attributes like "God is faithful" or "God is love" but suggest that we should never utter existential statements like "God is a being" and "God exists".[54] This seems to be an obvious contradiction. How can one truly predicate a property of something without committing to the existence or being of that thing?[55] Is there any way to make sense of this sort of paradoxical claims made by these theologians? Now I suggest one by applying the concept of structure to the existential quantifier(s).[56]

Let us consider a language which consists of (i) a name of God, and (ii) predicates for God's attributes. Suppose that all expressions in this language are structural. A theist then can use this language to utter various ungrounded/fundamental truths about God, e.g. "God is omnipotent". Now recall that one of the features of structural concepts is that there are only just enough of them to characterise things completely and without redundancy. Hence, we may ask: do we also need the existential quantifier as part of the vocabulary in order to exhaust all fundamental truths about God? Here, because we already have a name for God

[53] This is the so-called 'purity' principle. See Sider (2011), ch.7. Nevertheless, it is unclear whether all truths which are only written in structural terms are also ungrounded. Consider the following sentence which is only written in structural terms: "There exists some electron, and there exists some photon." (Suppose that the existential quantifier, the relevant physical predicates, and the sentential connective of conjunction are structural.) It seems that this conjunctive fact is grounded in its conjuncts, and thereby is not ungrounded. If so, then purity is a necessary but not sufficient condition for ungroundedness. For a discussion on this issue, see Fine (2013) and Sider (2013).

[54] See, for example, Marion (1991).

[55] To be sure, this is what Meinongians do. However, it is obvious that these theologians are not Meinongians.

[56] Disclaimer: I do not pretend to provide an interpretation of what these theologians really have in mind when they utter these paradoxical claims. Instead, I merely provide a way of making sense of these claims.

in the language, and God is the only focus of the discourse, the existential statements about God seem redundant, fundamentally speaking. If so, then we can say that the concept of existence or being which applies to God need not be a structural concept.[57] Therefore, a theist who speaks this quantifier/variable-free language will think that fundamentally speaking, "God exists" is not true as all fundamental truths must be written in structural terms, and the existential quantifier (for God) is not structural. On the other hand, this theist can also hold that fundamentally speaking, other predications about God, e.g. "God is perfectly good", are still true as these predications are written purely in structural terms (given the structuralness of these predicates.) Hence, the seeming contradiction disappears if what these theologians mean by "God does not exist" is that fundamentally speaking, "God exists" is not true (as the concept of existence which applies to God is not structural.)[58]

### 1.4.1 Structure and God's will

I now turn to another issue about structure and God. Suppose that two theists agree that reality contains qualitative structure. That is, both of them accept that some (qualitative) concepts, say the concept of being an electron, are structural, but the others, say the concept of being an electron or a cow, are not. Next, suppose that they disagree over whether reality's qualitative structure depends on God's will. One believes that it is what it is, independent of God's will, while the other believes that the qualitative structure is imposed by God on reality, and thereby within God's control, so to speak. Here comes the question: how should theistic metaphysicians formulate the foregoing two positions so that they may

[57] This does not mean that the existential quantifier(s) which applies to material substances or other entities, say abstract entities, is not structural either. For there may be various existential quantifiers some of which are structural and the others of which are not. For the discussion about the view(s) that there is more than one structural existential quantifier, see McDaniel (2017). Also, see Wood (2021), ch.8, for a suggestion about how this kind of idea may help theistic metaphysicians avoid ontotheology.
[58] For a similar proposal related to apophatic theology, see Jacobs (2015).

be differentiated from each other? I suggest that we may formulate these positions by using both propositional and sub-propositional metaphysical concepts. Specifically, we may say that reality's qualitative structure depends on God's will if facts about qualitative structure, e.g. the fact that the concept of being an electron is structural, are either grounded in or divinely caused by God's willings to impose such and such structure on reality. On the other hand, if one insists that reality's qualitative structure is independent of God's will, then this insistence may be understood as the claim that facts about qualitative structure are neither grounded in nor divinely caused by God's willings. More generally, the following idea can be applied to other sorts of structure of reality, say ontological structure (expressed by structural quantifiers) and logical structure (expressed by structural sentential connectives.)

I now draw a distinction between absolute structure and divine structure as follows. A concept *C* is absolutely structural iff (i) *C* is structural, and (ii) the fact that *C* is structural does not depend on, that is, is neither grounded in nor divinely caused by, God's willings. On the other hand, *C* is divinely structural iff (i) *C* is structural, and (ii) the fact that *C* is structural depends on, via either grounding or divine causation, God's willings. Put differently, this distinction may be understood as a distinction between structure that is prevolitional and structure that is postvolitional. Given this distinction, we may formulate various views about structure and God's will. For instance, one may hold that the only absolutely structural concepts are those about God, e.g. omnipotence, but the reality's qualitative and ontological structure still depends on God's willings.

Now we should be very careful. When I say that facts about structure, e.g. the fact that a concept *C* is structural, depends on God's willings, I do not mean that God bring about some genuine change to the concepts, e.g. *C*, themselves. Instead, the genuine change brought about by God's willings occurs to reality! Put differently: when God makes a

concept *C* divinely structural, *C*'s becoming divinely structural is merely a Cambridge change. The concept *C* itself (whatever it is) remains intrinsically the same, i.e. has exactly the same content, before and after God's willing to make it divinely structural. The difference lies in how reality is: reality acquires some new structure which it did not have before. Likewise, although I speak of facts about structure like the fact that the concept of conjunction is divinely structural, strictly speaking, what I mean is that reality has some logical structure at which the concept of conjunction gets. It is a fact about reality, as opposed to concepts or linguistic expressions.[59]

In this chapter, I have proposed three metaphysical tools for theistic metaphysics: (i) the concept of grounding, (ii) the concept of divine causation, and (iii) the concept of structure.[60] In later chapters of this thesis, I will apply them to some major issues of theistic metaphysics. Before doing so, I will discuss some meta-questions regarding divine causation and divine structure, e.g. how we should understand the relation between these two concepts, in order to avoid some potential confusion which might arise in our first-order inquiries of theistic metaphysics. Let us turn to these questions in the next chapter.

[59] It is noteworthy that the talks of facts about structure, as Sider emphasizes, do not require the reification of any corresponding entitties, e.g. universals. See Sider (2011), Section 6.3. For instance, we can say that the existential quantifier of first-order logic gets at reality's quantificational structure without accepting that there is some entity, for example, a higher-order property, which the existential quantifier stands for.

[60] Again, I do not mean that theistic metaphysicians should not utilize modal concepts. My contention here is that in addition to modal concepts, which have been used by theistic metaphysicians for decades, some other metaphysical tools are needed, and these (at least) include (i) the concept of grounding, (ii) the concept of divine causation, and (iii) the concept of structure.

# 2 Divine Causation and Divine Structure

In this chapter, I will go through various issues about the concepts of divine causation and divine structure. These issues include: the relation between divine causation and divine structure (Section 2.1), the purity principle (Section 2.2), divinely causal facts (Section 2.3), and conceptions of fundamentality (Section 2.4).

## 2.1 Relation between divine causation and divine structure

As noted in the previous chapter, the concept of divine causation applies to facts while the concept of divine structure applies to sub-factual/propositional expressions or concepts. Now let us use one of them to formulate some questions regarding the other.[61] For instance, we may ask whether the concept of divine causation itself is divinely structural. I tend to think that it is not because reality's divinely causal structure is not what God imposes on reality. In other words, when God's mental events divinely cause creaturely facts, God does not need to do anything in advance so as to bring about the divinely causal structure of the world. Suppose, on the contrary, that reality's divinely causal structure is imposed by God. Then we may ask how the imposition is done by God. As noted in 1.4.1 God makes concepts divinely structural by either divinely causing or grounding them to be so. However, this requires the concept of divine causation to be absolutely structural in the first place. For if the concept of divine causation were divinely structural rather than absolutely structural, then it would not be structural until God made it so. However, if so, then before its being made structural by God, divinely causal facts would involve something still non-structural, namely the concept of divine causation itself, and thereby could not underlie any metaphysical explanations of any concept's being (divinely)

[61] It is noteworthy that the concept of divine structure is independent of the introduction of the concept of divine causation. For the former can also be understood in terms of the concept of grounding.

structural.[62] Especially, the divinely causal fact that God's willing divinely causes the fact that the concept of divine causation is structural would involve something non-structural, i.e. the concept of divine causation itself, and thereby could not explain the putative divine structuralness of the concept of divine causation. In order to avoid this problem, we should say that the concept of divine causation is absolutely structural rather than divinely structural. In other words, reality's divinely causal structure is not something invented by God.

Now a question about God's concepts emerges. Before imposing some certain structure on reality, God must firstly have concepts for him to decide what kind of structure he is going to impose on the reality. For instance, suppose that God imposes the logical structure on reality which can be fully described by classical logic. Before making classical logic true of the reality, God might also have the option of imposing some different kind of logical structure, say the logical structure fully described by intuitionistic logic, on reality. Moreover, in order to decide which logical structure to impose on reality, God needs to have competing concepts which represent different (candidates of) logical structure, say the concept of a classical negation and the concept of an intuitionistic negation, in advance. So we have a question of how God acquires these concepts, which help him make the decision. Now let us see how this question may be answered.

### 2.1.1 Divine concepts

To answer the foregoing question, we may need to know where these concepts, or their contents, come from. I know of at least three possible ways for theists to go. First, one may hold that God firstly creates the contents of the concepts in question, and then grasps these

[62] Here, I assume that ultimate metaphysical explanations must be purely stated in structural terms. This assumption, again, is motivated by the purity principle, to which I will turn soon in the next section. Also, one may compare Sider's argument for the structuralness of the concept of structure itself in his (2011), section 7.13.

contents. For instance, consider the concept of negative charge. In order to make it divinely structural, God needs to think up the content of this concept, i.e. what it is to be negatively charged. Afterwards, God grasps the content which is just created by him. On this view, there are two divine facts in place: (i) God's creating the content, and (ii) God's grasping the content. Now one may wonder what the former fact exactly looks like. For God's creating a content seems different from God's creating a concrete object, e.g. a particular electron. When we say that God creates an electron *a*, we mean that God wills that the electron *a* exists. However, it seems implausible that God also creates the content of the concept of negative charge by willing that this content exists because this divine willing, which involves the content itself, presumably has to presuppose the existence of the content. Thus, the divine willing, construed in this relational way, cannot explain the existence of the content. Instead, it is more likely that God's creating a novel content is just a primitive mental event purely about God himself which cannot be analysed in relational terms. This primitive fact may be expressed by a monadic predication, say "God is *F*".[63] Then we may say that the fact that God is *F* divinely causes the existence of the content. Given the existence of this content, we can have the fact that God grasps the content which I take to be a relational fact between God and that content.[64]

[63] I will return to the question of whether *F* itself is structural or not shortly.

[64] One question about the foregoing view is *whether* God knows what he is going to create if his grasping the contents comes after his creation of them. There seems to be a dilemma here. If yes, then it would seem that God has already grasped the contents before creating them as he already knew what he was going to create. If no, then it would seem that God was not omniscient because there was something which God did not know (before creating them). Perhaps the proponents of this view can reply by taking the second horn of this dilemma. They may say that although God did not grasp the contents before creating them, this does not mean that God was not omniscient. For there were no contents, as the contents in question were not created yet, for him to know before creating them. The cost of this reply is that the creation of these novel contents might surprise God as he did not know what would come into existence before his creation. One may think that this is unacceptable on the ground of perfect being theology or the like. I leave the question open here, and instead provide some other accounts of divine concepts which are less controversial below.

On the second view, the contents of concepts are something written in God's nature.[65] Since they have already existed, there is no need for God to think them up or create them *ex nihilo*. Therefore, one of the two divine facts mentioned in the foregoing paragraph, namely God's creating the content, is replaced by the fact(s) about God's nature. On this view, in order to acquire a certain concept, the only thing which God has to do is look inside and then grasp the content which is written in his nature.

Third, one may go for adverbialism with regard to these contents. For instance, Leftow writes:

> But we need not think that some entity gave the cat-event its content. We could treat being contentful, and contentful one way rather than another, as a primitive fact about mental events. Many ontologies involve entities not made to be as they are by other entities… Realists say that cathood makes cats cats, but nothing makes cathood cathood: it just is as it is. So it is not clear what special fact about the cat-event would make *it* require to be made as it is by cathood. If we bring the attribute into the story of God's mental content, the story goes this way: a particular event encodes what it is to be a cat because it grasps cathood. Ignoring the questions of what this means and how it is done, we can ask simply: why does it do so? Well, it just does. That is just the event's nature, as a brute fact; that is where explanation stops. All there is to the event is the grasping and the content grasped; the content grasped makes it the event it is; to be that event is to be the grasping of that content, period. Without the attribute, the story goes: a particular event encodes what it is to be a cat. Why? It just does. That is its nature, as a brute fact; that is where explanation stops. All there is to the event is God's thinking and its being contentful in a particular way; the way it is contentful makes it the event it is; to be that event is to be an event contentful that way, period; and 'way' is not ontologically commissive. Either way, explanation stops at a brute fact about the nature of a mental event. Why is the one resting point any better than the other?[66]

On this view, there is only one divine fact in play: God's grasping a certain content. However, unlike the first and the second views, this view does not treat this fact as a relational fact between God and another entity. Instead, this fact is a monadic, primitive mental event which is purely about God himself. It is noteworthy that this view is not committed to the existence of contents. Thus, God's grasping a content should be

[65] More precisely, one may say that the existence of these contents is grounded in the fact that God has his nature or essence.
[66] Leftow (2012), p. 311.

understood as God's mental event being contentful some way or another. This can also be expressed by a monadic predication of the form "God is *F*."

Now the proponents of the first and the third views accept that contents, or God's grasping them, are novel in the sense that they are not something which already exist. However, if they are novel and thereby somehow brought about by God, we have good reason to think that the '*F*' which appears in the monadic predication expressing God's creating the content (on the first view) or God's grasping the content (on the third view) is not absolutely structural. For if '*F*' itself is absolutely structural, then its structuralness will not depend on God's will, that is, the fact that the concept of *F* is structural is neither grounded in nor divinely caused by God's willing.[67] If so, then the content brought about by the fact that God is *F* will not be genuinely novel because the content has already been determined by the ungrounded and divinely uncaused fact that '*F*' is structural, just like on the second view, the contents of God's concepts have already been determined by the fact about God's essence. Therefore, if we want to say, as the proponents of the first and the third views do, that these contents are novel, as opposed to encoded in some pre-existing facts about structure, then we should accept that '*F*' and the like are not absolutely structural.

Since '*F*' is not absolutely structural, the fact that God is *F* does not *purely* involve absolutely structural concepts. This gives rise to the question about the purity of facts about God. Let us turn to it now.

## 2.2 Purity

As noted above, the purity principle with regard to grounding says that every ungrounded fact can be stated purely in terms of structural (either divinely or absolutely)

[67] Recall that only divinely structural concepts, but not absolutely structural ones, depend for their structuralness, on God's willings.

concepts. Now we may generalize the purity principle to cases about divine causation. The generalized version says that that every *ungrounded and divinely uncaused* fact involves nothing non-structural.[68]

If we accept the generalized version of purity principle, then the monadic, primitive mental events mentioned in the previous section, namely God's creating a content (on the first view) or God's grasping a content (on the third view), will violate this principle, and thereby cannot be ungrounded and divinely uncaused facts.[69] In other words, given the generalized version of purity principle, this sort of monadic, primitive mental events, say the fact that God is *F*, must be either grounded or divinely caused. Let us now ask what their grounds or divine causes are. One thing which we should note is that their grounds or divine causes cannot necessitate these monadic, primitive mental events; otherwise, the created contents will not be genuinely novel. Another thing which we should note is that these grounds or divine causes in question involve only structural concepts according to the purity principle. Given the foregoing two constraints, we may ask whether there is anything which (i) does not necessitate the existence of the content, or God's grasping the content, and (ii) only involves structural concepts. Now a simple answer to this question is: God. God himself may not necessitate what contents he is going to create or grasp because he, as a libertarian free agent, is free to create/grasp them. Also, the concept of God itself

[68] I use 'ungrounded and divinely uncaused fact' rather than 'divinely uncaused fact' because as noted in 1.3, one may hold that some grounded facts, e.g. the chemical fact that an $O_2$ molecule exists, are not divinely caused by any fact but grounded in some facts which are divinely caused by God's mental events. Thus, the purity principle should allow these grounded but divinely uncaused facts to involve some non-structural concepts.

[69] One might object that these primitive mental events do not violate the purity principle as the monadic predicates like '*F*' can still be divinely structural. (In the end of the previous section, I only argued that these monadic predicates cannot be *absolutely* structural.) However, I believe that this objection fails. Before the fact that God was *F* came into being, that is, before God created or grasped the relevant content, no fact could involve the concept of *F*; Otherwise, as noted above, the relevant content brought by the fact that God was *F*, would not be genuinely novel because it would be determined by some pre-existing fact about *F*. Therefore, *'F*' could not be divinely structural before the fact that God was *F* came into being. For its being divinely structural would require, as noted above, the existence of the relevantly divinely causal fact, which involved the concept of *F*, in advance. Now if the concept of *F* was not structural yet at the time when the fact that God was *F* came into being, then the fact that God was *F*, which involved the non-structural concept of *F*, still need be grounded or divinely caused according to the generalized version of purity principle.

is a structural concept. Therefore, one might think that God himself is the divine cause of these monadic, primitive mental events.

However, one might object that the concept of divine causation and the concept of grounding are factual or propositional in the sense that they apply to facts rather than constituents of facts while the concept of God, who is an entity rather than a fact, is sub-propositional. Therefore, God, as a sub-factual entity, cannot be a relatum of divine causation or (fact-)grounding.

We may avoid the foregoing problem by distinguishing two sorts of divine causation: (i) divine *event* causation, and (ii) divine *agent* causation.[70] Agent causation is a special kind of causation as it relates a *substance*, which is also sub-factual, to an event. If the distinction between event causation and agent causation also holds for divine causation, then one may say that God, as an agent, can serve as a special kind of divine cause. However, this reply requires one to posit two concepts of divine causation one of which is purely propositional and the other of which is not. I take this to be an ideological cost to one's theistic metaontology. To justify the usage of this new concept, one may need to provide some reason why this concept is indispensable for doing theistic metaphysics. For instance, one might contend that the only thing which satisfies the two aforementioned constraints, i.e. (i) failing to necessitate novel contents, and (ii) involving only absolutely structural concepts, is God himself, so (the thought goes) a theist who thinks that God does create or grasp novel contents should add the concept of divine agent causation to one's ideology.

However, the opponents of divine agent causation may claim that there are some other candidates which (i) satisfy the two constraints, and (ii) are facts rather than sub-factual

[70] Likewise, we may posit two sorts of grounding: (i) entity-grounding and (ii) fact-grounding. As I have discussed the relevant question about grounding in section 1.2, I will focus on divine causation here.

entities. For instance, the fact that God exists seems to be one of them. If God himself does not necessitate God's creating or grasping novel contents, then neither does God's existence. Thus, this fact satisfies the first constraint. How about the second one? If the concept of existence is, as ontological realists believe, a structural concept, then this fact will also satisfy the second constraint as it only involves the concept of God and the concept of existence, and both of them are structural. Now if we accept that the fact that God exists satisfies these two constraints, then there is no need, the opponents of divine agent causation contend, to posit a new concept of divine agent causation as the purely propositional/factual concept of divine causation is enough for us to answer the question about divine causes.

However, the proponents of divine agent causation might raise an objection based on the theological worry mentioned in 1.4, namely that the concept of existence which applies to God is not structural. Given that worry, the fact that God exists might involve some non-structural concept and thereby fail to satisfy the second constraint.

The opponents of divine agent causation, I believe, have at least two ways to reply to the foregoing objection. First, they may take the cost of positing the concept of divine agent causation to be the reason why the concept of existence which applies to God is indispensable for us to characterize the reality. For if God cannot be the divine cause of God's creating or grasping novel contents, some fact(s) about God must fill the position. As the fact that God exists can play this role, we have good reason to think that the concept of existence which applies to God is indispensable and thereby need be structural.

Second, even if they accept that the concept of existence which applies to God is not absolutely structural, they still can find some other facts about God which can play the role of being the divine (indeterministic) cause of God's creating or grasping novel contents. Consider the following analogy. I have the ability to swim because my body is physically

structured in a certain way which confers the ability to swim on me. In this case, we may say that when I swim, my body's being *F* (where *F* is a description of the physical state of my body) causes my swimming. Likewise, we may say that the fact that God is omnipotent causes his creating or grasping novel contents as his omnipotence confers the ability to create novel contents on him. In this case, the fact that God is omnipotent is the divine cause, and there seems no reason to say that the concept of omnipotence is not absolutely structural. Therefore, the opponents of divine agent causation may hold that the fact that God is omnipotent, instead of God himself, is the divine cause of God's libertarian free actions or intentions, including God's creating/grasping novel contents.

Now we have seen that there are at least two ways for theistic metaphysicians to answer the question of what the divine causes of facts about God's creating or grasping novel contents are. Although I myself prefer a simpler ideology which does not include the concept of divine agent causation, I do not think that this question has been settled. As the question about ideological parsimony requires a comprehensive evaluation, there is no plain knock-down argument for either position. What I have done in this section is just an initial sketch of how the question about the purity of facts about God may be answered. In the rest of this thesis, I will assume that divine causation is a relation between facts only. However, the following discussions do not rely on this assumption. For those who accept divine agent causation, it is easy to reformulate the relevant talk in terms of the concept of divine agent causation.

## 2.3 Divinely causal facts

Another question which arises from the purity principle concerns divinely causal facts, e.g. the fact that God's being omnipotent divinely causes God's creating the content of the concept of negative charge. According to the generalized purity principle stated in 2.2, divinely causal facts should be either grounded or divinely caused if they involve some

non-structural concepts. We may therefore ask: what grounds or divinely caused these divinely causal facts?

This foregoing question is similar to a notorious question in the grounding literature, namely the question of what grounds a grounding fact, i.e. a fact about what grounds what. To see what the question is, let us suppose that some ungrounded microphysical fact(s) *M* grounds the fact that Oxford is a city, call it *C*. According to the purity requirement, this grounding fact, namely the fact that *M* grounds *C*, must have a ground as it involves some non-structural concept, namely the concept of city.

There are several attempts to answer the problem of what grounds a grounding fact.[71] Now consider the grounding fact that *A* grounds *B*. Bennett and deRosset hold that this grounding fact is grounded in the ground, i.e. *A*, itself.[72] The main rival of Bennett and deRosset's view is the view that the grounding fact is grounded in some essentialist fact(s) about *B* (and perhaps *A* itself as well.)[73] For instance, they may say that the grounding fact that some microphysical facts ground the fact that Oxford is a city is grounded in the fact about the essence of being a city. Unlike the previous two views, Bader proposes a view on which grounding facts do not really exist. He writes: "Grounding is not a relation that connects different items in the world, but something that generates the derivative from the fundamental."[74] For him, there only exist grounds and grounded facts. The grounding operation generates the latter from the former. But the operation itself is *not* a fact in the world. Thus, it is not something apt to be grounded.

Back to the question regarding divinely causal facts. I believe that we may learn some lessons from the aforementioned views. Before I apply some of these strategies to the

[71] See Bader (2020), Bennett (2017), ch.7, Dasgupta (2014), deRosset (2013), Fine (2012), Litland (2017), and Sider (2020b).
[72] This view is defended by Bennett (2017), ch.7, and deRosset (2013).
[73] This view is proposed by Dasgupta (2014) and Fine (2012).
[74] See Bader (2020), p. 44.

question, let us firstly have a look at a view on which divinely causal facts are divinely caused rather than grounded. Consider the divinely causal fact that *A*, an ungrounded and divinely uncaused fact, divinely causes *B*. Suppose that this divinely causal fact is divinely caused by another fact *C*. That is, God brings about the divinely causal fact by the fact *C*. Here we have another divinely causal fact, namely the fact that *C* divinely causes the divinely causal fact that *A* divinely causes *B*. According to the purity principle, this divinely causal fact is then either grounded or divinely caused as it involves something non-structural, which figures in *B*. As the view in question holds that divinely causal facts are divinely caused, the divinely causal fact that *C* divinely causes *A*'s divinely causing *B* is also divinely caused by some other fact, say *D*. However, this gives rise to another divinely causal fact, i.e. *D*'s divinely causing *C*'s divinely causing *A*'s divinely causing *B*, which according to the view in question, is divinely caused by some other fact, *E*. Thus, this view generates an infinite regress of divine causation. Now the proponents of this view might reply that this regress is not vicious because all these divine causes, e.g. *C*, *D*, and *E*, which divinely cause divinely causal facts are also ungrounded and divinely uncaused. Therefore, for each divinely causal fact, we can find a divine cause which does not violate the purity principle.[75]

I agree that the infinite regress is not a vicious one. However, it is unclear to me what kind of facts about God can divinely cause divinely causal facts. It does not seem that the (ungrounded and divinely uncaused) divine cause here can be any candidate of divine cause which I have considered in the previous section. For instance, I have proposed a view on which the fact that God is omnipotent divinely causes some of God's monadic, primitive mental events like his creating a novel content. This view is as unproblematic as the view

[75] This is similar to Sider's (2020) diagnosis. He thinks that although there are infinitely many grounding facts, it is not a serious problem because each of them has a ground which does not violate the purity requirement.

that the fact about the physical structure of my body causes my swimming because in both cases, the effects brought about by the agents are just their own actions or intentions. However, the fact in which we are interested here, i.e. the divinely causal fact that *A* divinely causes *B*, is not a monadic event about God. Instead, it is a complex fact somehow composed of some monadic fact about God and the effect brought about by that monadic fact. Thus, it is not clear whether the question of divinely causal facts can also be answered by saying that God's being omnipotent, or God's existence, or God himself (as an agent cause) is the divine cause of these divinely causal facts. At any rate, it seems quite strange to say that God's being omnipotent divinely causes the fact that God's being omnipotent divinely causes God's being *F*. On the other hand, if the divine cause is different from the candidates considered in the previous section, it means that we have to accept some other ungrounded and divinely uncaused facts which may serve as the divine causes of these divinely causal facts. If so, then the reply will have not only the ontological cost of accepting more fundamental facts but also the ideological cost of positing more structural concepts, which these ungrounded and divinely uncaused facts involve. Hence, it does not seem a preferable view that divinely causal facts are divinely caused. (That said, I do not, again, take this to be a knock-down argument against the view.)

Now let us turn to some other answers to the question of divinely causal facts. If, as noted above, divinely causal facts are not divinely caused, then they should be grounded according to the purity principle. What can their grounds be? Let us firstly consider a view similar to Bennett and deRosset's idea that the grounding fact that *A* grounds *B* is grounded in the ground involved in it, i.e. *A*. On this view, divinely causal facts are grounded in the divine causes involved in them. For instance, the divinely causal fact that *A* divinely causes *B* is grounded in *A*. This view provides a simple answer to the question of divinely causal facts. When a fact divinely causes another fact, the former fact also grounds the fact that it

divinely causes the latter fact. Now given this account, one may ask what grounds this grounding fact that the former fact grounds the fact that it divinely causes the latter fact. Here, I intend to remain neutral with regard to this question as there are various possible answers to it. One may say that it is grounded in the ground, i.e. the divine cause. Or one may say that it is grounded in facts about the essence of divine causation. The proponents of this view are free to borrow these ideas from the grounding literature to answer the question regarding this grounding fact. As our concern here is about the grounds of divinely causal facts, there is no need to subscribe to any particular account of the grounds of grounding facts.

Nevertheless, although the foregoing view is quite simple, there are several problems with it. The first problem is about grounding's modal status. Recall that it is a common view that grounded facts are necessitated by their grounds. However, the divine cause involved in a divinely causal fact may fail to necessitate the divinely causal fact because given the libertarian assumption about God, it is possible that the divine cause, say God's being omnipotent, exists but the effect, say God's creating a certain content, does not. Therefore, it is possible that a divine cause exists but the allegedly grounded divinely causal fact fails to exist as the effect involved in it does not exist. The second problem with this view has to do with the tight connection between grounded facts and their grounds. As noted above, grounded facts are claimed to be nothing over and above their grounds. Now if the ground of the fact that *A* divinely causes *B* is just *A*, then the divinely causal fact in question will be nothing over and above *A* itself. However, the divinely causal fact is certainly something over and above *A* as it involves the effect, i.e. *B*, which is something over and above its divine cause, i.e. *A*. Because of these problems, I tend to think that the view that divinely causal facts are grounded in the divine causes involved in them is an unsatisfactory one.

That said, I believe that we can have a modified version of the foregoing view, which does not fall prey to these objections. Now let the ground of a divinely causal fact that *A* divinely causes *B* be *both A* and *B*. That is, a divinely causal fact is grounded in both the divine cause and the effect. This view avoids the foregoing problems. First, although the divine cause itself may fail to necessitate the divinely causal fact, the divine cause and its effect, taken together, cannot fail to do so because divine causation, as noted in 1.3, is an internal rather than external relation. Second, although a divinely causal fact is something over and above the divine caused involved in it, it seems plausible that a divinely causal fact is *not* something over and above the divine cause and the effect involved in it. As noted above, divine causation is internal. Some philosophers think that internal relations (or their instantiations) are an ontological free lunch.[76] Therefore, we may also hold that divinely causal facts are an ontological free lunch, nothing over and above the divine causes and effects involved in them. On this view, for a divinely causal fact to hold is just for both the divine cause and the effect in question to hold. Once the divine cause and its effect come into play, we automatically have a corresponding divinely causal fact out of them. Again, the proponents of this view are free to borrow various ideas from the grounding literature to answer the question of what grounds the grounding fact that the divine cause and the effect jointly ground the divinely causal fact. The view here, as it stands, does not commit one to any specific account of the grounds of grounding facts.

One might still raise some objections to the foregoing view. For instance, in order to avoid a vicious regress, the grounds of divinely causal facts should involve only structural concepts. However, the view states that the full grounds include both divine causes, which can be ungrounded and divinely uncaused, and their effects, which are divinely caused. In other words, some part of the full grounds, i.e. the effects, may involve some non-structural

[76] See, for example, Armstrong (1997), pp. 11-13.

concepts. In reply, the proponents can say that in order to avoid the vicious regress, what we need is not that every part of the grounds is ungrounded and divinely uncaused but that every part of them is either (i) ungrounded and divinely uncaused, or (ii) grounded in or divinely caused by some ungrounded and divinely uncaused fact.[77] The well-foundedness which can prevent the vicious regress requires only the latter. For instance, although it is not the case that the effects of divine causes are ungrounded and divinely uncaused, these effects are still divinely caused by some ungrounded and divinely uncaused facts, i.e. their divine causes. In this sort of case, we still can drill down to the level of reality which consists of all and only ungrounded and divinely uncaused facts, which can be stated purely in structural terms. Thus, no vicious regress is generated. I therefore take this view to be an available option for theistic metaphysicians.

Let us then turn to another view, which is similar to Bader's view on grounding facts. Recall that Bader takes grounding to be an operation which generates grounded facts out of their grounds. On his view, since an operation is not a relation, one does not need to accept the existence of grounding facts which are supposed to be *relational* facts. Hence, for Bader, it is simply a categorical mistake to ask what grounds grounding facts. He therefore writes: "The only things that are apt to be grounds or be grounded are instantiations of monadic as well as polyadic properties."[78]

Now one may also take divine causation to be a generative operation rather than a relation and thereby deny the existence of divinely causal facts. As there is no divinely causal fact, the acceptance of divine causation (as a generative operation) does not add any new facts to one's ontology. Thus, the purity principle is trivially satisfied.

[77] This discussion here points to the possibility that a fact may not have a full ground every part of which is ungrounded and divinely uncaused. We will see in the next section that this possibility arises if two conceptions of fundamentality considered below part ways.
[78] Bader (2020), p 44.

Let us turn to some questions about this view. First, one may wonder whether the difference between the Baderian view and the Bennettian account is merely verbal. On the one hand, the former view states that there is no divinely causal fact in addition to divine causes and their effects. On the other hand, the latter view states that divinely causal facts are *nothing* over and above the divine causes and their effects involved in them. Here both views agree that divine causes and their effects exist. The difference is simply that one thinks that a divine cause and its effect, taken together, ground a divinely causal fact while the other refuses to do so. There seems to be no substantive disagreement about ontology between them. I believe that the foregoing line of thought is wrong for two reasons. First, one may reply that the Bennettian view that a divinely causal fact is nothing over and above the divine cause and the effect in question is misunderstood as it does not mean that a divinely causal fact is *identical* to the divine cause and its effect taken together. Instead, the metaphor 'nothing over and above' only suggests that the connection between divinely causal facts and divine causes/effects involved in them is very tight. In fact, the relation between them is grounding instead of identity. Hence, there is still a substantive disagreement about ontology between these views as one of them aims to ground an additional fact while the other aims to eliminate it. Second, one may reply that the difference lies in whether one takes divine causation to be a relation or an operation. This is not only an ontological disagreement (about whether a certain relation exists or not) but also an ideological disagreement about the concept of divine causation as one takes the concept of divine causation to be expressing a relation while the other an operation.[79]

[79] Compare the ideological difference between the following two realistic views about laws of nature: on one, the concept of lawful facts is structural so that lawful facts, e.g. the fact that all *F*s are *G*, are fundamental entities existing in the world; on the other, the concept of a lawful operator is structural so that one may say that it is a law that *X* without committing to the existence of any lawful fact. Taking divine causation to be an operation is just like the latter realist view about laws as it does not require the existence of any causal fact either.

The second question is related to the last point. One may wonder whether the ideological commitment to a new primitive concept, i.e. the concept of divine causation as an operation, is a cost for one's theory of divine causation. My answer to this question is that it is indeed a cost, though probably not a high one. Operations are surely something with which we are not familiar. However, recall that the concept of divine causation, no matter what it expresses, a relation or an operation, is already a new primitive concept which, as I have argued, is distinct from the concept of grounding and the concept of (ordinary) causation. In 1.3, I have provided reasons why theistic metaphysicians should add this concept to their ideology. However, no part of discussion about divine causation before this section relies on the assumption that divine causation is a relation rather than an operation. In other words, although it is a cost for one to accept the concept of divine causation (as an operation), it is not too expensive, or at least not more expensive than the cost of accepting the concept of divine causation (as a relation). Hence, I take the Baderian view about divinely causal facts to be another available option for theistic metaphysicians.

In this section, I presented some proposals concerning the question of divinely causal facts and rejected some of them. The foregoing discussion is not exhaustive, but I hope that it can initiate more discussions on this topic.

## 2.4 Fundamentality

As noted in 1.3, metaphysical tools can be used to understand talk of fundamentality. For instance, one may use the concept of grounding to define fundamental facts as ungrounded facts.[80] Also, in 1.3, we have seen why some theistic metaphysicians may think that the concept of grounding is not adequate to articulate the idea of fundamentality which they have in mind. As noted there, one may hold that only facts about God can be

[80] See, for example, Bennett (2017), ch.5, and Schaffer (2009).

fundamental, and no creaturely fact is fundamental as they somehow depend on facts about God. If fundamentality is defined solely in terms of grounding, then one may not be able to say that all creaturely facts are not fundamental because some of them, say micro-physical facts, can also be ungrounded (but divinely caused.) Therefore, to characterize a theistic account of fundamentality, metaphysical concepts besides the concept of grounding are also needed. In this section, I will illustrate how the concept of divine causation and the concept of divine structure can help here.

In her (2017) book, Bennett points out that there are three conceptions of fundamentality discussed in the literature: (i) fundamentality as independence, (ii) fundamentality as completeness, and (iii) fundamentality as structuralness.[81] Let me briefly explain these three conceptions.

On the first conception, the concept of fundamentality is understood in terms of the notion of dependence (which I will explicate in detail below). A fundamental fact is just a fact which depends on nothing. As we have seen above, some metaphysicians read 'depend on' as 'be grounded in' and then take fundamental facts to be ungrounded facts. In the next subsection, I will explicate the notion of dependence in terms of both the concept of grounding and the concept of divine causation, and then use it to define the concept of fundamentality as independence.

The basic idea of the second conception is that fundamental facts are facts which constitute the minimally complete basis which accounts for all truths. Here, fundamental facts are complete in the sense that no truth will be left unexplained given the existence of all fundamental facts. For instance, the fact that Oxford is a city is arguably not a fundamental fact in the sense of completeness as it does not belong to the minimal basis. Suppose that the micro-physical facts which ground the fact that Oxford is a city are already

[81] See Bennett (2017), ch.5.

in the minimal basis. Then the truth that Oxford is a city will supervene on this minimal basis.[82] If so, then the fact that Oxford is a city will be redundant as the truth that Oxford is a city has already been accounted for by the micro-physical facts. Here, it is noteworthy that on some version of theism, even the micro-physical facts are redundant as God's willings to bring about these facts are also sufficient to account for the truth that Oxford is a city. In the second subsection, we will see how this conception of fundamentality should be understood within a theistic framework.

Finally, the third conception of fundamentality is a familiar one as it is just the concept of structure which has been extensively discussed in this thesis. On this conception, the concept of fundamentality is sub-factual or sub-propositional (while on the previous two conceptions, the concept of fundamentality is factual as it applies to facts.) For example, we may say that the concept of God is fundamental as it is structural. Now as there are two concepts of structure, i.e. absolute structure and divine structure, we may have two more fine-grained conceptions of fundamentality on one of which only absolutely structural concepts are fundamental and on the other of which both absolutely and divinely structural concepts are fundamental. Since I have written enough on this conception of fundamentality, in the following two subsections, I will only focus on the other two conceptions of fundamentality. Now let us turn to the first conception: fundamentality as independence.

### 2.4.1 Independence

As noted above, some theists, e.g. the theistic non-idealist discussed in 1.2 and 1.3, may hold that some creaturely facts, e.g. micro-physical facts, are ungrounded (and therefore involve only structural concepts) but still somehow depend on facts about God. They may

[82] Here I assume, for the sake of exposition, that grounded facts are necessitated by their (full) grounds.

even hold that all ungrounded creaturely facts depend on God's willings. For a theist of this sort, a different account of dependence which renders these ungrounded creaturely facts non-fundamental, namely not independent, is needed. Let us call the notion of dependence in question 'metaphysical dependence'. Now we may define it in terms of the concept of grounding and the concept of divine causation as follows:

> **Metaphysical Dependence** For every fact *P* and *Q*, *P* metaphysically depends on *Q* iff (i) *P* is grounded in *Q*, or (ii) *P* is divinely caused by *Q*, or (iii) *P* is grounded in some fact which metaphysically depends on *Q*, or (iv) *P* is divinely caused by some fact which metaphysically depends on *Q*.[83, 84]

Given **Metaphysical Dependence**, one can say that an ungrounded creaturely fact also metaphysically depends on facts about God if it is divinely caused by facts about God. Therefore, the notion of fundamentality as independence can be defined as follows:

> **FUNDAMENTALITY$_I$** A fact is fundamental if and only if it does not metaphysically depend on any fact.

It is noteworthy that given **Metaphysical Dependence**, it is not the case that all facts about God are independent. Recall that according to the purity principle, some of God's willings should also be grounded or divinely caused if they involve something non-structural. Therefore, these grounded or divinely caused facts about God are not fundamental$_I$. Also, facts about God which are the results of logical operation on facts about God, e.g. the conjunctive fact that God is omnipotent and God exists, may also be grounded in their logical constituents, e.g. conjuncts or disjuncts, and therefore not fundamental$_I$. Hence, not every fact about God is fundamental$_I$.

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[83] Here by 'ground' I mean partial ground rather than full ground as it seems fair to say that a grounded fact metaphysically depends on partial grounds. For instance, a conjunctive fact *A* & *B* metaphysically depends on *A* even though *A* is merely a partial ground of the conjunction.

[84] The definition here is a recursive one as its definiendum, i.e. metaphysical dependence, also occurs in the definiens. However, it is not a circular definition as clauses (i) and (ii) serve as the base case.

So what facts are independent in the foregoing metaphysical sense on theism? According to **Metaphysical Dependence**, only ungrounded and divinely uncaused facts are independent. Therefore, ungrounded and divinely uncaused facts about God, say facts reported by essential predications about God like "God is omnipotent", are independent. Now theists who accept that God is the source of absolutely everything, including the structure of reality, will accept that only ungrounded and divinely uncaused facts about God are independent. However, not every theist is so radical. For instance, some may hold that properties are Platonic entities which are not created by God and do not metaphysically depend on anything.[85] For them, some facts about Platonic properties, e.g. that the property of being negative charged is monadic, may also be independent.

The notion of metaphysical dependence also has to do with a question raised earlier. Recall the view that divinely causal facts are grounded in divine causes and their effects involved in them. Since these effects in question are divinely caused, they are not metaphysically independent. However, this does not mean that divinely causal facts do not metaphysically depend on some metaphysically independent facts. For these effects themselves also metaphysically depend on some ungrounded and divinely uncaused facts, namely their divine causes. If so, then the existence of divinely causal facts does not imply the existence of an infinite chain of metaphysical dependence which goes all the way down.

Before turning to the second conception of fundamentality, let us notice that the conception of fundamentality as independence is not only intensionally but also extensionally different from the conception of fundamentality as completeness. On the former conception, only ungrounded and divinely uncaused facts are fundamental. However, these ungrounded and divinely uncaused facts may fail to account for all truths. For instance, the truth that Oxford is a city will not be necessitated by all ungrounded and

[85] For this sort of position, see section 3.1.

divinely uncaused facts if God has the libertarian free will to do so (and not to do so.) For God's willing that Oxford is a city, as noted above, may be divinely caused by but not necessitated by its divine cause. Therefore, God's willing that Oxford is a city is indispensable to the complete ontological explanation of all truths even though it is not a metaphysically independent fact. In this scenario, the two conceptions of fundamentality part ways.

### 2.4.2 Completeness

If, as the foregoing example indicates, metaphysically independent, i.e. ungrounded and divinely uncaused, facts may not account for all truths, then some metaphysically dependent facts should belong to the minimal basis so that no truth will be left unexplained. However, it is yet unclear what metaphysically dependent facts are in this minimal basis even though it is clear that not all of them are in it. For instance, the fact that Oxford is a city does not seem to be a member of the minimal basis as some micro-physical facts are sufficient for the truth that Oxford is a city. But why prefer micro-physical facts, which ground the fact that Oxford is a city, to the grounded fact that Oxford is a city? Why not put the fact that Oxford is a city, instead of the micro-physical facts in question, into the minimal basis? In fact, there is good reason why the fact that Oxford is a city should not belong to the minimal basis. The property of being a city is multi-realizable. In other words, there are various arrangements of physical particles which may realize this property. If the property of being a city is multi-realizable, then there are many different arrangements of physical particles which can ground the fact that Oxford is a city. For instance, if a new college is built in the city centre, then the arrangement of physical particles will become different but still ground the fact that Oxford is a city. Therefore, the micro-physical facts which ground the fact that Oxford is a city will not be necessitated by the fact that Oxford is a city. On the other hand, the fact that Oxford is a city will be necessitated by these

micro-physical facts in question. This is why it is the micro-physical facts rather than the fact that Oxford is a city which should be included into the minimal basis. For without the former, some truths about the world, e.g. some truths about physical particles, will be left unexplained, but not vice versa.

Let us return to the question of what metaphysically dependent facts should belong to the minimal basis. A theist may hold that there is no need to put ungrounded micro-physical facts into it because their divine causes are sufficient to account for their truths. For instance, if the ungrounded creaturely fact that an electron *a* is negatively charged is divinely caused by God's willing that *a* is negatively charged, then God's willing that *a* is negatively charged will also necessitate the truth that the electron *a* is negatively charged as it is impossible that an omnipotent God wills so but it turns out otherwise. However, the question then becomes: why prefer God's willings to ungrounded creaturely facts? If God is essentially the creator of every creaturely fact, then it should be the case that necessarily, for every creaturely fact *P*, God wills that *P*. For instance, if the electron *a* is negatively charged, then God's willing that *a* is negatively charged will also be necessitated by the fact that *a* is negatively charged. Now one may either put God's willings into the minimal basis or replace them with creaturely facts. Either way, no truth will be left undetermined as they both necessitate each other. However, a theist who believes that God is essentially the creator of every creaturely fact is likely to hold that it is God's willings rather than ungrounded creaturely facts which should belong to the minimal basis. If so, then we have to find a way to take divinely caused creaturely facts out of the minimal basis.

Bennett suggests that we may understand the conception of fundamentality as completeness as follows:

**FUNDAMENTALITY$_C$** A fact is fundamental if and only if it is among the complete facts.

Here the notion of completeness is understood with the help of the concept of grounding as follows:

> **COMPLETENESS$_G$** For every plurality of facts *xx*s, and every world *w*, *xx*s are complete at *w* iff (i) *xx*s obtain at *w*, (ii) for every fact *y*, if *y* obtains at *w*, and *y* is not among *xx*s, then some of *xx*s ground *y*, and (iii) it is not the case that for some plurality of facts *yy*s, (a) *yy*s are properly among *xx*s, and (b) for every fact *z*, if *z* obtains at *w*, and *z* is not among *yy*s, then some of *yy*s ground *z*.

This definition of completeness is good as it can deal with some hyperintensional cases, e.g. that it is the existence of 2 rather than the existence of {2} should be included in the complete facts even though 2 and {2} are necessarily co-existing.[86] However, it still cannot help us deal with the question of how to take divinely caused creaturely facts out of the complete facts because some creaturely facts are ungrounded, and then turn out to be fundamental according to **FUNDAMENTALITY$_C$** and **COMPLETENESS$_G$**.

In order to avoid this problem, we may propose the following definition of completeness in terms of the notion of metaphysical dependence:

> **COMPLETENESS$_D$** For every plurality of facts *xx*s, and every world *w*, *xx*s are complete at *w* iff (i) *xx*s obtain at *w*, (ii) for every fact *y*, if *y* obtains at *w*, and *y* is not among *xx*s, then *y* metaphysically depends on some of *xx*s, and (iii) it is not the case that for some plurality of facts *yy*s, (a) *yy*s are properly among *xx*s, and (b) for every fact *z*, if *z* obtains at *w*, and *z* is not among *yy*s, then *z* metaphysically depends on some of *yy*s.

According to **COMPLETENESS$_D$**, the ungrounded creaturely fact that an electron *a* is negatively charged is not among the complete facts if it metaphysically depends on some

[86] Let us assume for the sake of exposition that the existence of 2 is ungrounded, and the existence of {2} is grounded in the existence of 2.

divine cause, e.g. God's willing that *a* is negatively charged. Therefore, we can remove ungrounded but divinely caused facts from the set of fundamental$_C$ facts.

However, there is still a problem with **COMPLETENESS$_D$**. Recall that God's willing that *a* is negatively charged also metaphysically depends on its divine cause, i.e. the fact that God is omnipotent. Now according to **COMPLETENESS$_D$**, God's willing that *a* is negatively charged should not be included in the complete facts either, because it metaphysically depends on some further fact. However, since the fact on which it metaphysically depends, namely the fact that God is omnipotent, does not necessitate it (given that God is libertarian free), some truths about the world, e.g. the truth that God wills that *a* is negatively charged and the truth that *a* is negatively charged, will be left unexplained. To solve this problem, I suggest that a feasible account of completeness should satisfy the modal constraint that the complete facts need necessitate all other truths/facts. If we build this modal constraint into our previous definition of completeness, we will get:

> **COMPLETENESS$_{DM}$** For every plurality of facts *xx*s, and every world *w*, *xx*s are complete at *w* iff (i) *xx*s obtain at *w*, (ii) for every fact *y*, if *y* exists at *w*, and *y* is not among *xx*s, then *y* metaphysically depends on some of *xx*s, *and it is necessary that if xxs obtain, then y obtains*, and (iii) it is not the case that for some plurality of entities *yy*s, (a) *yy*s are properly among *xx*s, and (b) for every fact *z*, if *z* obtains at *w*, and *z* is not among *yy*s, then *z* metaphysically depend on some of *yy*s, *and it is necessary that if yys obtain, then z obtains*.[87]

Given **COMPLETENESS$_{DM}$**, God's willing that an electron *a* is negatively charged is among the complete facts even though God's willing that *a* is negatively charged is *not*

[87] The italicized words are the modal constraint added. The remaining part of this account is the same as **COMPLETENESS$_D$**.

metaphysically independent (as it is divinely caused). For without it, some truths, e.g. the truth that *a* is negatively charged, will not be necessitated by the remaining complete facts. In this case, the two conceptions of fundamentality, i.e. fundamentality as independence and fundamentality as completeness, have different extensions. According to **FUNDAMENTALITY$_{\mathbf{I}}$**, God's willing that *a* is negatively charged is not fundamental because it metaphysically depends on its divine cause. On the other hand, according to **FUNDAMENTALITY$_{\mathbf{C}}$**, God's willing that *a* is negatively charged is fundamental because it is among the complete facts according to **COMPLETENESS$_{\mathbf{DM}}$**.

Now the parting of these two conceptions of fundamentality can be used to articulate the idea of metaphysical emergence. We may say that an emergent fact is (i) metaphysically dependent, and (ii) among the complete facts.[88] For instance, according to emergentism, mental facts emerge from physical facts as the former metaphysically depend on, or are grounded in, the latter while the latter do not necessitate all truths, especially the truths about mental facts.

I believe that the two conceptions of fundamentality are equally important and neither of them is redundant in the discussions of theistic metaphysics. Theistic metaphysicians need the conception of fundamentality as completeness because for them, many facts, e.g. facts brought about by God's libertarian free will, are fundamental$_{\mathrm{C}}$ but not fundamental$_{\mathrm{I}}$. Thus, to fully describe the world, we need all of the complete facts, including metaphysically dependent ones, rather than just metaphysically independent ones. On the other hand, theistic metaphysicians also need the conception of fundamentality as independence because it provides a way for them to articulate the view that only certain

[88] The account here is similar to Barnes's (2012) account on which an emergent entity is (i) ontologically dependent, and (ii) an indispensable truthmaker for some truth.

facts about God are fundamental (in the sense that they do not metaphysically depend on any fact.)

In this chapter, we have looked at various second-order issues about postmodal concept proposed in Chapter 1. These include (i) the question of whether the concept of divine causation is structural, (ii) the question about the nature of divine concepts, (iii) the question of iterated grounding/divine causation generated, and (iv) the question about conceptions of fundamentality. I have provided some tentative answers to these questions. After discussing these second-order questions, we will turn back to first-order questions of theistic metaphysics in the following chapters. We will see how postmodal concepts may be applied to various first-order questions of theistic metaphysics.

# 3 Theistic Accounts of Properties

In the following chapters, I will revisit a variety of issues of theistic metaphysics. To begin with, this chapter will focus on theistic accounts of properties. Then I will move on to issues about modality and about time in Chapter 4 and Chapter 5 respectively.

There are two tasks which I aim to achieve in this chapter. The first is a second-order one. As mentioned in Chapter 1, I suggest that the postmodal concepts are useful tools for theistic metaphysicians to formulate and clarify positions. Thus, I will formulate various theistic account of properties in terms of them. The second task is a first-order one. I will propose my own theistic account of properties which draws on some metaontological considerations raised in this chapter.

In the following sections, I will start with the most radical realist theory of properties, i.e. Platonism, then move to theories with less and less realist elements, and finally end with an extreme nominalist account which I myself prefer.

## 3.1 Platonism

The core doctrine of Platonism is that properties are independent entities which exist on their own. Put in a theistic way, properties are beyond the control of God. Platonists take properties to be universals, i.e. abstract entities which can be exemplified or instantiated by distinct particulars. The mere claim that there are universals is not sufficient to establish Platonism. For one may believe universals exist without being a Platonist. For instance, Aristotelians also accept that universals exist but deny that they are independent entities. Aristotelian universals are claimed to depend on their instances, i.e. particulars which exemplify or instantiate them.

So how should we understand Platonism? One may take Platonism to be the view that uninstantiated, or unexemplified, universals exist. For Aristotelians think that universals depend on instances, and thereby cannot exist without being instantiated. However, the problem with this formulation of Platonism is that Platonists are not prohibited from denying the existence of uninstantiated universals. They are free to hold that every universal has some instance. For example, despite the denial of the dependence of universals on their instances, some Platonists may still think that there are no alien universals, and every universal is instantiated by some particular. For this sort of Platonists, there are no uninstantiated universals. Nevertheless, although they deny the existence of uninstantiated universals, they may claim that the non-existence of uninstantiated universals has nothing to do the Aristotelian idea that universals depend on their instances. Instead, for them, it is a mere coincidence that every universal is instantiated by some particular. Thus, it is inappropriate to understand Platonism as the view that there are uninstantiated universals.

Next, let us consider a modal approach to define Platonism as one might think that the foregoing problem could be solved by appealing to modal concepts. Given the modal concept of necessity, we might take Platonism to be the view that universals exist *necessarily*. On the other hand, Aristotelianism might be taken to be the view that universals exist *contingently*. The motivation for defining Platonism (and Aristotelianism) modally is that Platonic universals do not depend on their instances and thereby would still exist if they were not exemplified by anything. Aristotelian universals, on the other hand, would fail to exist if there were no instances exemplifying them. Therefore, the modal definition of Platonism does not fall prey to the foregoing problem. For although Platonists can say that *actually*, all universals are instantiated, it seems harder for them to deny that *possibly*, some universals are uninstantiated.

I believe that the foregoing modal definition is problematic too. To see why, let us consider a position which is the combination of Aristotelianism and Timothy Williamson's necessitism, i.e. the thesis that necessarily, everything necessarily exists.[89] Since Aristotelianism is committed to the existence of universals, this position implies that universals also exist necessarily. However, this position will then be classified as a sort of Platonism, instead of Aristotelianism, according to the modal definition.

The proponents of the modal definition might reply that what the foregoing problem shows is not the flaw of the modal definition but the incompatibility between Aristotelianism and necessitism. This reply, however, is not successful due to an aforementioned metaontological reason. As noted in 1.1, this sort of problem can be understood in two ways. First, it may be seen as a first-order problem of whether the position thus understood is coherent or not. Second, it may be seen as a second-order problem of whether these metaphysical concepts, i.e. modal concepts, are adequate to articulate or formulate this position. The problem understood in the second way is what interests us here. As far as I can tell, it is perfectly coherent for Aristotelians to hold that universals exist necessarily without getting rid of their insistence that the existence of universals depends on the existence of their instances (as long as the latter also exist necessarily.) Thus, the foregoing reply does not really address the problem at stake.

That said, the proponents of the modal definition might give another reply which is better than the previous one. They might reply that although the position implies that those things which are universals in the actual world necessarily exist, it does not follow that they are necessarily universals. In other words, universals necessarily exist, though they do not exist as universals in all possible worlds. They may exist as some other sort(s) of entities in different worlds. Let us consider the following analogy. According to (Williamson's

[89] See Williamson (2002).

own) necessitism, the concrete person Timothy Williamson is a necessary being. However, this does not mean that Williamson is necessarily a person. In some possible worlds, he (or more precisely, it) is a non-concrete entity, which is not a person. Likewise, universals may also exist as some other sort of entities.[90] According to this reply, the difference between Platonism and Aristotelianism is that the former says that (i) universals necessarily exist, and (ii) they are necessarily universals while the latter says that (i) either universals contingently exist, or (ii) they are contingently universals. Thus, one might still use the modal concepts to articulate the difference between Platonism and Aristotelianism. Let us call the foregoing idea the 'refined modal definition.'

The refined modal definition successfully avoids the problem raised above. However, there is a more serious problem which it cannot solve. Now let us consider another position which is the combination of Aristotelianism and some sort of Spinozist theory of modality, i.e. the view that every (actual) truth is necessarily true. According to this position, every proposition true in the actual world is true in every possible world (as the actual world is the only possible world.) Therefore, universals not only exist but also necessarily exist. Moreover, it is necessary that they exist as universals, instead of any other sort of entities, as they exist as universals in the actual world (which is the only possible world.) Again, this position will then be classified as a sort of Platonism according to the refined modal definition.

For a similar reason, the reply that Aristotelianism is incompatible with the Spinozist theory of modality is a non-starter as we are concerned with the second-order problem of how to articulate this *prima facie* coherent metaphysical position here. Indeed, given the

[90] For example, suppose that it is possible that there is nothing red. According to Aristotelianism, if there is nothing red, then there is no universal of redness. Thus, a necessitist Aristotelian (understood in the modal way) would say that although redness cannot fail to exist, it can fail to be a universal in some possible worlds (where nothing is red.)

Spinozist theory of modality, it is unclear how one may differentiate Platonism from Aristotelianism only by modal concepts like necessity and contingency.[91]

The foregoing conclusion again confirms my point made in Chapter 1, i.e. that modal concepts are not adequate to articulate many metaphysical positions, especially positions involving claims about dependence. Now I turn to the exploration of how we may use postmodal concepts to understand Platonism.[92] Specifically, we may understand the notion of 'independence' involved in Platonism in terms of some postmodal concepts.

Recall that in 2.4, I have defined the notion of metaphysical dependence in terms of the concept of grounding and the concept of divine causation in the following way:

> **Metaphysical Dependence** For every fact *P* and *Q*, *P* metaphysically depends on *Q* iff (i) *P* is grounded in *Q*, or (ii) *P* is divinely caused by *Q*, or (iii) *P* is grounded in some fact which metaphysically depends on *Q*, or (iv) *P* is divinely caused by some fact which metaphysically depends on *Q*.

Now we may use this notion of metaphysical dependence to understand the distinctive Platonist claim that universals exist independently. Since universals are sub-factual or sub-propositional entities, they cannot be relata of the grounding relation or the divinely causal relation as these relations relate only facts. Thus, the relata in question should be *facts* about universals rather universals themselves. So what kind of facts about universals are metaphysically independent in the foregoing sense? A straightforward answer is existential

[91] Likewise, the suggestion that Platonism may be understood as the view that possibly there are uninstantiated universals will face a similar problem. For a Platonist may hold both (i) the Spinozist theory of modality, and (ii) that every universal in the actual world is instantiated by something. If so, then it is impossible that there are uninstantiated universals as all universals are necessarily instantiated according to this position.

[92] I do not claim that Platonism *must* be understood in terms of postmodal concepts. What I contend here is that if one insists that postmodal concepts like the concept of grounding is utterly unintelligible, then the difference between Platonism and Aristotelianism will also be unintelligible. If so, then Platonism, as a thesis which involves some sort of (non-modal) independence, will be an unintelligible view. My point here is simply a conditional one: if you believe that Platonism is an intelligible thesis which involves some sort of independence, then postmodal concepts *may* provide a way for you to understand non-modal independence here.

facts. Hence, the distinctive Platonist claim may be understood as the thesis that for every universal *U*, the fact that *U* exists is neither grounded nor divinely caused. Or one may take not only the existence but also the *natures* of universals into account, and thereby claim that for every universal *U*, both the fact that *U* exists and the fact(s) about the nature of *U*, e.g. that *U* is monadic, are neither grounded nor divinely caused.

Given the notion of metaphysical dependence, we may define Platonism as the claim that the existence of (or/and the natures of) universals is neither grounded nor divinely caused. The merit of this 'postmodal' definition is that it will not (incorrectly) classify some version of Aristotelianism as Platonism because on all versions of Aristotelianism, the existential facts about universals must be grounded in some facts about particulars.[93] As a result, this postmodal way of formulating Platonism leaves room for metaphysical positions mentioned above, e.g. Spinozist Aristotelianism.

We have seen how the two postmodal concepts, namely the concept of grounding and the concept of divine causation, can help formulate Platonism. Now let us turn to another postmodal concept, i.e. the concept of structure, and see whether it may have some interesting applications.

### 3.2.1 Platonic universals and structure

Platonism on its own stays neutral on whether Platonic universals are structural, or in Lewis's words, 'perfectly natural', properties. Some Platonists believe that all of them are natural properties which play a crucial role in the qualitative structure of reality.[94] Now if all Platonic universals are structural, we may then ask where their structuralness comes from. The answer to this question depends on what sort of structuralness Platonic universals possess. If they are divinely structural, then God's mental events will divinely cause their

[93] We will return to the exact formulation of the postmodal definition of Aristotelianism in 3.3.
[94] Some other Platonists, e.g. van Inwagen (2004), disagree.

being structural. On the other hand, if they are absolutely structural, then their being structural will be, like their existence, neither grounded nor divinely caused.

Now if a Platonist believes in the full-fledged independence of Platonic universals, the concept of structure (as well as the concept of grounding and the concept of divine causation) may help the Platonist clarify this position. Given these postmodal concepts, the full-fledged independence of Platonic universals may be expressed by the following two claims: (i) that the existence of Platonic universals is neither grounded nor divinely caused, and (ii) that they are absolutely structural, that is, the facts that they are structural are neither grounded nor divinely caused.

In addition to the foregoing extreme version of Platonism, there is another less extreme version of Platonism which we may formulate by using the postmodal concepts. I call it the theistic version of Goodmanism. On this view, (i) there exist abundant properties, (ii) their existence does not metaphysically depend on, i.e. be grounded in or divinely caused by, any fact, (iii) and all of them are *not* absolutely structural. For instance, both the property of being green and the property of being grue are ontologically on a par. Neither is more natural than the other. Given the presence of these (uncreated) abundant properties, God can choose on which properties he imposes (divine) structure. For example, he may pick out the property of green and the property of blue by making them divinely structural while leave the property of grue and the property of bleen non-structural. On this view, universals, e.g. the structural property of green, still exist independently (as their existence is neither grounded nor divinely caused.) However, they are not wholly beyond God's control as their structuralness comes from God's divine willings. On this view, the existence of universals does not metaphysically depend on facts about God, while their structuralness does. Again, the postmodal concepts can help formulate this position.

## 3.2 Theistic activism

In the previous section, we have considered the Platonist account(s) of properties on which universals are not created by God. Now let us turn to a view which is similar to but different from the foregoing account(s). This view is called 'theistic activism'. Theistic activists believe that although universals are, as on Platonism, abstract and necessary entities, their existence is not independent but due to God's mental activity.[95] The motivation for theistic activism is twofold. On the one hand, theistic activists believe that a theory which posits a realm of necessarily existent abstract objects has a strong explanatory power in the field of metaphysics. On the other hand, they want to hold on to the doctrine of divine sovereignty according to which every (non-divine) entity, including those putatively necessarily existent abstract objects, is created by God. Thus, theistic activism may be viewed as a modified version of Platonism on which abstract and necessary universals depend for their existence on God's mental events.

Now let us see how we may characterise this position in terms of metaphysical concepts. As noted in 1.1, modal concepts are not adequate to cope with hyperintensional cases. However, on theistic activism, universals are necessary objects. In fact, Morris and Menzel have already noticed this problem in their paper. They write: "[The relevant counterpossible counterfactual] seems just as well to display a dependence of God on abstract objects. But the theist wants a one-way dependence relation."[96] And they also propose a solution to this problem. They write: "the theist can… acknowledge a logical dependence running both ways between God and abstract objects… and nevertheless maintain that there is a causal or ontological dependence running in only one direction."[97] That is, they suggest that we should understand the dependence of abstract objects like

[95] See Morris and Menzel (1986).
[96] Morris and Menzel (1986), p. 354.
[97] Morris and Menzel (1986), p. 355.

universals on God as a *causal* or *ontological* one. It is not hard to find that their suggestion fits in with the postmodal concepts proposed in Chapter 1. For we may use the concept of divine causation to understand the dependence relation in question as a causal one or the concept of grounding to understand it as an ontological one.

Now let us attempt to understand theistic activism in terms of these two concepts. When Morris and Menzel talk about God's creation of universals, they write: "… we suggest… that all properties and relations are God's concepts, the products, or perhaps better, the contents of a divine intellective activity, a causally efficacious or productive sort of divine conceiving."[98] As Craig points out, there is some ambiguity in the foregoing quotation.[99] On one reading, properties and relations are taken to be God's *concepts*. On the other, they are taken to be *products* of God's divine intellective activity. Now the problem with the first reading is that if properties and relations are taken to be God's concepts, then it is unclear how they can be abstract universals. Concepts may be taken to be mental events of a certain sort, and mental events are concrete particulars.[100] Thus, if properties and relations, on theistic activism, are really taken to be God's divine concepts, then theistic activism will be not any sort of realism (whose minimal commitment is that universals exist) but some version of concept nominalism as it posits nothing but particulars. As I am now interested in the question of how to formulate a modified version of Platonism on which *abstract universals* are created by God, I will take theistic activism to be a realist rather than nominalist theory in the following discussion.[101]

[98] Morris and Menzel (1986), p. 355.
[99] See Craig (2017), pp. 124-129.
[100] See, for example, Leftow (2012), Ch. 11, where he suggests that the talk of divine concepts may be understood in terms of the talk of God's mental events with certain causal powers.
[101] According to Craig's record of his personal communication with Menzel and Morris, Morris and Menzel are now inclined to the conceptualist, instead of Platonist, interpretation of the quoted passage. However, since my work here is philosophical rather than exegetical, I will not be bothered by the question of what these authors *actually* have in mind. See Craig (2017), pp. 127-128. As for a theistic version of concept nominalism, I will turn back to this topic in 3.5.

On the other hand, if properties and relations are, as on the second reading, products of, but not identical with, God's mental events, and these products are taken to be abstract universals, then we need to explain how God's mental events, i.e. his divine intellective activities, can bring about the existence of abstract universals. Some might find this problem urgent as they might think that the existence of abstract universals cannot be caused by anything, including God's mental events, as only facts about concrete objects can stand in the causal relation. Fortunately, given the concept of grounding, theistic activists need not worry about this problem as they may give the following explanation: the existence of universals is grounded in God's mental events. If so, then the grounding relation will relate facts about abstract objects to facts about God, who is arguably a concrete object as he has causal power. Although one of the grounding relata is about a concrete object and the other about an abstract object, this does not seem to generate any particular problem. For there are some fairly uncontroversial cases in which the grounding relata are facts about different kinds of objects. For instance, the existence of Socrates, who is a concrete object, grounds the existence of the singleton set of Socrates, which is an abstract object. Likewise, there does not seem to be any problem with the view the existence of abstract universals is grounded in God's mental events either.[102]

We have seen how abstract universals may be created by God. Nevertheless, the full story of theistic activism has not been told yet. To complete it, let us turn to the issue of structuralness. Recall that theistic activists want these created abstract universals to play roles in systematic metaphysics, which surely include the role of natural properties. This

[102] Alternatively, if one still thinks that the dependence of abstract universals on God should be a causal one, then one may hold that the existence of abstract universals is *divinely* caused by God's mental events. Now the problem about causal relata may be dismissed by pointing out the difference between ordinary causation and divine causation. One can admit that ordinary causation is restricted to concrete objects while insist that no particular case shows that this restriction also applies to divine causation. That is, one may hold that divine causation can hold between facts about different kinds of objects on the ground that divine causation is different from ordinary causation.

means that these abstract universals are structural. Now they are either absolutely structural or divinely structural. Here we may have two versions of theistic activism which differ in their accounts of where the structuralness of abstract universals comes from. The first version of theistic activism is quite straightforward. It claims that abstract universals were born non-structural while God imposed divine structure on them after his creation. On this account, the structuralness of abstract universals comes from God's will.

On the other hand, the second version of theistic activism claims that abstract universals are absolutely structural. Now one may wonder how they can be absolutely structural. Recall that in 2.1.1, I discussed an account of divine concepts on which the contents of divine concepts are written in God's nature or essence. Given this view regarding divine concepts, one may hold that the contents of divine concepts about these abstract universals exist prior to abstract universals themselves. For these contents have already been written in God's nature or essence. Moreover, one may hold that since God's nature or essence somehow contains these contents, it is impossible to fully describe fundamental and essential facts about God without mentioning them. If so, then the concepts about these abstract universals have to be absolutely structural given their indispensability to the fundamental level of reality.[103] On the foregoing view, abstract universals are absolutely structural as their structuralness comes from God's nature rather than his will.

### 3.2.1 Bootstrapping objection

After presenting a postmodal formulation of theistic activism, I now turn to a famous objection to it: the bootstrapping objection. Roughly speaking, the objection is that some circularity will occur if all abstract universals are created by God. Consider the property of omnipotence. On theistic activism, it is created by God. However, in order to create this

[103] Here I assume that God's nature or essence does not depend on his will. Thus, concepts that are required to describe some fundamental and essential facts about God cannot be divinely structural.

property, God must have the power or ability to create it. Since all God's powers are grounded in his omnipotence, God's power to create the property of omnipotence is also grounded in his omnipotence.[104] However, God's being omnipotent has already presupposed the existence of the property of omnipotence. Thus, in order to create the property of omnipotence, the property of omnipotence must exist in the first place. But if the property of omnipotence has already existed, there will be no need to create it at all. Here we get a circularity with regard to the existence of the property of omnipotence.

The property of omnipotence is not the only case which may lead to some circularity. For instance, the property of being God, i.e. God's nature or essence, may generate a similar circularity. Also, Bergmann and Brower formulate their version of bootstrapping objection in terms of the property of being able to create a property.[105] In these cases, one may show that God's creating a certain property requires the existence of that property in advance.

The foregoing presentation of the bootstrapping objection is relatively informal. It seems to rely on a notion of ontological priority which is supposed to be transitive and asymmetric; otherwise, the putative circularity will not be a problematic one.[106] Now we may understand the notion of ontological priority in terms of the concept of grounding and the concept of divine causation. As noted above, on theistic activism, the existence of abstract universals is either grounded in or divinely caused by facts about God. Consider any circularity-generating property, e.g. omnipotence or God's essence. According to the foregoing idea, the existence of this property should be either grounded in or divinely

[104] More precisely, the grounding relation holds between the fact that God is omnipotent and the fact that God has such a power. I write as if the grounding relata are God's properties and powers merely for the sake of simplicity.

[105] See Bergmann and Brower (2006).

[106] Morris and Menzel think that there are two different sorts of priority, i.e. causal one and logical one, involved in the bootstrapping objection. Thus, the charge of circularity is not a successful one. They write: "Relations of logical dependence are always transitive. Relations of continuous causal dependence are always transitive. But we have no good reason to think that transitivity always holds across these two relations." See Morris and Menzel (1986) p. 360. Menzel gives a similar reply to Bergmann and Brower's version of bootstrapping objection in his (2016), pp. 61-2.

caused by some fact about God. Let us call this fact *C*. Now God either freely creates this property or essentially creates it.[107] If the former, then *C* will have a non-necessitating divine cause. In 2.2, I suggested that the fact that God is omnipotent may serve as a libertarian divine cause which does not necessitate its effects. If so, then *C* is divinely caused by the fact that God is omnipotent. On the other hand, if God essentially (and unfreely) creates the property of omnipotence, then *C* will have a necessitating divine cause (or ground), i.e. the fact that God has his essence.

Now the bootstrapping objectors seem to hold the view that the fact that God is omnipotent is grounded in the existence of the property of omnipotence. If they are right, then we will have the following chain of priority: (i) the existence of omnipotence is either grounded in or divinely caused by *C*, (ii) *C* is either grounded in or divinely caused by the fact that God is omnipotent, and (iii) the fact that God is omnipotent is grounded in the existence of omnipotence. So far, there is no circularity generated here as the chain involves two different relations, i.e. grounding and divine causation. However, recall that I have defined a notion of metaphysical dependence in terms of the concept of grounding and the concept of divine causation together in 2.4.1. Given this notion of metaphysical dependence, the foregoing chain entails the following one: (i) the existence of omnipotence metaphysically depends on *C*, (ii) *C* metaphysically depends on the fact that God is omnipotent, and (iii) the fact that God is omnipotent metaphysically depends on the existence of omnipotence. The second chain constitutes a circularity. Thus, if metaphysical dependence is transitive and asymmetric, then the bootstrapping objection, which is formulated in terms of the concept of grounding and the concept of divine causation, will pose a genuine problem to theistic activism.

[107] Whether God is free to create it or not, as we have seen earlier, depends on which account of abstract universal's structuralness one embraces.

Although I reformulated the bootstrapping objection in terms of the proposed postmodal metaphysical concepts, this does not mean that I think that this objection, thus understood, is a successful one as there are many controversial issues involved in it, e.g. whether the fact that God is omnipotent is grounded in the existence of omnipotence and whether metaphysical dependence is asymmetric. What I have done in the previous paragraphs is just sketch how the bootstrapping objection may be understood in a clearer way.

As for the first-order question, I think that theistic activists can reply to the bootstrapping objection by denying one of its premises, i.e. the premise that the property of omnipotence, or any other circularity-generating property, is created by God. This premise assumes the existence of the property of omnipotence. However, it is unclear to me why theistic activists need to buy this assumption. As noted above, their reason for abstract universals is that positing them can do a lot of metaphysical work, e.g. explaining objective resemblance between distinct particulars and providing building blocks for modal recombination. Nevertheless, it is not the same case for omnipotence and other circularity-generating properties like God's essence. For they are both unique and essential to God. Due to their uniqueness, there are no two particulars which resemble each other with respect to omnipotence or God's essence. Due to their essentiality, they cannot be freely recombined with other properties. In other words, the motivation for positing universals does not apply to God's features like omnipotence. Thus, it seems to me that theistic activists are free to treat divine predications, e.g. that God is omnipotent, in a different way which may look quite non-Platonist.[108]

[108] We will see how theists, including theistic activists, may answer the question about divine predications in 3.5.2.

## 3.3 Aristotelianism

In 3.1, we have seen that modal concepts are not adequate to mark the difference between Platonism and Aristotelianism. Also, I have proposed a postmodal definition of Platonism, which does not (incorrectly) classify some certain kind(s) of Aristotelianism as a form of Platonism. In this section, I turn to the question of how to understand the distinctive Aristotelian claim that universals depend on their instances.

Let us firstly note that both universals and their instances are sub-factual or sub-propositional entities. That is, they are not facts but constituents of facts. Therefore, if we want to express the dependence relation between them by the concept of grounding, we will need something more than these sub-factual entities. Now one might think that the dependence relation in question could be taken to the grounding relation holding between existential facts about universals and about their instances. For instance, when Aristotelians say that a universal *U* depends on its instance *a*, it might be understood as the claim that the fact that *U* exists is grounded in the fact that *a* exists.

Following the foregoing line of thought, one might define Aristotelianism as the view that for every universal *U*, the existence of *U* is grounded in the existence of its instances. Let us call this definition 'existential' definition as it draws on existential facts about universals and about particulars. Now the problem with the existential definition is that the mere existence of bearers of *U* may not guarantee the existence of *U*. Suppose that *U* is an accidental property for all of its instances in the sense that every instance of *U* may fail to exemplify or instantiate it.[109] Then consider a world in which (i) all these instances still exist, and (ii) nothing is *U*. In this world, the objects which are all of *U*'s instances in the actual world still exist, but *U* does not exist as there is nothing which is *U*. In other words,

[109] For instance, if a person with 60 kg mass may fail to have this mass universal, then this universal will be an accidental property of that person.

the mere existence of instances of *U* (which may fail to be *U*) does not necessitate the existence of *U*. If the former does not necessitate the latter, then the former cannot be the full ground of the latter.

Now the proponents of the existential definition might reply that full grounding need not imply necessitation. If so, then the existence of instances of *U* might still be the full ground of the existence of *U*. As noted in 2.4.2, I am also inclined to the view that grounded facts may not always be necessitated by their full grounds. However, this does not mean that I am satisfied with the reply here. On the contrary, I believe that my reason there does not support the foregoing reply. I accept the possibility that some grounded facts may not be necessitated by their full grounds because I take the failure of necessitation to be a sign of emergence. Recall my definition of metaphysical emergence in 2.4.2: an emergent fact is (i) metaphysically dependent, and (ii) among the complete facts. Now a grounded fact which is not necessitated by its full ground is both (i) metaphysically dependent (as it is grounded), and (ii) among the complete facts (as some truths will be left unexplained without it). Thus, the existence of *U*, according to the existential definition, will also be an emergent fact as it is grounded in but not necessitated by the existence of its instances. However, the dependence of Aristotelian universals on their instances is surely not a case of emergence; otherwise emergence will be an extremely pervasive phenomenon, which always occurs if there is an instantiation of a property or a relation. Therefore, the reply that some grounded facts may not be necessitated by their full grounds cannot save the existential definition as the existential facts about universals are not this special sort of facts, i.e. emergent facts.

If the existential facts about universals are not fully grounded in the existential facts about particulars, what can the full grounds in question be? As noted above, the full grounds have to necessitate the existence of universals. Now it seems very hard to find facts about

particulars which fulfil this requirement, but only the facts which straightforwardly involve universals. For instance, the fact that *a* is *F*, which involves *F*, necessitates the existence of *F* as it is impossible that this fact exists, but *F* does not. As the fact that *a* is *F* necessitates the existence of *F*, Aristotelians may take the former to be the full ground of the latter.[110] If so, then Aristotelianism may be defined as the view that for every universal *U*, for some particular *x*, the existence of *U* is grounded in the fact that *x* is *U*. Let us call this definition 'Armstrongian' definition.[111] According to this Armstrongian definition, the dependence of an Aristotelian universal on its instances is understood in terms of the (full) grounding relation, which holds between the existence of that universal and the facts that its instances exemplify or instantiate it. Here theistic Aristotelian may hold a further claim that the existence of universals also metaphysically depends on facts about God by saying that facts about him, say his willing that *a* is *F*, divinely cause or ground Armstrongian facts, say the fact that *a* is *F*, which in turn ground the existence of universals, e.g. *F*.

Facts of the form "*x* is *F*" play an important role not only in Aristotelianism but also in one notorious problem in the literature on properties, i.e. the regress problem. To get a rough idea of what the regress problem is, let us take the following sort of realism about universals, call it 'minimal' realism, as an example. Minimal realists hold that both universals and their instances exist, but do not accept the existence of facts, e.g. the fact that *a* is *F*. Their ontology includes only particulars like *a* and universals like *F*. Now suppose that "*a* is *F*" is true. Minimal realists might explain this truth by appealing to the existence of *a* and *F*. However, it seems that the mere existence of *a* and *F* cannot explain the truth of "*a* is *F*" because it is possible that both *a* and *F* exist but *a* is not *F*. (Just

[110] It is noteworthy that because the existence of *F* is also necessitated by the fact that *b* is *F*, the fact that *c* is *F*, and so on, these facts are also the full grounds of the existence of *F*. This should not pose any problem because disjunctive facts, which are fully grounded in any of its (obtaining) disjuncts, and existential facts, which are fully grounded in any of its instances, also have more than one full ground.
[111] See Armstrong (1997).

consider a world in which *b* is *F*, but *a* exists without being *F*.) If the truth of "*a* is *F*" is to be explained, then minimal realists need something to block the foregoing possibility. They might propose a more sophisticated account which says that "*a* is *F*" is true because *a instantiates F*. But this does not solve the problem since "*a* instantiates *F*" is also a truth which needs an explanation. For, again, it is possible that *a*, *F*, and the relation of *instantiation* exist but *a* does not instantiate *F*. The existence of *a*, *F*, and instantiation therefore cannot explain why *a* instantiates *F* either. Likewise, a similar reasoning would show that this problem will not be solved by appealing to another relation which allegedly relates *a*, *F*, and instantiation as the existence of *a*, *F*, instantiation, and the new relation does not guarantee the truth in question. In fact, adding any further relation(s) to the story will not help. It will only lead to a vicious regress for minimal realism.[112]

Due to the regress problem, Armstrong came to believe that in addition to universals and their instances, one's ontology should also include *states of affairs*, i.e. facts like the fact that *a* is *F* and the fact that *b* is *G*, to explain the truths of predications like "*a* is *F*" and "*b* is *G*."[113] Why can they explain the truths of predications? Because they, unlike the mere aggregates of particulars and universals, necessitate the truths of the predications in question. For instance, the existence of the fact, or state of affairs, that *a* is *F* is sufficient for the truth of "*a* is *F*" since it is impossible that this fact exists, but the predication is false. Armstrong calls the truth-necessitating entities 'truthmakers.' Since they necessitate the truths in question, the existence of truthmakers can block the infinite regress for one's theory of properties.

[112] There is another regress problem which can be found in the literature. Roughly speaking, the problem is that if realists say that "*a* is *F*" is true because *a* instantiates *F*, then in order to explain why "a instantiates *F*", they also have to say that it is true because the ordered pair of *a* and *F* instantiate the relation of instantiation, and so on, ad infinitum. This version of regress problem is not the one I raise here as I believe that the regress here is much easier to block than the one in the main text. For an excellent reply to this regress, see Lewis (1983a), pp. 351-354.

[113] See Armstrong (1983), pp. 88-93, and (1997), pp.115-116.

We have seen that facts, or states of affairs, are indispensable in Aristotelianism for two reasons. First, the existence of universals need be grounded in them. Second, these facts need to be truthmakers for true predications. Now given their second role (as truthmakers), the existence of these facts may also help to deal with another central issue of properties, i.e. the problem of universals. The problem of universals is usually taken to be the problem of how two distinct particulars can share the same feature, e.g. how two distinct electrons have the same mass. Let '*a*' and '*b*' be the names of these two electrons, and '*F*' stands for the mass which *a* and *b* have. As Rodriguez-Pereyra points out, to answer how *a* and *b* are both *F* is nothing more than to provide the truthmaker for the conjunction "*a* is *F*, and *b* is *F*." Furthermore, as a conjunction is grounded in its conjuncts, we can explain the truth of the conjunction "*a* is *F*, and *b* is *F*" by providing the truthmaker for "*a* is *F*" and the truthmaker for "*b* is *F*". Since the fact that *a* is *F* and the fact that *b* is *F* can be these truthmakers, the problem of universals can be solved by positing these facts.[114]

We have seen the benefits of positing (Armstrongian) facts. Now let us turn to an argument against it. The argument appeals to the Humean principle which, roughly speaking, states that there is no necessary connection between distinct entities. According to the Humean principle, there should not be any necessary connection between the fact that *a* is *F* and the fact that *F* exists as they are distinct. However, since the fact that *a* is *F* necessitates the fact that *F* exists, the Humean principle is violated.[115]

[114] See Rodriguez-Pereyra (2000), pp. 265-7.

[115] This argument has been attributed to Lewis (1992) by Wilson (2010). However, I cannot find the foregoing argument in Lewis (1992). In that paper, Lewis only says that he finds the building of facts out of particulars and universals mysterious because it requires some sort of 'unmereological' composition. Perhaps what Wilson has in mind is a generalised version of one of Lewis's (1986b) arguments against structural universals. However, Lewis explicitly takes this Humean argument to be an argument against the 'magical' conception of structural universals, on which structural universals do not have any part, instead of the 'pictorial' conception of structural universals, on which structural universals do have parts, though unmereological ones. Therefore, it is his argument against the pictorial conception of structural universals which is relevant to his argument against facts. But his argument against the pictorial conception of structural universals has nothing to do with the Humean denial of any necessary connection.

The foregoing argument may be resisted as the Humean principle, as stated above, is too strong. It is too strong because it will also rule out the necessary connection between a grounded fact, say the chemical fact that an $H_2O$ molecule exists, and its full ground, say the physical facts about the elementary particles which constitute that $H_2O$ molecule. Thus, some philosophers prefer a moderate version of Humean principle which denies any necessary connection between fundamental, or ungrounded, facts.[116] Now this version of Humean principle does not rule out the necessary connection between the fact that *a* is *F* and the fact that *F* exists, as the latter is grounded in the former and therefore not fundamental. Hence, the Humean argument against facts is not a successful one.[117]

Finally, let me conclude this section with some words about the structuralness of Aristotelian universals. Again, Aristotelian theists may go for (i) absolute structuralness, or (ii) divine structuralness. If the former, then the structuralness of Aristotelian universals may come from God's nature or essence. If the latter, then their structuralness may come from God's (free) will. There is not much difference between theistic activism and Aristotelian theism in this respect.

## 3.4 Trope theory

This section is a divide between realist theories and nominalist theories. I am now moving from the realist side to the nominalist side. Along the spectrum, let us now turn to a moderate version of nominalism, i.e. trope theory.

Tropes are usually conceived as *particularized* properties, in the sense that they are not universals but particulars. For instance, suppose that both an electron $e_1$ and another

[116] See, for example, Bennett (2017), p. 50, and Schaffer (2010a), p. 40.

[117] However, this reply works only for Aristotelianism. If Platonists, in order to block the infinite regress, also accept the existence of states of affairs or facts, then they will need to take both the fact that *a* is *F* and the fact that *F* exists to be fundamental, i.e. ungrounded. This will violate the moderate version of Humean principle. I do not take this to be a successful argument against Platonism either. Platonists have already accepted the *necessary* existence of universals anyway. Thus, it is likely that they are not big fans of the Humean principle in the first place.

electron $e_2$ have the same mass. Then trope theorists would think that there exist two distinct tropes, $e_1$'s mass, call it $m_1$, and $e_2$'s mass, call it $m_2$, which explain why $e_1$ and $e_2$ have the same mass. I take trope theory to be a nominalist theory of properties as it does not posit the existence of any universals, i.e. things which can be instantiated by more than one object. On trope theory, properties are particulars rather than universals.

Now I turn to the question of how theism may assimilate trope theory. I will break down the discussion into two parts, one for non-transferable tropes and the other for transferable tropes where a trope is non-transferable if and only it is essentially attached to its bearer. For instance, if $m_1$ is non-transferable, then $m_1$ cannot be any electron's trope except $e_1$'s. Thus, non-transferable tropes, say $m_1$ and $m_2$, cannot swap their bearers even if they are exactly similar. On the other hand, transferable tropes may have different bearers. For example, $m_1$, which actually belongs to $e_1$, could have been a trope of $e_2$ given that tropes are transferable.

Let me start with non-transferable tropes. Although non-transferable tropes are sub-factual entities, their role in one's ontology is very similar to facts'. For instance, they can also be truthmakers for true predications. Consider a non-transferable trope of *a*: *a*'s *Fness*. Since this trope is non-transferable, it is impossible that it exists, but *a* does not have it. Thus, its existence necessitates that *a* is *F*.

Also, many trope theorists believe that tropes are causal relata as they behave quite like facts or events. For instance, they may say that $e_1$'s negative charge, $c_1$, causes $e_1$'s moving away from $e_2$. Now if tropes are causal relata, then theists may use the concept of divine causation to capture the dependence of tropes on God. However, recall that tropes are sub-factual entities while the concept of divine causation is factual. Fortunately, this is not a big problem as we can take the existential facts about tropes, e.g. the fact that $c_1$ exists, to

be causal relata instead. Therefore, theists may understand the dependence of tropes on God as follows: the existence of tropes is divinely caused by facts about God.[118]

As for transferable tropes, we may understand their dependence on God in quite the same way because their existence may also be taken to be causal relata. However, they cannot be truthmakers as their existence does not necessitate true predications. One may take this to be a reason for non-transferable tropes over transferable tropes. But I believe that theists need not be moved by this reason. To see why, let us have a look at the regress problem for transferable tropes. There are two accounts of particulars which a trope theorist may adopt. First, one may take particulars to be bundles of tropes which are tied together by the *compresence* relation. Second, one may take particulars to be substratum which on their own are qualityless but have, or *instantiate*, tropes as their qualities.

Let us start with the second account. As noted in 3.3, the instantiation relation, or, more precisely, an instantiation trope $i_1$, cannot guarantee that a substrate, say $a$, possesses its tropes, say $t_1$, $t_2$, … and $t_n$, as it is possible that $i_1$, $a$, $t_1$, $t_2$, … and $t_n$ exist, but $a$ does not possess $t_1$, $t_2$, … and $t_n$. (Recall that all tropes here, including $i_1$, are transferable.) Moreover, adding another relational trope $i_2$ will not block the regress for some similar reason.

On the other hand, on the first account, the existence of a particular, say $a$, requires the compresence relation, or, more precisely, a compresence trope $c_1$, to gather tropes, say $t_1$, $t_2$, … and $t_n$, together. However, $c_1$ will not do the work either as it is possible that $c_1$, $t_1$, $t_2$, … and $t_n$ exist, but $t_1$, $t_2$, … and $t_n$ are not compresent. (Recall that $c_1$ is also a transferable trope.) Again, adding another compresence trope $c_2$ will not help at all.

Now theists may provide a way out for the regress problem for transferable tropes. Some facts about God, say his willing that $t_1$, $t_2$, … and $t_n$ are compresent or his willing that $a$

[118] Alternatively, one may hold that their existence is grounded in facts about God if some sort of theistic idealism is true.

instantiates $t_1$, $t_2$, … and $t_n$, can block the regress as it is impossible that an omnipotent God wills so, but it turns out otherwise. Thus, these facts about God may serve as the metaphysical 'glue' which bonds together $t_1$, $t_2$, … and $t_n$ (and perhaps *a* as well if *a* is a substrate.)[119] In contrast, if tropes are non-transferable, then God only needs to cause them to exist without an additional willing to bring them together.

We have seen how theism may assimilate trope theory and how theism can block the regress problem for (transferable) tropes. At the end of this section, I do not have too much to say about tropes' structuralness as what I have said in 3.2 and 3.3 can also apply here. I now turn to extreme nominalist theories.

## 3.5 Extreme nominalist theories

By 'extreme nominalist theories', I mean theories which posit no quality-conferring properties (which include both multi-exemplifiable properties, i.e. universals, and particularised properties, i.e. tropes,) but only concrete particulars.[120] Specifically, these include resemblance nominalism, class nominalism, ostrich nominalism, and concept nominalism.[121]

Now let us see how these extreme nominalist theories may be formulated in terms of metaphysical concepts. As usual, I tend to think that modal concepts cannot help too much here. For example, resemblance nominalism is, roughly speaking, the view that qualitative facts, say the fact that a certain rose is red, depend on resemblance facts, say this rose's resembling other red objects. Few, if any, take the dependence here to be some sort of modal dependence. It is easy to see why. It seems plausible that if the relevant resemblance

[119] It is noteworthy that one must not understand facts about God here as transferable tropes; Otherwise, the regress problem will recur. To sidestep this problem, one may take them to be non-transferable tropes. Or one may simply take them to be primitive, (compositionally) simple facts which cannot be understood in terms of tropes or any property-like entities. I will explore the latter strategy more in 3.6.
[120] I would like to point out that perfectly natural classes of concrete particulars do not count as properties in the foregoing sense as they do not confer qualities on concrete particulars.
[121] The list here is certainly not exhaustive.

facts were not to obtain, the qualitative fact in question would still obtain. For instance, if all red objects involved in the relevant resemblance facts, except the red rose in question, were to fail to exist, then these resemblance facts would fail to obtain. However, the qualitative fact that this rose is red might still hold in some possible world as long as in that possible world, the rose resembles some other red objects (which are not the red objects mentioned above.) Thus, the counterfactuals cannot be used to capture the dependence between qualitative facts and resemblance facts asserted by resemblance nominalists. Therefore, I will follow Rodriguez-Pereyra, a well-known defender of resemblance nominalism, taking the dependence here to be grounding.[122] That is, qualitative facts are grounded in resemblance facts.

As for class nominalism, the modal concepts are also useless because the set-theoretic cases are hyperintensional, as noted in 1.1. Instead, it is the concept of structure which plays an important role in class nominalism. On class nominalism, every class is a property (on the abundant conception.) To say that an object has a property is just to say that that objects is a member of the class which contains all and only objects with the same property. However, not all classes are ontologically on a par. For instance, the class whose only members are Eiffel tower and my left hand is also a property on class nominalism. But this class presumably does not have the same ontological status as the class which contains all and only objects with 1g mass. In order to demarcate the ontologically privileged classes from the others, what we need to do is apply the concept of structure, holding that some classes are structural/natural, and the others are not. Not every class carves reality at its joints.

When it comes to ostrich nominalism, the situation is quite different as qualitative facts do not depend on any other sort of facts, e.g. resemblance facts or set-theoretic facts. In

[122] See Rodriguez-Pereyra (2002).

fact, on ostrich nominalism, the qualitative facts are taken to be primitive in the sense that they do not depend on anything further. This may be taken to mean that the qualitative facts are not grounded in any facts (or at least not in any *creaturely* facts as they may be grounded in or divinely caused by facts about God.) Objects just have different features, and that's it. For ostrich nominalists, there are different predicates some of which are structural. The structural ones are used to describe what genuine features an object has.[123]

For each of these nominalist theories, its ontology contains only concrete particulars and, if any, abstract particulars whose existence is grounded in the existence of concrete particulars, e.g. classes. If any of these nominalist theories is true, then all God has to do is bring about the existence of concrete particulars (via either grounding or divine causation) as the existence of all other entities (except God), on these theories, is grounded in the existence of concrete particulars. Thus, in terms of the ontological commitments, none of these extreme nominalist theories fits in with theism better than the other extreme nominalist theories as all of them are in harmony with theism equally well.

However, when it comes to the issue of structure, the difference among these extreme nominalist theories becomes clearer. As noted above, they take different concepts, e.g. resemblance, classes, and predicates, to be structural. Again, within the theistic framework, they may be either absolutely structural or divinely structural. These concepts may acquire their structuralness in the two ways suggested above.

The issue is more complex in the case of concept nominalism. On the standard version of concept nominalism, it is human concepts under which particulars fall. And distinct particulars' falling under the same human concept explains why they share the same feature. However, many believe that this sort of explanation get things wrong. For our human concepts may fail to carve reality at its joints if we accept that the qualitative structure of

[123] I omit concept nominalism here as I will devote the next subsection to it.

reality is an objective and (creaturely) mind-independent matter. It seems plausible that if we had formed different concepts from those we actually did, then the qualitative structure of reality would still have been the same. The genuine resemblance would still have held between, say, green things rather than grue things even if we had formed the concept of grue and the concept of bleen instead of the concept of green and the concept of blue.[124]

Although I believe that given the objectivity of the qualitative structure of reality, the standard version of concept nominalism is very implausible, my own preferred theory of properties is also a version of concept nominalism, though a theistic one. It is called 'theistic concept nominalism.'[125] Now I turn to it in the following subsection.

### 3.5.1 Theist concept nominalism

As noted above, God's divine concepts may be taken to be his mental events of a certain sort, which are divinely caused by some facts about God, e.g. the fact that God is omnipotent. Also, we have noted that it is God's concepts (in conjunction with some relevant mental events of God, say his willing that a concept *C* is structural,) which determine the structure of reality. Therefore, God's concepts, unlike human concepts, will not fail to carve reality at its joints. The foregoing objection to the standard version of concept nominalism does not apply to theist concept nominalism on which the objectivity of the qualitative structure of reality is secured.

However, theist concept nominalism still suffers from the regress problem.[126] The existence of a divine concept, say the concept of *F*, and the existence of a concrete

[124] Extreme Goodmanians might resist the foregoing objection by insisting that no concept is absolutely or divinely structural, so human concepts are the only things capable of carving, or more precisely, classifying, reality. They might have a third concept of structure, i.e. 'human' structure, and hold that whether something is humanly structural or not is a contingent matter.
[125] See Leftow (2006) and (2011), and my (2019).
[126] The regress problem is usually not so serious in the cases of extreme nominalism as it is in the cases of trope theory and realist theories. Class nominalism is free from the regress problem because the membership relation is an internal relation. As for resemblance nominalism, the regress can be blocked if resemblance facts can be grounded in the existence of concrete particulars. See Rodriguez-Pereyra (2002), Section 6.5.

particular, say *a*, may not necessitate that *a* is *F* as it is possible that it is *b* rather than *a* which is *F*. Furthermore, adding a divine concept of falling-under will not solve the problem as it is possible that the concept of *F*, the particular *a*, and the concept of falling-under exist, but *a* does not fall under the concept of *F*.

I believe that it is easy to solve the regress problem for theist concept nominalism. Recall that in order to block the regress generated by transferable tropes, I have appealed to God's mental events, e.g. his willing that $t_1$, $t_2$, … and $t_n$ are compresent. Here we may adopt a similar strategy. As God is omnipotent, it is impossible that God wills that *a* falls under his divine concept of *F*, but *a* is not *F*.[127] Thus, God's willing can block the regress as it necessitates that *a* is *F*.[128]

Now I contend that theist concept nominalism has an ontological advantage over all the aforementioned theistic theories of properties. On one hand, it does not posit anything other than concrete particulars. In place of universals, God's divine concepts play the role of properties in theist concept nominalism. And God's willings are needed to block the regress. However, both God's concepts and his willings are his mental events, which are concrete particulars (as they have causal power.)[129] On the other hand, the other theistic theories of properties also posit what theist concept nominalism need posit, namely God's concepts and willings. For instance, a theistic Aristotelian have to believe not only that Armstrongian facts are truthmakers for true predications like "*a* is *F*" but also that these facts are grounded in or divinely caused by facts about God. What are the facts about God which Armstrongian facts are grounded in or divinely caused by? They should be God's willings to bring about

Also, Lewis (2002) provides a counterpart theoretic account of truthmakers on which ostrich nominalists can take concrete particulars to be truthmakers for true predications. However, unlike the foregoing nominalist theories, it is unclear how the standard version of concept nominalism can handle the regress problem.

[127] Again, on pain of regress, God's willings here should not be understood as his falling under certain concepts, but primitive facts which do not contain any property-like entities as their constituents.

[128] See my (2019) for a more detailed discussion of this problem.

[129] Here I follow Leftow's suggestion.

these Armstrongian facts, e.g. God's willing that the fact that *a* is *F* exists, or more simply, God's willing that *a* is *F*. Also, in order to explain the structuralness of Aristotelian universals, a theistic Aristotelian also needs the existence of God's concepts about these universals, which are either absolutely structural or divinely structural. Likewise, a theistic trope theorist also needs to tell a story about how God brings about the truthmakers, i.e. non-transferable tropes or the compresence facts about transferable tropes. And it is again God's willings which ground or divinely cause the existence of these putative truthmakers.[130] The foregoing reasoning applies to all other theistic theories of properties. Even a theist who accepts some radical version of Platonism, the view that both the existence and the structuralness of universals are independent, still needs to accept God's concepts and willings into one's ontology. For without divine concepts of these Platonic universals, God will not be omniscient. And without God's willings, it will be very hard to see how the creaturely facts like the fact that *a* is *F* may metaphysically depend on facts about God.[131] Thus, theists who are not theist concept nominalists also need to accept the existence of God's concepts and willings. Overall, theist concept nominalism has an ontology which is more parsimonious than the other theistic theories of properties as the former does not posit things like universals, tropes, or merely possible concrete particulars.[132]

Another case for the inclusion of God's willings in one's ontology is that it leads to a simple solution to the problem of negative/general truths. Let us start with general truths like "all ravens are black." Suppose that this world contains only three ravens, *a*, *b*, and *c*, and all of them are black. There is a notorious problem for truthmaking theorists: If facts

[130] Same to extreme nominalist theories. One needs God's willings to bring about the existence of the truthmakers, e.g. concrete particulars.
[131] As noted in 3.3, even if Platonists do not believe that the existence of universals is grounded in Armstrongian facts, they might still need the latter so as to block the regress.
[132] Resemblance nominalists and class nominalists need to posit merely possible concrete particulars in order to solve the problem of co-extension while theistic concept nominalists need not.

are truthmakers, then what is the truthmaker for "all ravens are black"? It is not the conjunctive fact of *a's being a raven, a's being black, b's being a raven*, and so on because the existence of all these facts does not necessitate the truth of "all ravens are black." In a possible world in which all these facts exist but there are two more facts, say *d's being a raven* and *d's being white*, "all ravens are black" is false as there is a raven, namely *d*, which is not black in that world. The trope theory faces a similar problem as we can always add some other tropes, say *d's ravenhood* and *d's whiteness*, to make the general claim false.

Likewise, consider the negative truth that there is no hobbit. Again, all individuals that exist in this world are not the truthmaker for "there is no hobbit" because it is possible that all of them exist but there is one more individual, e.g. Frodo, who is a hobbit. It is noteworthy that Armstrong's own solution to the problem of negative/general truths is to posit the so-called "totality state of affairs" which is a higher order fact, consisting of (i) the aggregate of all first order facts, (ii) a totalling or alling relation, and (iii) the higher order universal *being a first order fact*.[133] The existence of this totality state of affairs guarantees that all and only these facts obtain. Thus, its existence excludes the possibility of adding other fact like *d's being white*. For Armstrong, the totality state of affairs is the truthmaker for these general truths. Likewise, the totality state of affairs can be the truthmaker for negative truths like "there is no hobbit" as its existence guarantees the non-existence of hobbits.

Now I suggest that theists have a very simple solution to the problem of negative/general truths: They are made true by God's willings. For instance, "there is no hobbit" is made true by God's willing that there is no hobbit and "all ravens are black" is made true by God's willing that all ravens are black as it is impossible that an omnipotent

[133] See Armstrong (1997), pp. 197-200.

God wills so, but it turns out otherwise. If so, then there is no need for one to posit some peculiar entities like negative facts or the totality states of affairs as all God's willings are just his mental events, which are positive entities.[134]

Now one might object that theists still need to provide truthmakers for negative/general truths about God himself like "God does not will that Fido is a cat." If no truthmakers for these truths are provided, theists do not really answer the problem of negative/general truths. In reply, we may appeal to something like the totality state of affairs. For instance, let us posit the totality willing of God. That is, God wills that he wills nothing else. And this totality willing of God can be the truthmaker for this sort of negative truths about God himself. It is noteworthy that this willing is still a normal positive fact of God as my willing that I do not attend the seminar tomorrow is also a positive fact, unlike Armstrong's totality states of affairs.

We have seen some merits of theist concept nominalism. Now let us turn to an objection to it.[135] One might wonder how two different willings can cause two different things to have the same feature. For instance, both God's willing that a basic particle *p* is negatively charged and God's willing that another basic particle *q* is negatively charged bring about something negatively charged. There seems to be some sort of connection between one willing and the other; otherwise, the similarity between them, i.e. their ability to bring about something negatively charged, would be mysterious. If it is mysterious, then the problem of universals is unsolved because the similarity between God's different willings is

[134] One might object that if some of God's willings are the truthmaker for negative truths, then the former will bring about, via grounding or divine causation, negative facts. Therefore, theists still need to accept the existence of negative facts. I think that there is no problem for one to accept the existence of negative facts if they are not fundamental, or metaphysically independent. The problem of negative/general truths is that truthmaking maximalists have a hard time finding positive entities as truthmakers for negative/general truths. It does not mean that one should never accept the existence of negative facts which are grounded in positive facts if these positive facts are the truthmakers for negative truths. Some of God's willings are just positive facts of this sort.

[135] Besides the following objection, one might also raise the bootstrapping objection to theist concept nominalism. However, as noted in 3.2, the objection can be avoided by treating creaturely predications and divine predications differently. I will present my own solution to this objection in the next subsection.

unexplained. Therefore, to thoroughly answer the problem of universals, we have to explain what makes God's different willings capable of causing the sameness of type of creatures' features.

This problem in fact can be formulated in a way that applies to other theories of properties. Let us call something an *F*-entity if it is a truthmaker for a true predication of the form "*x* is *F*". For instance, the (non-transferable) trope *a's Fness* and the (Armstrongian) fact *a's being F* are both *F*-entities since they are truthmakers for "*a* is *F*." Now the question is how two distinct entities can be both *F*-entities. Trope theorists may answer this by saying that *a's Fness* and *b's Fness* are both *F*-entities because they exactly resemble each other and all other *F*-tropes. As for the proponents of facts, the answer is straightforward: the property of being *F* is both a constituent of *a's being F* and a constituent of *b's being F*.

To answer the question of how God's willing that *a* is *F* can be an *F*-entity, we may follow the line of thought of proponents of facts, saying that God's willing that *a* is *F* is an *F*-entity because of a further entity which is related in a relevant way to God's willing that *a* is *F*. What further entity can it be? Just like the universal of *F* plays such a role in the similarity of *F*-facts, I suggest that it is God's divine concept of *F* which does the work in the case of God's *F*-willings. We may say that both God's willing that *a* is *F* and his willing that *b* is *F* are related to his concept of *F* in some way. Now recall that both God's willing that *a* is *F* and his concept of *F* are mental events. Therefore, it is natural to take the relation between them to be divine causation. If so, then we can explain why God's *F*-willings are *F*-entities as follows: God's *F*-willings are *F*-entities because God's divine concept of *F* is a divine cause of all *F*-willings. Again, we see how the concept of divine causation is helpful for doing theistic metaphysics.

What I have said so far in this chapter can only apply to creaturely properties and creaturely predications.[136] I now turn to the question about divine predications so as to complete my discussion of theistic theories of properties.

## 3.6 An account of true predications about God

Let us firstly distinguish three kinds of predications about God. The first one is *extrinsic* predications about God. A predication is extrinsic if it predicates something extrinsic of its subject. For instance, "God is a savior" is arguably an extrinsic predication because being a savior is arguably extrinsic. Whether God is a savior depends not only on God's own actions and mental states but also on something external to God, i.e. his creatures. Certainly, God would not be a savior if there were no sinner to be redeemed.

The second and the third kinds of predications about God are both *intrinsic* predications which predicate something intrinsic of their subjects. We can divide the class of all intrinsic predications about God into two subclasses. They correspond to our second and third kinds of predications about God. Let us call the second *intrinsic-accidental* predications. As its name suggests, an intrinsic-accidental predication predicates something both intrinsic and accidental of its subject. For instance, "God wills that Fido is white" is an intrinsic-accidental predication because (i) this willing is intrinsic to God, and (ii) this predication is, arguably, contingently true as God has the freedom to will otherwise.

On the other hand, we also have the third kind of intrinsic predications about God. These are *intrinsic-essential* predications. An intrinsic-essential predication predicates something both intrinsic and essential of its subject.[137] For instance, "God is omnipotent" will be an intrinsic-essential predication about God if he is intrinsically and essentially omnipotent.

[136] Otherwise, it will lead to, as noted above, the divine bootstrapping objection and the regress problem.
[137] There may be some essential properties which are extrinsic. For instance, if the essentiality of origin thesis is true, then being a son of Plato's parents is an essential but extrinsic property of Plato.

I have listed these three kinds of predications about God which are exhaustive. Now I shall deal with each of them respectively in the following subsections.

### 3.6.1 Extrinsic predications about God

Before giving an account of extrinsic predications about God, let us have a look at extrinsic predications in general. How can extrinsic predications be explained? Lewis suggests:

> [T]hings have many of their extrinsic properties in virtue of the intrinsic properties of more inclusive things – perhaps the entire universe, perhaps something less. Where *F* is one of these extrinsic properties, the proposition *Fa* is implied by some *Gb*, where *G* is intrinsic and *a* is part of *b*…. So a truthmaker for *Gb* is a truthmaker for *Fa* as well.[138]

Let us see how our example, namely "God is a savior", can be explained in this way. First, we may identify some (conjunction of) intrinsic predication(s) which entails "God is a savior". For instance, some intrinsic predications about sinners' repentance and some intrinsic predications about God's redemptive action may jointly entail "God is a savior." Second, the truthmakers for intrinsic predications about sinners' repentance may be sinners' (free) mental events, and the truthmakers for intrinsic predications about God's redemptive action may be God's certain mental events.[139] In this scenario, "God is a savior" is made true by sinners' mental events and God's mental events together as the truth of this extrinsic predication is necessitated by and grounded in these entities. To be fair, the foregoing explanation is only a toy model. A satisfactory account of salvation may appeal to something other than sinners' and God's mental events. However, it seems promising to find a truthmaker for "God is a savior" along this line of thought.

If the foregoing strategy works, the complete facts need not include any extrinsic properties of God. In other words, there is no need to posit any extrinsic willings, e.g. God's

[138] Lewis (2002), p. 30.
[139] As noted above, I take God's mental events to be primitive and compositionally simple facts which do not contain any property-like entities.

will that he is a savior, or any extrinsic properties, e.g. being a savior, to explain the truths of extrinsic predications. Besides, according to this account, the truths of extrinsic predications about God may depend on some non-divine facts about creatures, like people's repentance.

### 3.6.2 Intrinsic-accidental predications about God

It is much easier to explain the truths of intrinsic-accidental predications about God. I have already argued that theists need God's mental events, such as his willings and divine concepts, in their ontology. Now these mental events seem to be able to serve as truthmakers for these predications as well. For instance, "God wills that Fido is white" is made true by a certain mental event, namely God's willing that Fido is white, because the truth of this predication is grounded in this willing.

Predications about God's willings may not be the only sort of intrinsic-accidental predications. If God freely forms divine concepts, then "God has the divine concept of *F*" will be made true by God's mental event which is the divine representation of *F*. Likewise, if there is any other *genuinely* intrinsic-accidental predication about God rather than an extrinsic predication in disguise, we can posit a corresponding mental event of God to be its truthmaker.

### 3.6.3 Intrinsic-essential predications about God

Finally, we come to the most interesting case, i.e. intrinsic-essential predications about God. I believe that we do not need to posit a plurality of entities, e.g. states of affairs, events, or tropes, to be their truthmakers. For example, we do not need a state of affairs *God's being omnipotent* to make "God is omnipotent" true and another state of affair *God's being omniscient* to make "God is omniscient" true. Instead, I suggest that the one and only truthmaker for all intrinsic-essential predications about God is God's existence (or the fact

that God has his essence, if you think, as noted in 1.4, that the existential quantifier for God is not structural.)[140] It is easy to notice that this fact meets the minimum requirement for being a truthmaker for these predications. As we are talking about true intrinsic-essential predications, it is impossible that their subject, i.e. God, exist (or has his essence) but these predications are false. That is, the existence (or the essence) of God necessitates that he is omnipotent, that he is omniscient, and so on.

Besides necessitation, we may specify more clearly the relation between God's existence/essence and these intrinsic-essential predications of God. It does not seem that God divinely causes himself to be omnipotent, omniscient, and so on. Thus, it is better to say that the intrinsic-essential facts about God, e.g. the fact that God is omnipotent, are grounded in the existence (or the essence) of God.

The account of predications about God proposed here is independent from all theistic account of (creaturely) properties discussed in this chapter. Thus, I believe that it is open to all theists to adopt it. Of course, the proponents of some aforementioned theories, e.g. theistic activism, may insist that even divine predications have to be treated in the same way as creaturely predications. However, the advantage of the account of divine predications proposed here is that it does not face the bootstrapping objection. For, on this account, God does not have to create his own properties.

Now it is time to wrap it up. In this chapter, we have seen how the metaontological question of how to formulate theistic theories of properties may be answered given the postmodal concepts, including grounding, divine causation, and structure. Within this postmodal framework, I have also developed an extreme nominalist theory of properties and addressed the first-order question of how divine predications may be explained. This

[140] A similar account is also proposed by Brower (2008).

chapter is therefore a demonstration that the postmodal concepts proposed in Chapter 1 are useful tools for theistic metaphysicians.

# 4 Theistic Accounts of Modality

We now move on to another crucial issue in systematic metaphysics: modality. Although I think that modal concepts are not adequate to formulate many claims of theistic metaphysics, I am not committed to the extreme view that there is no modal truth. Instead, I believe that some modal claims, e.g. that possibly there is a talking donkey, are true, and others, e.g. that necessarily Socrates is a philosopher, are false. (In fact, I have used a lot of modal claims, e.g. that it is impossible that God wills *P* but it turns out otherwise, to elucidate some of my points in the previous chapters, e.g. the internality of divine causation.) So now I am going to provide some metaphysical explanation of the truth/falsity of modal claims. The chapter will address the question of how modal facts may metaphysically depend on God.

In the following sections, I will discuss a variety of theistic accounts of modality, including theistic modal realism (Section 4.1), theistic combinatorialism (Section 4.2), theistic voluntarism (Section 4.3), theistic power theory (Section 4.4), and theistic essentialist theory (Section 4.5). Again, we will see how the metaphysical concepts proposed in Chapter 1 may play an important role in the explications of these positions.

## 4.1 Theistic modal realism

Modal realists hold that there are concrete possible worlds, which are the same in kind as the actual world where we concrete objects inhabit. On modal realism, modal claims can be analysed in terms of claims about (concrete) possible worlds, which in turn can be reductively defined in terms of the spatio-temporal relations and the parthood relation. Before going into the question of whether theism can be combined with modal realism, let me briefly introduce how modal realists reduce modality.

Modal realists take possible worlds to be maximally spatio-temporally connected mereological sums where maximality is understood in terms of the parthood relation as follows: a sum is maximally spatio-temporally connected if and only if (i) every part of this sum is spatio-temporally related to every other part of this sum, and (ii) none of its parts is spatio-temporally related to anything that is not one of its parts.[141] For instance, the actual world is just the mereological sum of all objects which are spatio-temporally related to us. It is noteworthy that this is a reductive definition of possible worlds which does not presuppose primitive modality as the only primitive notions involved in the definiens are the spatio-temporal and mereological ones, which are non-modal.

Given the foregoing definition of possible worlds, modal realists attempt to reduce modal claims to claims about possible worlds. The modal operators, i.e. 'possibly' and 'necessarily', are taken to be *unrestricted* universal/existential quantifiers over possible worlds. For instance, the modal claim "necessarily, all humans are mammals" has the following truth condition: For every *w* and every *o*, if (i) *w* is a possible world, (ii) *o* exists in *w*, and (iii) *o* is a human, then *o* is a mammal. Likewise, the modal claim "possibly, there is some talking donkey" has the following truth condition: For some *w* and some *o*, (i) *w* is a possible world, (ii) *o* exists in *w*, (iii) *o* is able to talk, and (iv) *o* is a donkey. Here the notion of existence in a world needs explaining as it is not the same as the (unrestricted) quantification, which ranges over the domain of the outermost quantifiers of the foregoing truth conditions. Lewis appeals to the parthood relation to explain the notion as follows: an object *o* exists in a possible world *w* if and only if *o* is a part of *w*.[142] Recall that a possible world is taken to be a mereological sum whose parts are maximally spatio-temporally

[141] See Lewis (1986a), pp. 69-81.
[142] See Lewis (1983b), pp. 39-40.

connected. Thus, it is natural to understand the notion of existence in a world as *being part of that world*.

The examples mentioned in the previous passage are cases of de dicto modality. Let us now turn to de re modal claims. Consider the following modal claim: Socrates is possibly a musician. On possible world semantics, the truth condition of this modal claim is that for some possible world *w*, (i) Socrates exists in *w*, and (ii) Socrates is a musician in *w*, or more formally, is in the extension of the predicate 'is a musician' in *w*. However, modal realism does not fit in with possible world semantics for the latter requires that objects in one world can be (transworldly) identical to objects in another world. And this in turn implies that objects can exist in more than one world. To refute the claim that concrete objects can exist in more than one world, Lewis raises his famous problem of accidental intrinsics. Roughly speaking, the idea is that if a concrete object, which exists in more than one possible world, has any contingent property, say having 60 kg mass, in one world and lacks it in another, then this concrete object both has and lacks this property *simpliciter*. However, it is a contradiction that a concrete object both has and lacks some property *simpliciter*. It follows that concrete objects, or at least concrete objects with some contingent property, cannot exist in more than one possible world. Thus, Lewis insists that concrete objects like Socrates cannot exist in more than one possible world.[143] In other words, Socrates is a 'world-bound', as opposed to 'transworld', object.

Although modal realists resist the claim that Socrates exists in more than one possible world, they do not deny the possibility that Socrates is a musician. They just do not think that possible world semantics provides the correct truth condition of this modal claim. Instead, they appeal to counterpart theory to explain de re modality. Counterpart theory draws on the notion of the counterpart relation(s) which is a similarity relation. When we

[143] See Lewis (1986a), pp.198-209.

say that *a* is a counterpart of *b*, we mean that *a* is similar enough to *b* in the current context of utterance. On counterpart theory, the modal claim that Socrates is possibly a musician is understood as follows: for some *w* and some *o*, (i) *w* is a possible world, (ii) *o* is part of *w*, (iii) *o* is a counterpart of Socrates, and (iv) *o* is a musician. According to this account of de re modality, modal realists do not have to say that in some possible world, the very same Socrates has a property which he actually lacks. Instead, they are only committed to the claim that there is someone who is similar enough to Socrates in another possible world, and that person is a musician. In sum, on counterpart theory, objects like Socrates are world-bound, but objects which exist in other possible worlds can, as counterparts, represent the de re possibilities of these world-bound objects.

Now let us return to the question about theism and modal realism. Is theism compatible with modal realism? The answer seems to be affirmative if we take theism to be the mere claim that there exists God(s). For instance, Lewis himself says that he is a theistic modal realist in this sense. For he is, as he himself notes, the most extreme polytheist who believes that there are countless gods in a lot of concrete possible worlds (not including the actual one though.)[144] One might wonder how gods, who putatively do not occupy any spatial location, can exist in any possible world if being part of a (concrete) possible world requires being spatio-temporally related to some other objects in the same world. Lewis provides two suggestions.[145] First, gods may be located only in time although not in space if space and time, contrary to the theory of relativity, are more separable in the worlds where these gods exist. If they have temporal locations, then they are still temporally related to other objects in the worlds. Thus, we may still say that these gods are parts of possible worlds as they are temporally related to their worldmates. Second, Lewis suggests that gods may be

[144] See Lewis (1983b), p. xi.
[145] See Lewis (1986a), p. 73.

spatio-temporally related to other things by being omnipresent. If so, then gods will be located in where all their worldmates are located. Again, there is no problem for gods to be parts of possible worlds. Therefore, theism, the view that God(s) exists, is compatible with modal realism.

Although we have seen that modal realism is compatible with a specific sort of theism, namely Lewisian polytheism, their combination is perhaps not a very interesting view as Lewisian polytheism is not a popular position within the theists' circle. Instead, a more interesting question will be whether modal realism is compatible with classical theism, i.e. the view that there exists a perfect being, which many past and present theists have endorsed. There are several properties which are usually attributed by classical theists to God. These include omnipotence, omniscience, uniqueness, and necessary existence.[146] In the present context, the focal point is the last two, i.e. uniqueness and necessary existence. Classical theists may ask: Is the conjunctive claim that (i) there is only one God, and (ii) God necessarily exists compatible with modal realism? At first glance, this conjunctive claim seems incompatible with modal realism. One may notice that (ii) is a de re modal claim. Thus, given modal realism and counterpart theory, its truth condition is that for every *w*, if *w* is a possible world, then for some *o*, *o* is part of *w*, and *o* is a counterpart of (our actual) God. In other words, (ii) implies that every possible world has a counterpart of God in it. This generates the result that there are, unrestrictedly speaking, countless, rather than a unique, Gods. This result seems incompatible with (i), i.e. the claim that there is only one God.

I do not think that the foregoing problem is a serious one. For modal realists, quantificational statements are usually context-sensitive. Suppose that I say: "there is no beer." This claim is false if the quantification is taken to range over the domain of the whole

[146] Disclaimer: the question of what properties a perfect being must have is not what I will pursue here.

universe, but true if restricted to the region within my fridge. Likewise, there are at least two ways to interpret the claim that there is only one God. If classical theists quantify over all possible worlds, then this claim is surely incompatible with the uniqueness claim about God. However, we may also read it in a weaker way such that this claim implies nothing more than that the actual world has only one God.[147] If so, then the incompatibility dissolves. Only the first reading will generate the incompatibility. But there seems nothing in classical theism which forbids classical theistic modal realists to read the claim in the second way.[148]

That said, I believe that there are two divine properties attributed by classical theists to God which generate hard problems for classical theistic modal realists. They are sovereignty and aseity. Let us start with the former.

### 4.1.1 Modal realism and sovereignty

According to the doctrine of sovereignty, all creaturely facts depend on some facts about God via either grounding or divine causation.[149] Now some, though not all, modal facts are creaturely facts. For instance, the fact that possibly, there is a talking donkey is a creaturely fact rather than a fact about God. Therefore, given the doctrine of sovereignty, the fact that possibly, there is a talking donkey should somehow depend on some fact about God. So how can this modal fact depend on some fact about God in the modal realist picture? Recall

[147] To be sure, the weak reading still has some potential cost. Recall that classical theists also hold that God is necessarily unique. This and the claim that God necessarily exists imply, on counterpart theory, that every possible world has one and only one counterpart of God. This result is not compatible with the principle of recombination, which is a thesis endorsed by many modal realists, including Lewis himself. Therefore, if one thinks classical theists cannot accept modal realism without accepting the principle of recombination, then classical theistic modal realists will run into incompatibility. However, as far as I can tell, there is no reason why classical theists cannot accept modal realism without accepting the principle of recombination. Thus, I do not take it to be a serious cost of the version of classical theistic modal realism discussed here.

[148] A perfect being is also arguably the creator of every creature. Again, classical theistic modal realists can also read the claim that God is the creator of every creature in a weak way: God is the creator of every *actual* creature.

[149] For a postmodal formulation of this doctrine, see subsection 1.3.5.

that modal realists hold that this modal fact obtains because for some *w* and some *o*, (i) *w* is a possible world, (ii) *o* is part of *w*, and (iii) *o* is a talking donkey. As a result, if this modal fact depends on some fact about God, it is because the existence of a certain (concrete) possible world, part of which is a talking donkey, depends on some fact about God.

Now let us call this possible world which contains a talking donkey $w_1$. Suppose that $w_1$ is not the actual world (as presumably there is no talking donkey in our world.) Thus, the doctrine of sovereignty and modal realism jointly lead to the consequence that the existence of $w_1$ depends on some fact about *the actual* God (because the modal fact that possibly, there is a talking donkey is a fact obtaining in the actual world.)

However, as noted above, classical theistic modal realists, in order to explain God's necessary existence, have to accept that in every possible world, there is a counterpart of God, which is a world-bound object numerically distinct from the God of the actual world. Since all these counterparts of God are also perfect beings, each of them should also be the creator of their own world. But then the objector may contend that the existence of $w_1$ should depend on its creator, i.e. the counterpart of God in $w_1$, rather than an object existing in a distinct possible world, i.e. the God of the actual world. Thus, God's necessary existence and sovereignty, in conjunction with modal realism, seem to generate some incoherent result.

Now it is noteworthy that modal concepts are inadequate to articulate the foregoing objection to classical theistic modal realism. To articulate the foregoing objection, the objector has to show that the existence of $w_1$ does not depend on any fact about (the actual) God.[150] However, if the dependence here is understood modally, the objector will be not

[150] Otherwise, it will be easy for classical theistic modal realists to dismiss this objection by insisting that the existence of $w_1$ depends on both some fact about the counterpart of God in $w_1$ and some fact about the actual God.

able to argue for the claim that the existence of $w_1$ does not depend on any fact about (our actual) God. To see why, let us suppose that we can use counterfactuals to capture the dependence here. Then the claim in question may be understood as follows: If God were not to create $w_1$, then $w_1$ would still exist. This counterfactual conditional, however, is false given the standard Lewis-Stalnaker semantics. According to the standard Lewis-Stalnaker semantics, the truth condition of this counterfactual conditional is that in the closest possible world(s) in which no counterpart of God creates $w_1$, $w_1$ exists. Arguably, the closest possible world in which no counterpart of God creates $w_1$ is just the actual world because in the actual world, what God (who is also one of his own counterparts) creates is not $w_1$ but the actual world. However, $w_1$ does not exist in the actual world because, as noted above, on modal realism, existence in a world just means being part of that world, but $w_1$ is not part of the actual world (as no concrete possible world, by definition, is part of another distinct concrete possible world.) Thus, the counterfactual conditional is false. Instead, what is true is this: If God were not to create $w_1$, then $w_1$ would fail to exist. For $w_1$ does not exist in, or is not part of, the closest world in which no counterpart of God creates $w_1$, i.e. the actual world.[151]

Therefore, if the dependence between God and a world is understood in terms of counterfactuals, then the objector will not be able to uphold the claim that the existence of $w_1$ does not depend on any fact about the God in the actual world (despite the modal realist commitment that the God of the actual world is not the creator of $w_1$.) Hence, no incompatibility will be generated if the dependence in question is understood modally. The objection cannot be articulated in terms of modal concepts.[152]

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[151] In the foregoing presentation of the argument, I used '$w_1$' as a proper name for the world in which there are talking donkeys. However, the argument can also be run by replacing '$w_1$' with a description, say 'a world in which there are talking donkeys.'

[152] It is easy to see that the inadequacy will not be improved even if we adopt the concepts of supervenience or strict conditionals, rather than counterfactuals, to capture the dependence here. For in every possible world in which God (or his counterpart) does not create $w_1$, $w_1$ does not exist (as $w_1$ only exists in $w_1$ itself.)

On the other hand, if one wants to express the idea that the existence of $w_1$ does not depend on any fact about God of the actual world, the postmodal concepts like divine causation or grounding are quite helpful as one may say that the existence of $w_1$ is neither divinely caused by nor grounded in any fact about the God of the actual world (as the existence of $w_1$ is divinely caused by or grounded in some fact about the creator of $w_1$, namely the counterpart of the actual God in $w_1$, exclusively.)

Now the proponents of the modal approach might reply that we should understand the existence of a local world-bound object, e.g. Socrates, and the existence of a world as a whole in different ways. They might point out that on modal realism, there are different kinds of existence. As noted above, the existence of an object in a world is usually taken to be its being part of that world. However, this does not exhaust all kinds of existence within the modal realist framework. For instance, let us suppose, as Lewis himself does, that composition is unrestricted. Then every two distinct objects will compose a further object. Consider my left hand which exists in the actual world and a talking donkey which does not exist in the actual world. Since composition is unrestricted, there is an object which is composed of my left hand and that talking donkey. However, although this composite object exists, it does not exist in any possible world as it is not part of any possible world (though some part of it is part of some possible world.) Thus, existing *wholly* in a world is not the only way for an object to exist. Lewis takes the kind of existence of this sort of *cross-world* objects, which are composed of parts from different possible worlds, to be *being partly in a world*, i.e. having a part which is part of a possible world, which is different from *being in a world*, i.e. being part of a world.[153] So far we have seen two different kinds of existence: (i) being/existing in a world and (ii) being partly in a world. Besides these two, Lewis also suggests a third way for objects to exist. If one accepts the

[153] See Lewis (1983b), pp. 39-40.

existence of pure sets, then sets will not be part of any possible world as pure sets do not stand in any spatio-temporal relation. Neither are pure sets partly in worlds as no (mereological) part of them is part of any possible world. However, as Lewis points out, when we evaluate quantification at a world, we will not omit pure sets. Thus, Lewis writes: "Let us say that an individual exists *from the standpoint of* a world iff it belongs to the least restricted domain that is normally… appropriate in evaluating the truth at that world of quantifications."[154] According to Lewis, this is the third way for an object to exist: existing from the standpoint of a world.[155]

Given the foregoing three kinds of existence, one might hold that like pure sets and numbers, all possible worlds exist from the standpoint of the actual world even though they, except the actual one, do not exist in the actual world by being part of it. That is, one might include possible worlds in the domain when one evaluates quantifications. If so, then $w_1$ will exist from the standpoint of every possible world, including the closest world in which no counterpart of God creates $w_1$. Hence, it is false that if God were not to create $w_1$, $w_1$ would fail to exist. The proponents of the modal approach then might claim that there is no need to appeal to postmodal concepts like divine causation. For modal concepts, in conjunction with Lewis's three different concepts of existence, are adequate to articulate the objection in question.

The foregoing reply from the proponents of the modal approach, I believe, is unsuccessful. For this way of interpreting counterfactual conditionals in the previous paragraph generates some unacceptable results. Consider the following counterfactual

[154] Lewis (1983b), p. 40.

[155] One might think that this third way of existence does not fit in with modal realism well and contend that modal realists need modify their definition of possible worlds (which purely consist of concrete objects) so as to accommodate the third way of existence. For instance, one may take a possible world to be the mereological sum of maximally spatio-temporally related concrete objects plus all necessarily existing, abstract objects, e.g. pure sets or Platonic universals, if any. If so, then the third way of existence here will collapse into the first way of existence, i.e. being part of a world. In the rest of this chapter, however, I will grant the intelligibility of Lewis's third way of existence and see what applications it may have to theistic modal metaphysics.

conditional: If my parents had never met, then I would not have existed. Let us assume for the sake of argument that the necessity of origin is true. Thus, the counterfactual conditional is true. Now let us call the closest world in which my parents have never met $w_2$. According to the suggestion in the previous paragraph, the actual world, call it $w_3$, exists from the standpoint of $w_2$ even though the former is not part of the latter. Thus, the following counterfactual conditional will then become true: If my parents had never met, then $w_3$ would still have existed. However, since I am part of $w_3$ and *bound* to $w_3$ on modal realism, $w_3$ cannot exist without my existence. Therefore, we get another counterfactual conditional: If my parents had never met, then I would still have existed, which is contradictory to the supposition made above (given the plausible assumption that the antecedent here is not necessarily false.)

In fact, when we do counterfactual reasonings, we restrict the domain of quantification to the parts of the closest world in which the antecedent is true and omit objects in the other possible worlds. For instance, when I wonder what would have happened if Lewis had not been a philosopher, the actual Lewis who was a philosopher will surely be omitted. Now if the other possible worlds, as suggested by the proponents of the modal approach, are also quantified over during our counterfactual reasonings, then we will not be able to omit objects in the other possible worlds as they are part of these worlds. Thus, in evaluating the truth values of counterfactual conditionals, the sort of existence involved should not be existing from the standpoint of a world but being/existing in a world, namely (wholly) being part of a world. The foregoing reply therefore still fails to save the modal approach.

We have seen how the divine property of sovereignty poses an objection to classical theistic modal realism. Let us now turn to the other divine property which I mentioned earlier: aseity.

### 4.1.2 Modal realism and aseity

The doctrine of aseity says that God's existence and his nature/essence do not depend on any fact external to himself. The qualification 'external to himself' is important as it leaves room for the possibility that some facts about God depend on some fact about God himself. For instance, one may hold that God's having the power to create a stone depends on God's having his essence or God's existence, as suggested in 3.6.3. Thus, some fact about God, e.g. his having a certain power, may depend on some other fact about God which do not depend on any fact at all, e.g. God's having his essence.

Here, the facts about God which depend on no fact external to himself include, among other things, God's necessary existence and God's having his essential properties. For instance, God's necessary existence, according to the doctrine of aseity, does not depend on any fact external to God. Now recall that on modal realism and counterpart theory, de re modality is understood in terms of the counterparts of the object in question. Specifically, the de re modal claim that God necessarily exists is analysed as follows: for every *w*, if *w* is a possible world, then for some *o*, (i) *o* is part of *w*, and (ii) *o* is a counterpart of God. However, if this is how God has the property of necessary existence, then God's necessary existence depends on some facts external to him. More precisely, God's necessary existence depends on the existence of his counterparts in the other possible worlds, which is certainly external to *the actual* God as the actual God and his counterparts are *distinct* objects bound to their own worlds. This result is incompatible with God's aseity. Likewise, suppose that God is essentially omnipotent. Then according to the doctrine of aseity, God's being essentially omnipotent depends on nothing external to him. However, on modal realism and counterpart theory, this fact at least partly depends on how God's counterparts are in the other possible worlds, which is, again, external to the actual God. This example also shows that aseity poses a challenge to classical theistic modal realism.

### 4.1.3 Modal realism with overlap

In the previous subsections, I have raised two objections to the combination of classical theism and the standard version of, i.e. Lewisian, modal realism, which goes hand in hand with counterpart theory. In this subsection, I will turn to another version of modal realism on which one object may exist in more than one possible world. That is, objects are not world-bound, and therefore objects in different possible worlds may overlap. As an object in one world can be transworldly identical to itself in another different world, counterpart theory is no longer needed to explain de re modality. This version of modal realism, i.e. modal realism with overlap (henceforth: 'MRO'), has been defended by Kris McDaniel.[156] What I am going to address in this subsection is the question of whether MRO is compatible with classical theism.

First of all, let us have a look at McDaniel's MRO. McDaniel makes a distinction between two fundamental parthood relations one of which is restricted to spatio-temporal regions and the other of which is restricted to material objects. (Therefore, MRO needs to presuppose substantivalism with regard to spacetime, i.e. the view that material objects and spatio-temporal regions are two different kinds of substances which are independent of each other.) The parthood relation for spacetime is a two-place relation holding between two spatio-temporal regions while the parthood relation for material objects is a three-place relation holding between two material objects relative to a region of spacetime.[157] Given the former parthood relation, i.e. the one restricted to spacetime, McDaniel defines possible worlds as follows: *w* is a possible world if and only if (i) *w* is a region of spacetime, (ii)

[156] See McDaniel (2004).

[157] Lewis denies that the parthood relation for material objects holds relative to a region of spacetime just as he denies that objects can have their intrinsic properties relative to a possible world. These are the core assumptions made in his problem of temporal/accidental intrinsics. Thus, one of the crucial differences between Lewis's orthodox modal realism and McDaniel's MRO is that the former denies but the latter affirms that properties and relations (for material objects) are spacetime-indexed.

every part of *w* (which is also a region of spacetime) is spatio-temporally related to every other part of *w* (which, again, is a region of spacetime), and (iii) no part of *w* is spatio-temporally related to anything that is not part of *w*. In brief, possible worlds are maximally spatio-temporally connected mereological sums *of spatio-temporal regions*. Notice that McDaniel's definition of possible worlds is similar to but distinct from Lewis's one. Both Lewis and McDaniel take possible worlds to be maximally spatio-temporally connected mereological sums. However, Lewis takes them to be mereological sums of *material objects* while McDaniel takes them to be mereological sums of *spatio-temporal regions*.[158] For McDaniel, possible worlds are containers in the (substantivalist) sense that spatio-temporal regions are containers, and material objects are contained by but not identical to these containers.

Given the foregoing definition of possible worlds, we may then explain how the same objects may exist and have properties/relations in different worlds. On substantivalism, material objects and spatio-temporal regions are distinct substances, and they are related by the relation of location. For instance, my left hand is located in a spatio-temporal relation which has the same shape and size as my left hand but is distinct from it. On MRO, to exist in a world is just to be wholly located in some spatio-temporal region which is part of that world. (Recall that possible worlds are mereological sums of spatio-temporal regions.) Thus, when the proponents of MRO say that some object, say *a*, exists in two different possible worlds, say $w_1$ and $w_2$, they mean that *a* is wholly located in some part of $w_1$ and wholly located in some part of $w_2$. In this aspect, MRO is like three-dimensionalism and endurantism, on which a persisting object can be wholly located in different times.

[158] More precisely, since Lewis accepts supersubstantivalism, i.e. the view that each material object is identical to the region where it is exactly located, material objects (including concrete possible worlds), for him, are just spatio-temporal regions with qualities. On the other hand, as noted above, McDaniel's MRO requires substantivalism. Thus, the proponents of MRO will reject that the spatio-temporal regions which compose possible worlds are also material objects.

Likewise, to have a part in a world is just to have a part relative to a spatio-temporal region which is part of that world. (Recall that the parthood relation for material objects is a three-place relation.)

MRO also has its own distinctive account of property instantiation. On MRO, a material object has a property, again, relative to a spatio-temporal region. For instance, I (now) have the property of being 180 cm tall in the actual world. For the proponents of MRO, I do not have this property simpliciter. Instead, I have this property relative to a spatio-temporal region which I am wholly located. Besides, I lack this property relative to another spatio-temporal region at which I am also wholly located. For the latter spatio-temporal region is the location of some past me who, say, was only 170 cm tall.

Now let us see how classical theism may fit in with MRO. As noted above, classical theists insist that God necessarily exists. On MRO, to say that something, say *a*, necessarily exists is just to say that for every possible world *w*, there is some spatio-temporal region *r* at which *a* is wholly located. Given this account of necessary existence, it is easy to see that God's necessary existence is compatible with MRO, and there is no need to posit countless gods as the actual God's counterparts. Omnipresence is a property usually attributed to God. If God is omnipresent (in the literal sense), then he is wholly located in every spatio-temporal region.[159] Within MRO's framework, these spatio-temporal regions include not only all *actual* spatio-temporal regions, which compose the actual world, but also other non-actual spatio-temporal regions, which compose all the other possible worlds. Hence, God necessarily exists, or exists in all possible worlds, by being wholly located in every, unrestrictedly speaking, spatio-temporal region.

Now the two objections raised against Lewisian classical theistic modal realism in the previous subsections do not apply to classical theistic modal realism with overlap as

[159] In the next subsection, I will discuss a different kind of interpretation of divine omnipresence.

presented here. The first objection, i.e. the one about divine sovereignty, does not arise because it is the very same God who creates both talking donkeys in $w_1$ and non-talking donkeys in $w_2$. God creates the former by, say, divinely causing the existence of talking donkeys relative to a spatio-temporal region which is part of $w_1$ and the latter by, say, divinely causing the existence of non-talking donkeys relative to another spatio-temporal region which is part of $w_2$. Thus, the modal truth that possibly, there is a talking donkey still depends on God, who is identical to the actual one. Likewise, the second objection, i.e. the one about divine aseity, does not arise because it is the very same God rather than his counterparts who exists and is omnipotent, perfectly good, and so on in all possible worlds. Thus, the truths of divine predications about God's essential properties need not depend on anything external.

I now turn to some other objections. Vance raises an objection to classical theistic modal realism which is relevant to the present proposal.[160] The idea of Vance's objection is that if God exists in and is the creator of all possible worlds, then something in a possible world $w_1$, namely God himself, is causally related to something in a distinct possible world $w_2$, say the physical universe in $w_2$. As a result, there would be causal relations across different possible worlds. However, as there are no spatio-temporal relations across different possible worlds, there should not be causal relations across different possible worlds either.

I believe that the present proposal does not suffer from Vance's objection for two reasons. First, his objection presupposes that causation is a two-place relation. However, on MRO, causation, just like all other spacetime-indexed properties and relations, should be understood as a three-place relation holding between two events relative to a spatio-temporal region. If so, then when the proponents of MRO say that God, who exists in $w_1$, (divinely) causes the existence of the physical universe in $w_2$, they do not mean that

[160] See Vance (2016).

something in $w_1$ is causally related to something in $w_2$. Instead, what they assert is the following conjunction: (i) God is wholly located in some/every spatio-temporal region which is part of $w_1$, and (ii) one of God's mental events causes the existence of a physical universe, which is wholly located in $w_2$, relative to a spatio-temporal region which is part of $w_2$, namely $w_2$ itself. There is no cross-world causation involved here. The instance of causation in question, i.e. God's creation of the physical universe in $w_2$, is exclusively restricted to $w_2$ as it holds relative to a non-cross-world spatio-temporal region, namely $w_2$ itself.

Second, and more generally, Vance holds that there cannot be causal relations across different possible worlds by appealing to Lewis's own opinion. Lewis holds that causation cannot happen across different possible worlds.[161] According to his counterfactual analysis of causation, an event *C* causes another event *E* just in case that if *C* had not occurred, then *E* would not have occurred.[162] Recall that the counterfactual here is analysed by Lewis as follows: in the closest world(s) to the actual world in which *C* does not occur, *E* does not occur.[163] Now suppose, on the contrary, that *C*, which is an event in a possible world $w_1$, causes *E*, which is an event in a distinct possible world $w_2$. Since there are two worlds involved in the case of causation, it is unclear where we should start. Is it $w_1$? If so, then the causal claim will be interpreted as the claim that in the closest world to $w_1$ in which *C* does not occur, *E* does not occur. However, *E*'s absence in that world does not seem relevant at all. *E* is supposed to occur in a possible world distinct from the world where *C* occurs. There is no reason why *E* should be absent in the closest world in which *C* is absent.

[161] See Lewis (1986a), pp. 78-80.

[162] This is the simplest version of his counterfactual account of causation which suffers from various counterexamples like late pre-emption and double prevention. The following discussion does not turn on these counterexamples. In the present context, it is good enough to work with the simplest version. See Lewis (1973b).

[163] This is a simplified version of Lewis's semantics too. Again, I will work with this version as the following discussion does not turn on the limit assumption that there is always a closest *P*-world for every proposition *P* such that it is possible that *P* is true.

On the other hand, if it is not $w_1$ from which we should evaluate this counterfactual, will it be $w_2$? It does not seem so either. For $w_2$ itself might just be the closest world to $w_2$ in which *C* does not occur. But $w_2$ on its own does not seem to make it the case that *C* in $w_1$ is a cause of *E* in $w_2$. Therefore, Lewis concludes that causation cannot happen across different possible worlds given his counterfactual analysis of causation.[164]

Vance's objection (implicitly) appeals to Lewis's counterfactual account of causation. Nevertheless, there is no reason for a classical theist to accept this. For instance, if one takes the relation between God and material objects to be divine causation, then Vance's objection will fail because divine causation, as noted in 1.3, is a primitive relation which cannot be analysed in terms of modal concepts like counterfactuals. Thus, one may dismiss this objection by rejecting the counterfactual analysis of causation. To be sure, there may be some better reasons against cross-world causation. My point here is simply that the one endorsed by Vance, namely the Lewisian one, is not compelling to classical theists.

We have seen that many objections to classical theistic modal realism does not apply to the MRO version of classical theistic modal realism. Now I turn to a problem which I take to be the most serious one. For classical theists, God is the creator of everything (except himself.) We have seen how God may create material objects by divinely causing their existence (relative to some spatio-temporal regions.) But material objects do not exhaust everything. Recall that MRO presupposes substantivalism as a possible world is taken to be a maximally spatio-temporal region which is composed of smaller spatio-temporal regions at which material objects are located. Thus, on MRO, there are at least two kinds of substances, namely (i) material objects and (ii) spatio-temporal regions. Now the question is: how could God be the creator of the latter? God could not create them via the

[164] In fact, Lewis's discussion on this issue is more detailed than the foregoing sketch. But these details are irrelevant to Vance's objection here.

three-place relation of divine causation because its obtaining between two events must be relative to a certain spatio-temporal region, but there was no spatio-temporal region at all before God's creation.

Will the problem be solved if we take the relation between God and spacetime to be a two-place relation of divine causation? This suggestion requires one to posit two relations of divine causation which does not seem very ideologically palatable. However, even if we leave the ideological cost aside, there is another problem which cannot be avoided by this suggestion. As noted above, on MRO, to say that God exists is just to say that God is wholly located in some spatio-temporal region. No matter how God creates spacetime (via a two-place or three-place relation), his creation of spacetime requires his existence which in turn requires the existence of spacetime, without which there is nowhere for him to be located in. Therefore, before God created spacetime, he could not exist. But this is a definitely unacceptable result for classical theists.

This serious problem can be solved, I believe, if one of the assumptions made earlier is dropped. Let us explore this possibility in the next subsection.

### 4.1.4 God outside worlds

In the foregoing subsection, God is taken to be wholly located in every spatio-temporal region. Given MRO's account of existence in a world, God's existence in every possible world, i.e. his necessary existence, is explained by his omnipresence. On this account, his omnipresence is understood in a literal way. That is, God is literally present everywhere. However, this is just one way of understanding omnipresence. One may understand God's omnipresence differently. For instance, some theists take omnipresence to be a derivative property grounded in omniscience and omnipotence.[165] For them, to say that God is

[165] See, for example, Swinburne (2016), ch.7.

omnipresent is just to say that God knows things happening in every single spatio-temporal region and has power over things happening in every single spatio-temporal region. God's omnipresence is therefore grounded in his knowledge and power over every spatio-temporal region. According to this understanding of omnipresence, God is not located in any spatio-temporal region. Neither does God stand in any spatio-temporal relation, say distance or location, to anything.

If God's omnipresence is understood in this non-literal way, then we will need a different account of God's (necessary) existence as God will not be taken to be wholly located in every spatio-temporal region. Let us now have a look at what this account may be. Recall that Lewis distinguishes three different kinds of existence: (i) being wholly in a world, (ii) being partly in a world, and (iii) existing from the standpoint of a world. As noted above, pure sets are taken to be entities which exist in the third way although they are neither part of nor located in any possible world. Now if we understand God's omnipresence in a non-literal way, then it is implausible to say that he exists in either of the first two ways as he does not stand in any spatio-temporal relation to anything and is not located in any spatio-temporal region. Instead, we may take God to be existing from the standpoint of a world. As noted above, Lewis thinks that pure sets exist from the standpoint of every possible world because they belong to the least restricted domain when we evaluate the truth at that world of quantifications. Likewise, since classical theists insist that God is a necessary being, God always belongs to the least restricted domain when classical theists evaluate the truth at that world of quantifications. If so, then classical theists may hold that God exists from the standpoint of every possible world, though he is neither located in nor part of any of them.[166]

[166] Cameron suggests that a modal realist God may exist in this way. See Cameron (2009). However, one might still wonder how God can exist from the standpoint of a possible world even if there is no possible world (construed as maximally connected spacetime) at all. My reply is that just as the existence of pure sets does not require the existence of possible worlds (construed as spatio-temporal regions) as their containers,

On the foregoing account of God's (necessary) existence, he can exist even if there is no spacetime at all. Thus, God's existence does not require any spatio-temporal region. This account offers an answer to the problem raised in the end of the previous subsection, i.e. the problem of how God could exist before he created spacetime, as God is not located in any spatio-temporal region at all. He is outside all spatio-temporal regions.

Given the foregoing account, let us see how God, who is outside spacetime, may create spacetime. As noted above, the three-place relation of divine causation, which is relative to a spatio-temporal region, is a non-starter as there is no spatio-temporal region before God's creation of them. Instead, we may take the relation between God's creative willings and the existence of spatio-temporal regions to be the two-place relation of divine causation which is non-indexed to any spatio-temporal region. For instance, God's willing that a spatio-temporal region $R_1$ exists divinely causes the existence of $R_1$. God's creation of spatio-temporal regions is therefore no different from his creation of material objects. However, the creation of the mere existence of a great number of spatio-temporal regions is not enough as they will be unordered and scattered regions each of which is unrelated to any other. Thus, God also needs to impose some geometrical and topological structures on them by having willings like God's willing that $R_1$ is one meter away from $R_2$. Now given the geometrical and topological structures imposed by God, a spatio-temporal region may be related to some spatio-temporal regions, but not to some other spatio-temporal regions. If so, then we will have different maximally spatio-temporally connected mereological sums of spatio-temporal regions each of which is spatio-temporally unrelated to any other. These mereological sums are just possible worlds according to MRO. This is how God may create possible worlds. It is noteworthy that God does not have to stand in any spatio-

neither does the existence of God. Perhaps the phrase 'exist from the standpoint of a world' is somewhat misleading, as it seems to suggest that pure sets' (and God's) existence requires the existence of possible worlds in the first place. If so, then we may adopt another phrase, i.e. 'exist outside possible worlds,' to capture the idea here.

temporal relation to any of these possible worlds as divine causation is taken to be a two-place relation which involves no spatio-temporal region at all. Thus, God's creation of all these maximally spatio-temporally connected mereological sums of spatio-temporal regions will not make them collapse into one single world because he is outside all of them.

Along the same lines, God can create material objects and put them into the containers, i.e. MRO's possible worlds which are spatio-temporal regions. For instance, God may will that a material object, say *a*, exists, and is located in a spatio-temporal region, say $R_1$, which is part of a possible world, say $w_1$, and in another spatio-temporal region, say $R_2$, which is part of another possible world, say $w_2$, and so on. This creative willing of God divinely causes the existence of *a* in $w_1$, $w_2$, and so on. Moreover, God's willings may also bring about material objects' qualitative features (in different possible worlds.) For example, God's willing that *a* is *F* in $w_1$ divinely causes that *a* is *F* in $w_1$, and God's willing that *a* is *G* in $w_2$ divinely causes that *a* is *G* in $w_2$.

Given the foregoing account, it is easy to see how it is compatible with divine sovereignty and divine aseity because (i) creaturely facts in different possible worlds can metaphysically depend on the facts about the same God, who is outside all spatio-temporal regions, and (ii) the essential facts about God, including his necessary existence and his essential omnipotence, do not metaphysically depend on anything external to himself. Thus, all problems raised earlier against classical theistic modal realism (with/without overlap) will not arise either if we take God to be outside spacetime.

We have seen how a classical theistic God who is outside spacetime can be compatible with MRO. I now suggest that the idea can be generalized to Lewis's orthodox modal realism as well. As on Lewis's orthodox modal realism, let us take possible worlds to be maximally spatio-temporally connected mereological sums of material objects. Now God's creative willings can divinely cause the existence of various material objects. Again, the

mere existence of these material objects is not enough as there is no spatio-temporal relation among them. (It is noteworthy that divine causation here is a two-place relation, which is not relative to any spatio-temporal region.) Thus, after bringing about the existence of material objects, God has to impose some spatio-temporal relations on them. Given the imposition of the spatio-temporal relations, a material object may be spatio-temporally related to some material objects, but not to the others. If so, then we will have different maximally spatio-temporally connected mereological sums of material objects each of which is spatio-temporally unrelated to any other.

On this account, material objects still have to be world-bound entities; otherwise, overlapping objects may make two distinct possible worlds collapse into one. Therefore, if God wants to make a material object have a certain property, God may simply will so as there is no need to index the property to any possible world. On the other hand, as God is outside spacetime, he does not stand in any spatio-temporal relation to any material object in any possible world. God's existence from the standpoint of all possible worlds will not make them collapse into one. Moreover, the problems about divine sovereignty and divine aseity, again, will not arise. Thus, a classical theistic God who is outside spacetime is compatible with Lewis's orthodox modal realism as well.[167]

My conclusion in this section is that classical theism is compatible with modal realism given that God is outside spacetime but exists from the standpoint of every possible world. Now let us turn to a different sort of theistic account of modality: theistic combinatorialism.

[167] The two (coherent) versions of classical theistic modal realism proposed in this subsection are formulated in terms of the concept of divine causation. However, one may use the concept of grounding instead. God's creative willings may ground that some material objects or/and spatio-temporal regions are spatio-temporally related to some material objects or/and spatio-temporal regions, but not to the others. God is therefore like a novelist who writes different stories each of which is independent of any other even though all these stories/worlds are in the mind of the same novelist/God.

## 4.2 Theistic combinatorialism

Most modal metaphysicians find the thought that there exist infinitely many concrete possible worlds crazy. Other things being equal, theories of modality without such a heavy ontological cost seem to be preferable. Among those who find the ontological commitment of modal realism hard to swallow, some suggest that modality may be reduced to free recombination of worldly items, including objects and properties, in the world. To illustrate, suppose that a ball *a* has 20g mass and another ball *b* has 40g mass. By (mentally) recombining the items in the foregoing scenario, one can conceive of a scenario where *a* has 40g mass and *b* has 20g mass. The possibility that *a* has 40g mass and *b* has 20 g mass is therefore established.

Now theists may reformulate this idea in terms of the language of divine concepts as follows: For every divine concept of particular *x* and every divine concept of property *F*, it is possible that *x* is *F*. For instance, God has the concept of Socrates and the concept of plumber. According to the principle of free recombination, it is possible that Socrates is a plumber.

The foregoing procedure generates local possibilities. In order to completely reduce modality, we need to generalize this method to global possibilities, i.e. the maximal possibilities which are represented by possible worlds. So how can we do this? Some take possible worlds to be maximally consistent sets of propositions, which are ontologically more palatable than concrete possible worlds. Some of God's mental events are also representational. For instance, God has the divine thought t'hat Socrates is a plumber which represents a (non-actual) possibility of Socrates'.[168] Given God's divine thoughts, theists

[168] It is noteworthy that since divine thoughts are God's mental events, they are also concrete rather than abstract. This has an interesting consequence that on theistic combinatorialism, possible worlds, which are defined as a certain sort of divine thoughts as we will see below, are also concrete entities. To be sure, concrete possible worlds of this sort are different from modal realist concrete possible worlds as they are not spatio-temporal entities, be it spacetime or material objects, at all.

may also take possible worlds to be maximal divine thoughts where maximality is defined as follows: a divine thought *C* is maximal if and only if (i) *C* is a divine thought containing conjuncts which are also divine thoughts, (ii) for every divine thought *P*, either *P* or its negation is a conjunct of *C*. However, the problem here is that not every maximal divine thought represents a genuine possibility. For instance, a maximal divine thought which contains the divine thought that *a* is *F* and the divine thought that *a* is not *F* is just impossible. There must be some constraints on which kinds of recombination are allowed. However, it seems hard to find an adequate constraint which is purely non-modal. For instance, one might lay down a non-modal constraint as follows: if a maximal divine thought represents a possibility, then its conjuncts do not lead to any *logical* contradiction. But this is certainly inadequate. Consider a maximal divine thought which contains the divine thought that *a* is red and the divine thought that *a* is green. This maximal divine thought is presumably impossible, but the foregoing non-modal constraint does not rule it out because the divine thought that *a* is *red* and the divine thought that *a* is green does not lead to any logical contradiction. Hence, the logical restriction is not sufficient for reduction of modality.

Theistic combinatorialists need something more than the logical restriction. Now they may put the restriction on what kind of *items* are allowed to be recombined. For instance, Schaffer holds that fundamental items are free from modal constraints.[169] Only fundamental items are recombinable with each other. For Schaffer, fundamental items are just ungrounded entities. But the Schafferean proposal has its limits because perhaps not all fundamental items, e.g. structural properties, are existing entities. For instance, a nominalist may also accept free qualitative recombination without reifying properties, say universals. Thus, we need a nominalist-friendly way of understanding fundamental items.

[169] See Schaffer (2010a), p. 40.

Here, the concept of structure is helpful as we can speak of the structuralness of a concept without reifying any corresponding entity. On this proposal, we may understand fundamental items as structural concepts. Thus, theistic combinatorialists may hold that maximal divine thoughts are possible only if they are generated purely from God's *structural* concepts. In other words, theistic combinatorialists may hold that only God's structural concepts of properties are recombinable. Since the concept of red and the concept of green are not structural (because objects' being red and objects' being green are arguably grounded, at least partially, in some micro-physical facts which involve no colour property), a divine thought which contains the divine thought that *a* is red and the divine thought that *a* is green will be ruled out by the restriction regarding fundamentality/structuralness.

Following the foregoing line of thought, theistic combinatorialists can construct possible worlds in the following way. First, we list all divine thoughts which only involve structural concepts of properties and structural concepts of particulars. Let us call these 'basic divine thoughts'. For instance, the divine thought that a micro-physical particle *a* is negatively charged is a basic divine thought.[170] Suppose that God has structural concepts of properties *F*, *G*, and so on and structural concepts of particulars *a*, *b*, and so on. We can define the set of all basic divine thoughts $S = \{Px: \forall P \forall x\ P \in \boldsymbol{N} \wedge x \in \boldsymbol{F}\}$ where $\boldsymbol{N}$ is the set of (the predicates of) all structural properties, $\boldsymbol{F}$ is the set of (the name letters of) all structural particulars, and $Px$ is a propositional variable. Second, we pick out some of the divine thoughts from *S*, and then construct a conjunction *C*. To do so, let $f(x)$ be a function such that its domain *D* will be the power set of *S*, and its image *I* will be the set of conjunctions each of which has all and only members of one subset of *S* as its conjuncts. Third, for any conjunction *C* in *I*, we add the divine thought that *the conjuncts of C are all and only basic*

[170] For the sake of exposition, let us assume that both God's concept of *a* and his concept of negative charge are structural.

*divine thoughts* to *C* to make another conjunction *C**. Now we can call *C** a 'complete' divine thought because presumably, all other truths would be determined by it were *C** to be true. *C** therefore represents a way a world could have been. Hence, a possible world can be defined as a complete divine thought. The foregoing account does not use any modal notion. Thus, it is a reductive account of modality. After presenting this theistic combinatorial account of modality, now let us turn to some objections to it.

The first objection is about determinates and determinables. Many hold that the determinates of determinables are structural/fundamental properties because the physical reality cannot be described completely without them. For instance, it is not enough to describe the mass of an electron by simply saying that it has mass. To fully describe the scenario, one should also specify how much mass it has. If so, then *having mg mass* and *having ng mass*, where *m* is not equal to *n*, are both structural properties which are building blocks for free recombination. Thus, there is a complete divine thought which contains the divine thought that *a* has *m*g mass and the divine thought that *a* has *n*g mass. But surely it is impossible for anything to have both *m*g mass and *n*g mass.

Armstrong provides a solution to this problem.[171] He suggests that we take only one determinate (of a certain determinable) to be fundamental/structural and take all other determinates as complex properties constructed out of the fundamental/structural determinate. For instance, we may take $9.10938356*10^{-31}$g mass, i.e. the mass of an electron, to be fundamental/structural. Now if something has 1g mass, then it is because this thing has a great number, around $10^{30}$, of parts each of which has the fundamental/structural determinate of mass. I believe that theistic combinatorialists may reply to this objection in a similar way. They may hold that for each determinable, all but one of God's concepts of determinates of that determinable are generated from one and

[171] See Armstrong (1989), pp. 78-79.

only one structural concept of a privileged determinate, and thereby not as structural as the privileged one.[172]

The second objection is raised by Lewis (1992). He asks how combinatorialists can explain the possibility of a talking donkey. The divine thought that there is a talking donkey is composed of some non-structural concepts, namely the concept of *talking* and the concept of *donkey*. Since all conjuncts of every complete divine thought are composed of structural concepts only, the divine thought that there is a talking donkey is not a conjunct of any complete divine thought. If it is not a conjunct, theistic combinatorialists will need to provide an account of how non-basic divine thoughts, e.g. the divine thought that there is a talking donkey, can be true in possible worlds, i.e. complete divine thoughts, of which no non-basic divine thoughts are conjuncts. One way to do so is to say that a non-basic divine thought is possible if its truth is necessitated by some complete divine thought. However, this will not do since necessitation is also a modal notion. Thus, this way of explaining the possibility of non-basic divine thoughts is just circular. To be sure, this might not be a problem if one does not aim to reduce modality. However, the non-reductiveness will then be an ideological cost of combinatorialism.

The third objection is that theistic combinatorialism seems to overgenerate some possibility, e.g. that possibly, there is a positively charged electron. This is not a problem for quidditists.[173] For they can take this consequence to be a feature rather than a bug of this account: electrons may be positively or negatively charged, depending on what laws of nature are. Nevertheless, I would like to point out that even a nomic/dispositional

[172] It is noteworthy that Armstrongian strategy cannot be used to deal with intensive quantities. As for the problem of intensive quantities, theistic combinatorialists may reply that as reality's quantitative structure is imposed by God, God can decree that all quantities are extensive. There is another problem that may be replied in a similar way. Some might object that it is arbitrary to take only one of the determinates to be structural. Again, if reality's quantitative structure is imposed by God, then I see no reason why God cannot decree which one of them is structural.

[173] For instance, Lewis (2009).

essentialist can reject this objection too. For one may hold that the concept of electron is not structural. Instead, it is electron's properties, e.g. a certain unit of negative charge and a certain amount of mass, that are structural. On this sort of account, to be an electron is just to have these structural properties. Since the concept of electron is not structural, that there is a positively charged electron will not be a basic divine thought.

The fourth and final objection is similar to the third one. Theistic combinatorialism is a Humean account in spirit as it presupposes that there is no necessary connection between structural particulars and properties. However, God's essential properties seem to rule out some sort of recombination. For instance, God may refrain from arranging the structural properties and relations of the physical universe in some certain ways if these arrangements lead to some possible worlds whose overall moral values are very low. For if God is essentially perfectly good, he will not allow the world created by him to be one including a large number of horrendous and pointless evils. Some sort of combination of structural particulars and properties may be just impossible because God's essence excludes its possibility. Thus, the restriction regarding structural concepts is not adequate. Generally speaking, the problem with theistic combinatorialism here arises because God's essence may play a role in delimiting possibilities in a non-Humean way which is contrary to the spirit of combinatorialism.

I have raised four objections to theistic combinatorialism. As we have seen, although the first and third ones can be answered, the other two pose serious challenges to theistic combinatorialism. I now turn to another theistic account of modality.

## 4.3 Theistic voluntarism

Modal conventionalists say that a proposition *P* is necessary if and only if *P* is true in virtue of its meaning or the linguistic conventions that we have adopted. However, it is widely accepted that this cannot be the case. For instance, it is true that in virtue of its

meaning or our linguistic conventions, 'bachelors' means 'unmarried men'. However, this at most shows that "bachelors are unmarried" is true in virtue of the very same thing which makes "unmarried men are unmarried" true. Their truthmaker is still something non-linguistic like the essences of logical constants and the property of being a human, rather than our linguistic conventions.

Based on this observation, some propose so-called neo-conventionalism.[174] They agree that necessary truths are true in virtue of things other than meanings or conventions, and instead say that whether a truth is necessary is a matter of convention. For example, they hold that (i) mathematical truths are *true* because of some mathematical facts, e.g. facts about Platonic numbers or facts about mathematical structure, and (ii) they are *necessary* because of our stipulation. More precisely, they are necessary because we take them to be so. Likewise, purely metaphysical truths are also necessary because of our stipulation. It is their necessity rather than truth which is grounded in our stipulations.

I now suggest that theists may adopt a similar strategy. They may claim that divine thoughts are possible/necessary because God takes them to be so. They may appeal to God's stipulations and propose a theistic voluntarist account of modality. To do so, they may, following the line of thought of Sider (2011, ch.12), take (the contents of) God's stipulations as (metaphysically) modal axioms.[175] For instance, God may will that *P* is a modal axiom, *Q* is a modal axiom, and so on. Given God's stipulations regarding modal axioms, we may say that a proposition is necessary iff it is a modal theorem, i.e. a logical consequence of modal axioms; a proposition is possible iff it is logically consistent with

[174] See Cameron (2010), and Sider (2011), ch.12.

[175] We may also take truths about God's essence to be modal axioms. As noted in the previous section, God's essence is arguably a delimiter of possibilities. Thus, theistic voluntarists may say that a morally (overall) bad universe is impossible because it is logically inconsistent with some truths about God's essence, e.g. the truth that God is essentially perfectly good, which are taken to be modal axioms.

modal axioms.[176] For instance, if God stipulates that nothing has two determinates of the same determinable, then the relevant divine thought will be a modal axiom. Therefore, the divine thought that *a* has 2g mass and a has 4g mass is impossible because it is logically inconsistent with the foregoing modal axiom.

It is noteworthy that there is a difference between theistic voluntarism and neo-conventionalism. For the latter, the truth about determinate/determinable is true in virtue of some non-linguistic facts like the fundamental features of physical reality. Only its necessity is determined by convention. For the former, not only its necessity but also the truth itself are grounded in God's willings. It is God's willing, not the fundamental features of physical reality, which ultimately grounds the general fact that nothing has two determinates of the same determinable. In this aspect, theistic voluntarism is more like traditional conventionalism because it holds that God's stipulations or divine conventions about determinate/determinable are truthmakers for modal truths. On the other hand, theistic voluntarism is not as objectionable as traditional conventionalism. Although it is a crazy idea that human linguistic conventions can make everything have at most one determinate, it is not odd at all to hold that some of God's willings, i.e. his stipulations, make reality have this sort of quantitative structure.

Now theistic voluntarists also have an answer to the problem about non-structural concepts, e.g. talking donkeys, mentioned in the previous section. Let us now introduce a class of stipulations about non-structural concepts. For instance, God may will that it is a modal axiom that to be a talking donkey is just to be a sum of micro-physical particles with such and such structural properties and relations. For each non-structural concept, God has

[176] Furthermore, we have to say that the truths of these two biconditionals are stipulated by God. In other words, in addition to what necessary propositions and possible propositions there are, what necessity and possibility themselves are is also stipulated by God. Modal concepts like metaphysical necessity are therefore divinely structural on this account.

a stipulation about it which is purely written in terms of his structural concepts.[177] If we take these conditionals to be modal axioms as well, then "there is a talking donkey" will be possible because "there is a sum of micro-physical particles with such and such structural properties and relations" is logically consistent with modal axioms.

Now let us consider a problem with theistic voluntarism. Are modal truths themselves necessary? Or are they contingent? The answer here seems to depend on whether the truthmakers for modal truths necessarily exist or not.[178] For instance, if the truthmaker for a modal truth *P* could fail to exist, then it might be the case that in some world, *P* does not have a truthmaker, and therefore is false. If so, then a modal truth is merely contingently true. On the other hand, if the truthmaker for *P* cannot fail to exist, then in every world, *P* will be made true by it (as a truthmaker should necessitate any truth made true by it.) If so, then *P* will be necessarily true. Now the modal status of modal truthmakers has some bearing on theistic voluntarism. As noted in 2.1.1, God's divine concepts may or may not be brought about by his free will. If God's divine concepts are forced to exist by his own nature or essence, then the existence of all actual divine concepts is not contingent but necessary as God's essence has determined all the divine concepts. No problem occurs so far. However, if God freely thinks up his divine concepts, then there seems no reason to say that he cannot think up more divine concepts or fewer.

Suppose that God freely thinks up his divine concepts. Then in some possible world, say *w*, some of the actual divine concepts do not exist. Let us assume that the divine concept of electron does not exist in *w*. Since it does not exist in *w*, there is no divine stipulation about electrons in *w* either. (Recall that divine thoughts are generated from divine concepts.)

[177] This may be viewed as a theistic version of metaphysical semantics proposed by Sider. See Sider (2011), pp. 132-136.

[178] More precisely, the question is whether for every modal truth *P*, it is necessary that there exists some truthmaker for *P*. The truthmaker for *P* need not be the same entity in all possible worlds, as the same truth may have different truthmakers.

Therefore, "necessarily, every electron is negatively charged" will not be true in *w*, as its alleged truthmaker, namely God's stipulation about electrons, does not exist in *w*.[179] Likewise, "possibly, there are exactly *n* electrons" where *n* is the number of the actual electrons will also be false in *w* for a similar reason. In the former case, there is some proposition *P*, namely that every electron is negatively charged, such that it is the case that necessarily *P*, but it is not necessary that necessarily *P* (as in *w*, *P* is not necessarily true.) The modal axiom 4, therefore, does not hold.[180] In the latter case, there is some proposition *Q*, namely that there are exactly *n* electrons, such that it is the case that *Q*, but it is not necessary that possibly *Q* (as in *w*, *Q* is not possibly true.) The modal axiom B, therefore, does not hold.

Theistic voluntarists might reply to this challenge by insisting that God's thinking up his divine concepts is not free, and therefore cannot generate a different set of divine concepts. But this does not entirely solve the problem. Theistic voluntarists hold that it is God's stipulations which make some of his divine thoughts necessary. Thus, these necessities are grounded in God's willings. Now if God can also freely choose to stipulate (or not to stipulate), for instance, that every red thing is not green, then in some possible world *v*, God does not stipulate that every red thing is not green. If so, then in *v*, "every red thing is not green" will be neither true nor necessarily true because the truthmaker for it, namely God's stipulation about colour, will not exist in *v*. Therefore, there will be a proposition *R*, namely that every red thing is not green, such that it is the case that necessarily *R*, but it is not necessary that necessarily *R* (as in *v*, *R* is not necessarily true.) Again, the modal axiom 4 does not hold. Similarly, a case can be made to show that the modal axiom B does not hold either.

[179] Here I assume, for the sake of argument, that "every electron is negatively charged" is necessarily true in the actual world.

[180] For a relevant discussion, see Curley (1984) where he argues that Descartes's voluntarism commits Descartes to the rejection of S4.

Here we seem to encounter a dilemma. Either God's stipulations (and his thinking up divine concepts) are free or not. If they are free, then we have to give up any modal system stronger than T (as neither 4 nor B could hold). This is a heavy price for one's account of modality. On the other hand, if they are not free, we need to explain what makes them unfree. One explanation might be that God's essence constrains what sorts of concepts/stipulations he might have. If so, then the theory will assimilate into theistic essentialism which I will discuss in 4.5. In this section, I will try to show that we can stick to the modal system S5 without compromising God's freedom of speech and thought. Let us see how this can be done in the following subsections.

### 4.3.1 A Russellian reply

Before presenting my own answer to this problem, let us take a look at a similar argument raised by Adams which aims to show that the modal system S5 is incompatible with a certain view about singular propositions, i.e. Russellianism.[181] Russellians believe that singular propositions, i.e. propositions about an individual(s), depend on the individuals which they are about in such a way that if the individuals were not to exist, then the propositions about them would not exist.[182] For instance, the proposition that Socrates does not exist is a singular proposition about Socrates. On Russellianism, in a Socrates-free world, i.e. a world in which Socrates does not exist, this singular proposition about Socrates does not exist either. Here comes the problem. In a Socrates-free world, the proposition that Socrates does not exist itself does not exist. Since it does not exist in that world, the proposition that Socrates does not exist cannot have any modal properties like

[181] See Adams (1981).
[182] In postmodal terms, the existence of a singular proposition is (partly) grounded in the existence of the object which it is about.

the property of being possibly true in that world.[183] If so, then we again have a case that a proposition *S*, i.e. the singular proposition that Socrates does not exist, such that it is possible that *S*, but it is not necessary that possibly *S* (because in some possible world, namely the Socrates-free world, it is not the case that possibly *S*.)[184] Therefore, the modal system S5 does not hold.

To answer this problem, Mitchell-Yellin and Nelson (2016) suggest that in order to evaluate the modal status of a certain proposition, Russellians do not have to check whether that proposition has such-and-such properties in this or that world. Instead, they may just pick out propositions which actually exist, and then see whether they correctly *represent* some possible worlds. For instance, suppose that one wants to know whether it is necessary that *S*, namely the proposition that Socrates does not exist, is possibly true. All one has to do is to pick out the proposition in question, namely that the proposition that *S* is possibly true, and then see if this proposition correctly represents every possible world. One proposition can correctly represent a world even if it does not exist in that world. For instance, *S* correctly represents every Socrates-free world as it just says that Socrates does not exist, which is true at every Socrates-free world. If this is the case, then the proposition that *S* is possibly true can correctly represent worlds even if it does not exist in any Socrates-free world: It correctly represents a world *w* if and only if there exists some world *v* accessible from *w*, and Socrates does not exist in *v*.[185] Therefore, Russellians do not need to give up S5 as the truth values of singular propositions with iterated modality do not rely

[183] Adams assumes serious actualism, i.e. the thesis that only existing things have properties. Let us grant this assumption for the sake of exposition.

[184] In fact, Plantinga (1983) gives an argument, showing that on Russellianism, the singular proposition that Socrates does not exist is not even possibly true in the actual world. Adams (1981) replies to Plantinga's argument by drawing the distinction between true-in and true-at. Williamson (2002) rejects this distinction, but appeals to his well-known necessitism, i.e. the view that necessarily, everything necessarily exists, to block Plantinga's argument.

[185] Mitchell-Yellin and Nelson believes that their reply is a generalized application of Adams's distinction between true-in and true-at. Therefore, one can also make a use of the notion of true-at to understand what 'correctly represent' means.

on whether they exist or fail to exist in some other worlds. In a nutshell, a proposition's having any modal status, e.g. *S's being possibly true*, depends on what properties, e.g. the property of *correctly representing some world*, it has in the *actual* world rather than on what properties it *might* have in some non-actual world(s).

Now it is tempting to think that theistic voluntarists can do the same trick as well. One might hold that although God's divine concepts could fail to exist (just like Socrates could fail to exist), the modal status of modal claims about these divine concepts does not vary from world to world for the reason sketched in the previous paragraph. However, the reply, I will argue, does not work for theistic voluntarism. Recall that on theistic voluntarism, God not only freely thinks up different divine concepts but also freely *stipulates* different modal axioms. Let us consider the following example. Suppose that God actually stipulates that no spiders are mammal. Thus, it is necessary that no spiders are mammal. However, if God is free to stipulate different modal truths, then there is some possible world in which God stipulates that all spiders are mammal. This leads to a problem which cannot be answered by Mitchell-Yellin and Nelson's reply. Here, we need to be cautious as the problem is not that the proposition that no spiders are mammal might have some different modal status. As noted above, one could say that the modal status of a proposition is grounded in how the actual world is, i.e. what God actually stipulates. Therefore, there is nothing wrong in saying that the proposition that all spiders are mammal is not a necessary truth even in the (non-actual) possible worlds where God stipulates so.

The real problem with this reply arises from the theistic voluntarists' claim that God's stipulations are not only necessity-makers but also *truthmakers* for some truths. For instance, God's stipulation that all spiders are mammal is also a truthmaker for "all spiders are mammal." Therefore, in possible worlds where God stipulates that all spiders are mammal, the proposition that all spiders are mammal is true as it is made true by God's

stipulation. Suppose that in some of these possible worlds, God creates some spiders. In these possible worlds, all spiders created by God must be mammal; otherwise, the proposition that all spiders are mammal will be false in these worlds. Thus, in some possible worlds, some spiders are mammal. However, as God actually stipulates that no spiders are mammal, it is impossible that some spiders are mammal as the proposition that some spiders are mammal is logically contradictory to the modal axioms stipulated by God. The Russellian reply does not solve the problem for theistic voluntarism. Theistic voluntarists need a different solution.

### 4.3.2 Divine modality

My preferred answer to this problem is just to bite the bullet, i.e. to accept that it is *metaphysically* impossible for God to think or stipulate otherwise. For example, since God actually stipulates that no spiders are mammal, it is metaphysically impossible that God stipulates that all spiders are mammal. Instead, in all possible worlds, he stipulates that no spiders are mammal as he does in the actual world. It is easy to see why this view is compatible with the modal system S5. For no modal truths can change its truth value from world to world (as their truthmakers, i.e. God's stipulations, remain the same in all possible worlds.)

However, the foregoing line of thought seems to deny God's freedom with respect to his divine concepts and stipulations as it is metaphysically impossible for him to think or stipulate otherwise. We tend to think that the possibility of doing otherwise is at least a necessary condition for an agent to be free with regard to a certain action. If it is not possible for God to think or stipulate otherwise, then God seems unfree with regard to modal matters.

In reply, I suggest that God's freedom should be modelled in terms of something other than metaphysical possibility. We may draw a distinction between *divine* modality and metaphysical modality. To be divinely necessary is just to be a logical consequence of

truths which are made true by *facts about God's essence*. Likewise, to be divinely possible is just to be logically consistent with truths which are made true by facts about God's essence. (Metaphysical necessity/possibility is still understood in the way explicated earlier.) Given the distinction, we can say that God is free with regard to *A* or not *A* iff it is divinely possible that God does *A* and it is divinely possible that God does not do *A*. Now as our working assumption is that God's essence or nature does not determine what concepts/stipulations God has, God's thinking up divine concepts and his laying down stipulations are counted as free in the proposed sense.[186]

The following analogy may help us better understand this distinction. James Naismith was the inventor of basketball. In 1892, he wrote the 13 rules of basketball. Probably, he not only invented basketball but also played it himself. As an inventor, he was definitely able to change some of the 13 rules or even coin some new ones. For instance, he might have added ten more rules if he had found some fatal defects in the 13 rules after playing few games. Nevertheless, when he entered a basketball court, he still needed to follow the 13 rules. As a player, he did not have the power to change the rules. Therefore, Naismith was able to change the rules in one sense but unable to do so in another sense. Now God's relation to his divine concepts and stipulations is somehow like Naismith's relation to the rules of basketball. As an inventor of these divine concepts and stipulations, God is surely able to think or stipulate otherwise. In other words, when we say that God is free to think or stipulate otherwise, we take him to be an inventor of modal truths. His essence does not forbid him to do so. On the other hand, God is also a player who enters the playground created by him, namely his whole creation, to play with his creatures. If so, then modal

[186] I also assume that logical truths are determined by God's essence so that God is not free with regard to whether a proposition is divinely necessary/possible or not.

truths, like the rules of basketball, will be something which no one, including God, can change (when we talk about metaphysical modality.)

Besides the foregoing analogy, the concept of absolute/divine structure may also help us understand the distinction between divine modality and metaphysical modality. One may say that the concept of divine necessity is absolutely structural as whether a proposition is divinely necessary/possible is a matter of God's essence rather than his free will. In other words, the divinely modal structure of reality is not imposed by God's free will. On the other hand, as metaphysically modal truths, except those which are divinely necessary/possible, are made true by God's free stipulations, the metaphysically modal structure of reality, as noted above, is imposed by God's free will. Thus, the concept of metaphysical necessity is divinely structural rather than absolutely structural.

In this section, I have presented a theistic account of modality on which (metaphysically) modal truths about creatures depend on, or are grounded in, God's free will. In the next two sections, I will turn to two accounts in which God's free will play no role. Let us start with the former one: theistic power theory of modality.

## 4.4 Theistic power theory

In the past decade, some metaphysicians have proposed a different kind of account of modality which dispenses with the theoretical posit of possible worlds, be it concrete or abstract. They suggest that claims about possibility should be understood in terms of claims about objects' powers roughly as follows: a proposition *P* is possibly true if and only if *P* is true, or there was or is something having a power to bring about the truth of *P*, or a power to bring about something having a power to bring about the truth of *P*, and so on.[187] Likewise, a proposition *P* is necessarily true if and only if *P* is true, and there was or is

[187] See, for example, Pruss (2011), Vetter (2015), and Yates (2015).

nothing having a power to bring about the falsity of *P*, there was or is nothing having a power to bring about something having a power to bring about the falsity of *P*, and so on.

The foregoing two biconditionals (or schemata of biconditionals) merely state the necessary and sufficient conditions for modal claims. Again, in order to articulate the idea of power theory of modality, some postmodal concept is needed. For, first, *being necessary and sufficient for*, which is a symmetric relation, cannot capture the putative asymmetric dependence relation between modality and powers. Second, it is possible, at least in principle, for one to accept these biconditionals without endorsing power theory of modality. For instance, a modal realist may hold that both powers and possibilities are grounded in the Humean mosaic of the plurality of concrete worlds in a way that wherever there is a power to be *F*, there is a corresponding possibility that something is *F*, and vice versa. Thus, the acceptance of these biconditionals does not automatically lead one to power theory of modality.

Vetter suggests that the relation between powers and modality is grounding.[188] Following her suggestion, the power theory of modality can be understood as the following view: the fact that a fact *P* is possible is grounded in *P*, or the fact that something has (or had) a power to bring about *P*, or the fact that something has (or had) a power to bring about the fact that something has a power to bring about *P*, and so on. And the fact that a fact *P* is necessary is grounded in the fact that nothing has (or had) a power to bring about the non-occurrence of *P*, the fact that nothing has (or had) a power to bring about the fact that something has a power to bring about the non-occurrence of *P*, and so on.

After introducing the general idea of power theory of modality, we may turn to theistic power theory of modality. On theistic power theory, all modal facts are grounded in facts involving God's powers. If *P* is possible, then it is because either *P* is an obtaining fact, or

[188] See Vetter (2015), pp.26-8.

God has the power to bring about, either by divine causation or by grounding, *F*, or God has the power to bring about the fact that something has the power to bring about *F*, etc.[189] For instance, theistic power theorists would say that it is possible that there are talking donkeys because God has the power to bring about the existence of talking donkeys.

Theistic power theory has a noteworthy advantage over its naturalistic relatives. It seems that our actual universe is merely contingent. Furthermore, it seems possible that there is another universe in which no actual thing exists. In other words, everything in that universe is a merely possible object (from the perspective of the actual world). However, naturalistic power theories cannot explain this possibility if our actual universe, as the current cosmological evidence suggests, has a beginning, i.e. the Big Bang. For a thing can be prevented from ever coming into existence only by things existing before it. However, by definition, there was nothing (natural) existing before the beginning of the universe. Thus, if naturalism is true, then nothing has (or had) the power to bring about the non-existence of the beginning of the universe. According to power theory of modality, the beginning of the universe, including the existence of some elementary particles and the states of these particles, is therefore necessary.[190] This is usually taken to be a cost of the naturalistic power theory of modality as it renders a highly intuitive possibility impossible.[191] On the other hand, theistic power theory is free from this problem because theists hold that there exists some supernatural entity, i.e. God, in addition to the natural universe. Thus, they may

[189] One might wonder whether theistic power theorists of modality really need any of these disjuncts besides the first one, i.e. that God has the power to bring about *P*, if God is omnipotent. Why not, instead of creating something which has a power to bring about *P*, directly bring about *P* on his own? Here, the other disjuncts are indispensable if we want to allow creatures to have libertarian free will. For instance, if I have libertarian free will, then it is possible that I freely have hamburger as my lunch, though God cannot directly bring about, either by divine causation or by grounding, my freely having hamburger as my lunch because God's divinely causing or grounding it will deprive me of my libertarian freedom, which requires the alternative possibilities.
[190] This objection is raised by Cameron (2008), p. 273.
[191] That said, I (2020) argue that this unwelcome result can be, somehow surprisingly, viewed by naturalists as a reply to the cosmological arguments for the existence of God.

hold that God has the power to bring about the non-occurrence of the Big Bang. If so, then the beginning of the actual universe will become contingent rather than necessary.

Although I agree that theistic power theory of modality is better than its naturalistic relative due to the foregoing problem, it seems to me that it still faces a serious problem. The problem lies in its account of necessity. Recall that on power theory of modality, the fact that *P* is necessary is grounded in the fact that nothing has (or had) the power to bring about the non-occurrence of *P*, the fact that nothing has (or had) the power to bring about the fact that something has a power to bring about the non-occurrence of *P*, and so on. If we put God into the picture, the account becomes the following one: the fact that *P* is necessary is grounded in the fact that God has no power to bring about the non-occurrence of *P*, the fact that God has no power to bring about the fact that something has a power to bring about the non-occurrence of *P*, and so on. One should note that the necessity of *P* is not grounded in God's possession of powers, but in his *lack* of powers. In other words, necessities are grounded in negative facts about God. However, one may think that no negative fact can be fundamental as every negative fact need be grounded or divinely caused.[192] If so, then these negative facts about God, which are claimed to be the grounds of necessary truths, should be grounded in some positive facts.

One might reply to the foregoing problem by adopting one suggestion which I raised in 3.5.1, i.e. that negative facts about God are grounded in the totality willing of God, namely his willing that he wills nothing else. But this reply will not do as it will make whether God lacks a certain power a matter of God's will. However, whether God has or lacks a power does not seem up to his will (as his powers are determined by his omnipotence, which is presumably a matter about his nature or essence.)

[192] As noted in 3.5.1, the reluctance to accept fundamental negative facts is the underlying reason behind the problem of negative truths for truthmaking maximalism.

Another possible reply is to take negative facts about God to be exceptional cases which do not need further grounds. The cost of this reply is that one needs to accept a great number of structural concepts of *negative* properties (of God). That is, besides the concepts of positive properties of God, e.g. omnipotence and omniscience, one also has to take the concept of not being able to bring about the non-occurrence of 1+1=2, the concept of not being able to bring about the falsity of the law of excluded middle, and so on to be structural as these concepts of negative properties figure in some fundamental facts, i.e. the negative facts about God which are grounds of necessary truths. Obviously, it will be a great ideological cost if we take this huge amount of negative properties to be structural.

Admittedly, neither of the foregoing replies are utterly unacceptable. However, their costs are also doubtlessly great, and thereby makes theistic power theory of modality less attractive. In the next section, I will discuss another theistic account of modality which is also a broadly Aristotelian account but does not fall prey to the problem raised here. On that account, all modal facts are grounded in positive facts, or more precisely *one and only one* positive fact, about God.

## 4.5 Theistic essentialist theory

There are two sorts of Aristotelian accounts of modality proposed by contemporary metaphysicians. We have seen one of them, namely power theory of modality, in the previous section. In this section, we turn to the other one: essentialist theory of modality. Fine is perhaps the most famous pioneer of this position.[193] He writes: "The metaphysically necessary truths can then be identified with the propositions which are true in virtue of the nature of all objects whatever."[194] Lowe raises a similar idea as follows: "a metaphysically necessary truth is a truth which is either an *essential* truth or else a truth that obtains *in*

[193] See Fine (1994) and (1995).
[194] Fine (1994), p.9.

*virtue of* the essences of two or more distinct things."[195] For him, an essential truth or fact is just a truth or fact concerning the essence of some entity.[196] Like Vetter, Lowe also puts the idea in terms of grounding. He writes: "On this account, all metaphysical necessity… is *grounded* in essence."[197] We now may reformulate the foregoing idea as follows: the fact that *P* is necessary is grounded in the essential fact that for some *xx*, *xx* have their essence(s) $E_{xx}$ (where $E_{xx}$ are such that *P* is grounded in the fact that *xx* have $E_{xx}$.) For instance, it is necessary that Socrates is a member of {Socrates} because the fact's being necessary is grounded in the fact that something, i.e. {Socrates}, has an essence $E_{\{Socrates\}}$ such that the fact that Socrates is a member of {Socrates} is grounded in the fact that {Socrates} has $E_{\{Socrates\}}$.

On theistic essentialist theory of modality, the only essence which matters in accounting necessities is God's essence. For theistic essentialist theorists of modality, the fact that *P* is necessary is simply grounded in the fact that God has his essence. For instance, the fact that God is necessarily omnipotent is grounded in the fact that God has his essence. Another example is about creatures. It is necessary that all dogs are mammal because this necessary truth about dogs is grounded in the fact that God has his essence. As one may notice, on this account, every necessary truth, including ones about God and ones about creatures, is grounded in the same fact, i.e. the fact that God has his essence. God's having his essence is the ground of all necessary truths.

Now one might raise an objection to theistic essentialist theory regarding the grounds of possible truths which is similar to the objection to theistic power theory regarding the grounds of necessary truths. The objection is this. If metaphysical possibilities, like metaphysical necessities, are also grounded in essential facts, then their grounds in question

[195] Lowe (2012), p. 939.
[196] See Lowe (2012), p. 938.
[197] Lowe (2012), p. 939.

should be negative facts. For instance, the possibility of talking donkeys is grounded in the fact that *nothing*, including God, has any essence *E* such that its having *E* grounds the non-existence of talking donkeys. This essential fact here is, again, a negative fact about God. If one wants to avoid fundamental negative facts, these essential facts which are claimed to be grounds for metaphysical possibilities should have further grounds as well. However, as noted above, God's totality willing, i.e. his willing that he wills nothing else, is not the suitable candidate because God's essence is presumably not up to his will.

I now propose a different sort of reply to this objection. Recall that theistic essentialist theory of modality holds that every modal fact is grounded in essential facts about God. It does not follow that metaphysical possibilities are grounded in negative facts about God's essence. Perhaps they are grounded in positive facts about God's essence. As noted in 3.6.3, it is a plausible claim that the fact that God has his essence grounds the fact that God is omnipotent. Now consider another plausible claim: all God's powers are grounded in his omnipotence, or in other words, the fact that God is omnipotent grounds the fact that God has the power to bring about the existence of talking donkeys, the fact that God has the power to bring about a different universe, and so on. If theistic essentialist theorists of modality accept the foregoing claims, then they may, borrowing the idea of theistic power theory of modality, hold that all metaphysical possibilities are grounded in God's having his powers, which in turn are grounded in God's being omnipotent, which in turn are grounded in God's having his essence. Thus, all possibilities are ultimately grounded in the fact that God has his essence. According to this reply, the fact that God has his essence is not only the ground of all metaphysical necessities but also the ground of all metaphysical possibilities. All modal facts are therefore grounded in one and only one positive fact about God, i.e. that God has his essence. There is no need to posit any fundamental negative fact to ground metaphysical possibilities.

The foregoing account, on which the fact that God has his essence is the ground of all modal facts, is an extremely simple theory of modality. Leftow attributes this simple account to Aquinas.[198] In the rest of this section, I will discuss an argument against this simple account raised by Leftow.[199] Leftow's argument attempts to show that the foregoing account leads to the unacceptable result that God's existence depends on facts about creatures. I do not think that Leftow's argument is a successful one. Before I explain why I do not think so, let us have a look at his argument.

Consider the following truth: Water is $H_2O$. Let us call this truth, following Leftow's usage, '(WATER).' For the sake of exposition, let us also assume that (WATER) is a necessary truth. On the theistic essentialist theory of modality, the fact that God has his essence grounds the truth of (WATER) as (WATER) is a necessary truth. Leftow thinks that this generates some consequences for God's essence and existence. He writes: "On this, if something is divine, deity's being as it is makes true all necessary truth about water… then if (WATER) is untrue, there are consequences for deity, and this has consequences for God's existence."[200] Leftow's argument against the theistic essentialist theory of modality can then be put as follows:[201]

(1) Necessarily, if (WATER) is untrue, then nothing has God's essence.

(2) Necessarily, if nothing has God's essence, then God does not exist.

(3) Necessarily, if (WATER) is untrue, then God does not exist.

As the ground of the truth of (WATER), on the simple theistic essentialist account, is simply the fact that God has his essence, and grounded facts are necessitated by their

[198] See Leftow (2012), pp. 139-40.
[199] See Leftow (2012), ch.8.
[200] Leftow (2012), p. 210. Leftow uses 'deity' to refer to what makes God God, that is, God's essence.
[201] Leftow's own argument is actually quite lengthy and complex. Fortunately, we need not discuss it here because it targets various theistic essentialist accounts, including simple and complex ones. As our present concern is only the simple theistic essentialist account, this simplified version of his argument suffices for the purpose.

grounds, it is necessary that if (WATER) is untrue, then nothing can have God's essence.[202] For if something has God's essence, then, according to essentialist theory of modality, the fact that it has God's essence will ground and thereby necessitate the truth of (WATER). Therefore, the simple account leads one to accept (1). On the other hand, (2) is a plausible assumption which follows from the claim that necessarily, if God exists, then God has his essence. And finally, (3) logically follows from (1) and (2).

I agree that there are good reasons for theistic essentialists to accept (1), (2), and (3). However, I reject the conclusion which Leftow draws from this argument, namely that God's existence depends on a creaturely truth about water, i.e. (WATER). In order to arrive at the unacceptable consequence that God's existence depends on some creaturely truths, an additional assumption is needed. The assumption may be formulated as follows:

> **DEPENDENCE$_L$** For every proposition *P* and every proposition *Q*, if ~*P* strictly entails ~*Q*, then *Q* depends on *P*.

Given **DEPENDENCE$_L$**, the alleged conclusion that God's existence depends on creaturely truths follows from (3). However, I believe that there are good reasons to reject the additional assumption. In the following paragraphs, I will provide two counterexamples to **DEPENDENCE$_L$**.

First, let us consider what kind of entailment relation holds between truths and their truthmakers. Suppose, for the sake of argument, that the truthmaker for the truth that an electron *e* has mass *m*, call this truth *T*, is the Armstrongian state of affairs *e's having m*, call this state of affairs *F*. As noted in 3.3, in order to block the vicious regress, a truth must be necessitated by its truthmaker. Thus, on our supposition, it is necessary that if *F* exists, then *T* is true. Then, by contraposition, it is necessary that if *T* is untrue, then *F* does not

[202] Again, I allow the cases of non-necessitating grounding because I take these exceptional cases to be emergence. Since God's essence's grounding modal facts does not seems to be a matter of emergence, I hold that the fact that God has his essence not only grounds but also necessitates all modal facts.

exist. Now according to **DEPENDENCE$_L$**, the existence of the truthmaker, i.e. the Armstrongian state of affairs *F*, depends on the truth of *T*. However, it is the aim of the truthmaking theory to capture the idea that truths depend on beings, i.e. their truthmakers. **DEPENDENCE$_L$** just generates the opposite result, i.e. that beings, namely truthmakers, depend on truths. Thus, if **DEPENDENCE$_L$**, which is indispensable to Leftow's argument, is granted, then one will need to accept not only that (on the simple theistic essentialist account of modality) God's existence depends on the truth of (WATER) but also that every truthmaker depends on the truth(s) which it makes true. This surely is overkill.

Second, consider a disjunctive truth *P*V*Q*. Suppose that *P* is true but *Q* is false. Now it is a matter of logic that if a disjunction is not true, then none of its disjuncts will be true. Thus, it is necessary that if *P*V*Q* is not true, then *P* will not be true. According to **DEPENDENCE$_L$**, *P* depends on the disjunctive truth *P*V*Q*. However, this is surely wrong as it is (true) disjuncts which explain disjunctions rather than the other way around. We therefore have the second counterexample to **DEPENDENCE$_L$**.

As the foregoing counterexamples show, modal entailment may not go hand in hand with metaphysical dependence. Therefore, there is no good reason to accept **DEPENDENCE$_L$**. If so, then the theistic essentialists can admit that (3), i.e. that necessarily, if (WATER) is untrue, then God does not exist, is a consequence of the simple account, but insist that the acceptance of (3) does not lead to the unwelcome consequence that God's existence depends on creaturely truths. In fact, on the theistic essentialist account of modality, it is more appropriate to say that since the truth of (WATER) is grounded in God's having his essence, it is the truth of (WATER) which depends on God's existence (which is identical to God's essence according to the doctrine of divine simplicity) rather than the other way around. I therefore conclude that Leftow's objection to the theistic

essentialist account of modality is not successful as it is based on an untenable assumption, namely **DEPENDENCE$_L$**.

I have presented five theistic accounts of modality in this chapter. After the foregoing lengthy discussion, I come to the conclusion that three of them are relatively attractive accounts. They are (a) theistic modal realism on which God is outside spacetime and worlds, (b) theistic voluntarism on which God's free stipulations are grounds of modal facts (about creatures), and (c) theistic essentialist theory of modality on which the fact that God has his essence is the sole ground of all modal facts. In the final section, I will briefly compare these three accounts in terms of their costs and benefits.

## 4.6 Comparison

Let us start with theistic modal realism. Its main advantage is an ideological one. On theistic modal realism, modal claims can be understood purely in terms of non-modal ones. Modal concepts are therefore no part of one's ideological commitment. As we will see below, on the other two accounts, modality or modalities are primitive. Thus, the reduction of modality is an edge of theistic modal realism over its rivals.

The ideological advantage is gained at the cost of ontological profligacy as theistic modal realists need to posit lots of (non-actual) concrete entities to serve as truthmakers for modal truths. However, as Lewis notes, in order to evaluate how great the cost is, one has to distinguish between two sorts of ontological parsimony: (i) qualitative parsimony, and (ii) quantitative parsimony.[203] A theory $T_1$ is more qualitatively parsimonious than another theory $T_2$ if the former posits fewer *kinds* of entities than the latter, while $T_1$ is more quantitatively parsimonious than $T_2$ if the former posits fewer *instances* of the kinds than the latter. Clearly, theistic modal realism is much less quantitatively parsimonious than its

[203] See Lewis (1973a), p. 87.

rivals as it posits infinitely many concrete possible worlds. However, theistic modal realism is still a fairly qualitatively parsimonious theory as it posits only concrete particulars.[204] Thus, theistic modal realists may, like Lewis, insist that qualitative parsimony is good in a philosophical hypothesis, but recognize no presumption whatever in favour of quantitative parsimony. If so, the ontological disadvantage is just a minor cost of theistic modal realism.

However, there is another cost of theistic modal realism which is a rather theological one. On modal realism, all sorts of modality are reduced. These include not only metaphysical possibilities but also the other modal features of objects, e.g. counterfactuals and powers. Therefore, God's powers to create this concrete particular, to create that concrete particular, and so on are also reduced. Suppose that God's powers to create such and such are grounded in the existence of the relevant possible worlds, which are defined non-modally on theistic modal realism. Then some of God's powers will be reduced to non-modal facts.[205] This might seem a benefit if one has a strong Humean inclination for reduction of modality. However, this reduction leads to the consequence that God's having the power to create a world *w* depends on God's willing to create *w*. For God's having the power to create *w* depends on the existence of *w*, and the existence of *w* depends on God's willing to create *w*. By transitivity, God's having the power to create *w* depends on God's willing to create *w*. I suspect that most classical theists do not have the Humean inclination. Instead, they may view the explanatory direction quite opposite. They may insist that it is the existence of *w* which depends on God's power to create *w*. For instance, they may hold that (i) the fact that God has the power to create *w* divinely causes God's willing to create *w*, and (ii) God's willing to create *w* divinely causes the existence of *w*. Thus, one may

[204] God is also a concrete particular as he has causal power over all possible worlds.

[205] One might wonder whether this way of reduction will violate God's aseity as God's powers depend on creaturely facts, i.e. possible worlds, rather than facts about himself. The answer is no because these creaturely facts also depend on facts about God as the former are either divinely caused by or grounded in God's willings. Thus, God's powers still ultimately depend on facts about himself.

object that theistic modal realism reduces too much as one may like to retain some sort of divine modality, e.g. God's powers. If so, then the putatively ideological advantage of theistic modal realism will turn out to be a theological drawback of it.

I now turn to theistic voluntarism. Its distinctive feature is that a voluntarist God is free to decide the (metaphysically) modal structure of reality. It is not the same case on the other two accounts. I take God's freedom to stipulate otherwise to be a virtue, though I am not sure how much of a virtue it is. Also, theistic voluntarism has a moderate ontology which includes God's mental events, which are also concrete particulars, as truthmakers for modal truths. No non-actual concreta is posited.

On the other hand, the major cost of theistic voluntarism is an ideological one. As noted in 4.3.2, both divine modality and metaphysical modality are structural concepts which cannot be eliminated from the ideological commitment of theistic voluntarism. In contrast, theistic essentialist theory of modality, as we will see below, has fewer primitive modal concepts than theistic voluntarism.

Finally, let us have a look at the costs and benefits of theistic essentialist theory of modality. Its first advantage is that it is ontologically the most parsimonious theory among these three accounts as it only posits one fundamental fact, i.e. the fact that God has his essence, as the truthmaker for every modal truth. The second advantage is that in contrast to the other two rivals, it has a moderate ideology. On the one hand, it, unlike theistic modal realism, does not reduce too much as it claims that God's having powers are grounded in God's having his essence, and essential facts are still modal facts. On the other hand, it has fewer kinds of modal concepts than theistic voluntarism because on it, all modal truths are taken to be cases of divine modality, and there is not a different structural concept of metaphysical modality which may apply to them.

The only disadvantage of theistic essentialist theory of modality seems to be that an essentialist God lacks the freedom to decide the modal structure of reality. However, I tend to take this disadvantage to be a minor one, as classical theists have already accepted the thesis that God's essence is not up to his free will. Now if all modal facts are grounded in the fact that God has his essence, then all of them will be not up to God's free will because their ground, i.e. the fact that God has his essence, is not up to his free will. Hence, God's lack of freedom to choose a different modal structure of reality is nothing more than a consequence of the classical theists' commitment that God's essence is not up to his free will.

I do not think that there is any knock-down argument which can be made here. All we can do is to list the costs and benefits. Recall that the primary aim of this chapter is to articulate various coherent theistic views on modality in terms of postmodal concepts. Therefore, I would like to leave the first-order question of which one is the best open here.

# 5 God and Time

In this chapter, I will revisit various questions regarding God's relation to time in light of postmodal concepts. The focus of Section 5.1 will be the timeless conception of God. We will have a look at the question about the relation between a timeless God and (irreducibly) tensed facts/truths. Sections 5.2 and 5.3 will be about God's divine foreknowledge and divine providence respectively. I will show that postmodal construals of two well-known positions in the literature, i.e. Ockhamism and Molinism, are better than the previous proposals, as postmodal concepts help us better understand the arguments for and against these positions.

## 5.1 Timeless God and tensed facts

Let us suppose that God exists outside spacetime in the way suggested in 4.1.4. That is, God exists from the standpoint of the actual world but is not located in any spacetime of the actual world. Now consider a common objection to the timeless conception of God: that a timeless being, which exists outside spacetime, cannot stand in the causal relation to events located in spacetime.[206] We have seen in 4.1.3 that divine causation, as a two-place relation, may hold between facts about God which obtain outside spacetime, say the fact that God (timelessly) wills that the electron *e* exists at *t*, and creaturely facts which obtain in spacetime, say the fact that *e* exists at *t*.[207] Thus, the objection does not apply to the timeless conception of God discussed here.[208]

[206] For this sort of objection(s), see Mullins (2016), ch.5.

[207] Alternatively, one may take the relation between God's creative willings and creaturely facts to be grounding, which is also a two-place relation. On this construal, a timeless God can still be the creator of the world without occupying any spatiotemporal region.

[208] In fact, this objection can also be answered without appealing to divine causation. For suppose that causation can be given a Lewisian analysis, i.e. that causal dependence is just, roughly speaking, counterfactual dependence (or chains of counterfactual dependence.) Then consider the following counterfactual conditional: if God were not to will that *e* exists at *t*, then *e* would not exist at *t*. This counterfactual can be true even if God is timeless. Therefore, the objection will not work if the relation

Another objection, which I believe is a more powerful one, to the timeless conception of God has to do with a timeless God's (lack of) knowledge of *tensed* truths. It seems *prima facie* plausible that an omniscient being knows all truths. Suppose that is the case. Then the proponents of a timeless God will face the following question: how does God know tensed truths, for instance, the truth that it is raining *now*? To have a better understanding of this question, let us take a look at the distinction between tensed truths and tenseless truths. A tensed truth is a true proposition in which verbal tenses play an important role. For instance, the proposition that there *were* dinosaurs is a tensed proposition. Consider a similar proposition: that there *are* dinosaurs. Although these two propositions contain exactly the same quantifier, verb, and predicate, they are still different as one is true, but the other is false. Their difference can be explained by their difference with respect to verbal tenses, i.e. 'are' and 'were.' One crucial feature of tensed propositions is that their truth values *may* vary from time to time.[209] For instance, the (tensed) proposition that there are dinosaurs was true when dinosaurs existed. However, the same proposition has become false since the extinction of dinosaurs. On the other hand, a tenseless proposition is one in which verbal tenses do not matter at all. For instance, the proposition that Peter *has* a hamburger on 23/05/2021 is a tenseless one.[210] As the proposition specifies when the very event occurs, its truth value has nothing to do with tenses. Its truth value, once settled, will not vary from time to time.[211]

between facts about God and creaturely facts is Lewisian causation. (That said, as noted in 1.1, the Lewisian proposal still falls prey to the counterexamples of hyperintensional cases.)

[209] I use 'may' rather than 'must' because there might be exceptions, e.g. a tensed proposition about an essential predication which cannot fail to be true, and thereby always has the same truth value.

[210] Here the verb 'has' should not be taken to be a simple present form. Instead, it should be understood as a tenseless form.

[211] I added 'once settled' here because one might hold that this proposition did not have any truth value before 23/05/2021. One might insist that only after 23/05/2021, the fact that Peter's having a hamburger (or not) has come into being. Before then, the tenseless proposition was neither true nor false because there was neither truthmaker nor falsity-maker for this proposition.

Given this distinction, tenseless truths do not seem to constitute any problem to a timeless God's omniscience. If God exists outside spacetime, then he can know (timelessly) that Peter has a hamburger on 23/05/2021, that Peter has a sandwich on 24/09/2025, and so on. However, things are quite different when it comes to tensed truths. Suppose, on the contrary, that a timeless God can know tensed truths. Now consider the tensed truth that it is raining now. Since change is impossible for things which do not exist in time, there can be no change in a timeless God. Therefore, if a timeless God knows that it is raining now, it is impossible for him not to know it (timelessly). Moreover, as knowledge is factive, God's knowledge that it is raining now implies that it is raining now. As God's (timeless) knowledge cannot change, the truth implied by God's knowledge, namely that it is raining now, cannot change either. That is, the (tensed) proposition that it is raining now is always true. However, it is surely not always the case that it is raining now. (For instance, the tensed proposition that it is raining now was not true two days ago because it did not rain two days ago.) Thus, we have a reductio of the supposition that a timeless God can know tensed truths.[212]

There are two replies which the proponents of a timeless God may give. First, they might hold that there are no irreducible tensed propositions. For instance, they may say that the sentence token "It is raining now" does not refer to a tensed proposition, but to a tenseless proposition that it is raining at *t* where *t* is the time when the token is produced. According to this response, when we say that God knows that it is raining now, what we mean is that God knows a tenseless proposition, i.e. that it is raining at *t* (where 'is' is taken to be a tenseless copula rather than a present-tense one, and *t* is the time when we utter the sentence.) Whether this response succeeds or fails depends on whether the alleged

[212] This objection was first raised by Wolterstorff in his (1975).

reducibility or translatability of the tensed propositions in question is available. My own view is that it is not, as some important information is obviously lost after the translation.[213]

The second response is to reject the prima facie plausible claim that an omniscient being knows all sorts of truths. The underlying reason of this response is that there are already clear cases in which some truths are such that even an omniscient being cannot know. For instance, consider a de se proposition that I am a student. Arguably, this de se proposition cannot be reduced or translated to the proposition that Tien-Chun is a student.[214] Therefore, if an omniscient being knows, unrestrictedly speaking, every truth, then God, as an omniscient being, should also know the irreducibly de se proposition that I am a student. Suppose further that my brother (who is not a student) has the following true de se belief: that I am not a student. By the same token, God knows it too. However, this will lead to the consequence that God knows both that he is a student and that he is not a student, which is surely absurd.

It is easy to see how to avoid the problem. One can, and should, insist that any omniscient being only needs to know de se propositions which are true of themselves, e.g. the de se proposition that I am omniscient. There is no need to hold that they should also know de se propositions which are true of other beings but not true of themselves, e.g. the proposition that I am not omniscient (which is a de se proposition true of me but false of every omniscient being.)[215] Any cogent account of omniscience should respect this. Otherwise, omniscience will be a necessarily uninstantiated property.

[213] See, for example, Prior (1959). The tenseless proposition that the exam ends at *t* does not seem to fully capture what finalists mean when they shout "the exam is over!"
[214] See Lewis (1979) and Perry (1979).
[215] However, omniscient beings can and should know that Tien-Chun knows the de se proposition that I am not omniscient. It is just the case that omniscient beings cannot know the de se proposition itself. It does not follow that they do not know who knows it.

Omniscient beings cannot know de se propositions not true of themselves because these de se contents are, in some sense, private to their owners.[216] Only their owners can use the first-person pronoun, i.e. 'I', involved in these de se propositions to refer to themselves, of which the de se propositions are true. Once a different subject acquires the same de se content, the first-person pronoun will refer to a different thing so that the de se proposition may not be true of the thing in question. The first-person aspect of de re propositions therefore provides the explanation of omniscient beings' lack of knowledge of some de se truths.

Similarly, the proponents of the timeless God may hold that knowledge of tensed truths is, in some sense, private to temporal beings. To know a tensed proposition, one must be in time because its content presupposes a temporal perspective. Thus, a timeless God's lack of knowledge of tenses truths is just like omniscient beings' lack of knowledge of (some) de se truths. Omniscient beings lack knowledge of some de se propositions because these de se propositions are not true of them. Likewise, the timeless God lacks knowledge of tensed propositions because tensed propositions, whose contents presuppose temporal perspectives, are not accessible to the timeless God.

This response, in my opinion, is more plausible that the previous one. However, there is another problem which this response does not answer. Let us now turn to this problem. We will see how postmodal concepts come into play.

### 5.1.1 Timeless God and temporal structure

Let us firstly distinguish two kinds of temporal facts, namely facts involving temporal properties or relations: (i) A-theoretic facts, and (ii) B-theoretic facts. A-theoretic facts are facts involving A properties, i.e. presentness, pastness, and futurity. For instance, the fact

[216] In fact, this holds not only for omniscient beings. No being, omniscient or not, can know de se propositions not true of themselves since, as noted above, knowledge is factive.

that dinosaurs do not exist presently is an A-theoretic fact because it involves the property of presentness. On the other hand, B-theoretic facts are facts involving B relations, i.e. being-earlier-than, being-simultaneous-with, and being-later-than.[217] For example, the fact that the publication of *On the Plurality of Worlds* is earlier than the publication of *Writing the Book of the World* is a B-theoretic fact.[218]

Now Recall that **Sovereignty** requires that all creaturely facts metaphysically depend on facts about God. B-theoretic facts do not seem to constitute any problem to the combination of **Sovereignty** and the timeless conception of God as the timeless God's willings can divinely cause them to occur. For instance, God may will that the publication of *On the Plurality of Worlds* is earlier than the publication of *Writing the Book of the World*. On the other hand, A-theoretic facts seem to pose some problem to such a combination. Suppose that it is an A-theoretic fact that humans exist presently. How can this fact metaphysically depend on facts about the timeless God? It seems obvious that it cannot be divinely caused by God's willing that humans exist presently (where the content of God's willing here is the tensed, as opposed to tenseless, proposition that humans exist presently.) As God's timeless willings cannot change, the A-theoretic fact which is necessitated by God's willing, namely the fact that human exist presently, cannot change either. In other words, the fact that humans exist presently will be a fact which can never fail to obtain. Therefore, we run into a problem about the timeless God's relation to A-theoretic facts which is similar to the problem about the timeless God's relation to tensed truths.

A quick solution to this problem is to deny that there are any A-theoretic facts at all. It is noteworthy that the proponents of this solution need not hold that there are no tensed

[217] I also take events relativized to a certain date to be B-theoretic facts. For instance, the fact that Peter has a hamburger on 28/05/2021 is a B-theoretic fact as its obtaining is tenseless and has nothing to do with tense.
[218] Again, the 'is' here is taken to be a tenseless copula.

truths. For instance, they may accept that it is true that there are humans now. However, they can still insist that the truthmakers for tensed truths are not A-theoretic facts, but B-theoretic facts. For instance, the tensed truth that there are humans now may be made true by the B-theoretic fact that the existence of humans is simultaneously with a certain utterance token or the like.[219] In other words, this solution is just to embrace the ontology of B theory of time. If there are only B-theoretic facts, then there will be no problem about the timeless God's relation to A-theoretic facts, as there are no such things as A-theoretic facts.

The proponents of A theory of time, i.e. those taking tensed facts seriously, cannot adopt the foregoing solution though. For they accept the existence of A-theoretic facts, and insist that they, rather than their B-theoretic proxies, are truthmakers for tensed truths. Therefore, the proponents of the A theory of time have to find another solution to the foregoing problem: an account on which A-theoretic facts metaphysically depend on but are not necessitated by facts about God.

Now the phrase 'metaphysically depend on but are not necessitated by' may remind one of the definition of emergence proposed in 2.4.2: an emergent fact is a fact which is (i) metaphysically dependent on some other fact(s), and (ii) fundamental in the sense of completeness. Since it is fundamental in the sense of completeness, i.e. be among the complete facts without which some truths will be left unexplained, it is not necessitated by, if any, the fact(s) which it metaphysically depends on. Therefore, if we take A-theoretic facts to be emergent facts, then the problem may be solved.

Let us consider the following account of the timeless God's relation to temporal facts, both A-theoretic and B-theoretic ones. First, there is a timeless God whose willings have various tenseless propositions, but no tensed propositions, as their contents. For instance,

[219] See, for example, Mellor (1981), ch.2.

the timeless God may have a willing that Peter has a hamburger at *t*. Then God's (timeless) willings divinely cause or ground the B-theoretic facts such as the fact that Peter has a hamburger at *t*. Given the existence of these B-theoretic facts, let us also suppose that A-theoretic facts are grounded in B-theoretic facts. Now although A-theoretic facts are grounded in B-theoretic facts, the latter do not necessitate the former.[220] For A-theoretic facts may obtain or fail to obtain from time to time, while B-theoretic facts always remain the same. According to the definition of emergence proposed in 2.4.2, we may say that A-theoretic facts, e.g. there are no dinosaurs presently, *emerge* from the static manifold consisted of B-theoretic facts. On this account, A-theoretic facts not only exist but also serve as (ineliminable) truthmakers for tensed truths. That is, they are fundamental facts in the sense of completeness, though not in the sense of independence. Therefore, the passage of time is a genuine phenomenon on this account as there can be different sets of A-theoretic facts obtaining in different times.

The account proposed here can be viewed as a theistic version of moving spotlight theories.[221] For according to this account, (i) the past, the present, and the future which are constituted by B-theoretic, tenseless facts equally exist, and (ii) there are also A-theoretic facts about which spatio-temporal regions count as the present. In each time, a different set of A-theoretic facts emerges from the same set of B-theoretic facts.[222]

[220] Some might wonder how grounded entities, e.g. A-theoretic facts, can be grounded in their grounds, e.g. B-theoretic facts, without being necessitated by them. Due to the limit of space, I cannot argue against grounding necessitarianism, i.e. the thesis that grounds must necessitate facts grounded by them, in this thesis. However, for those interested in the debate between grounding necessitarianism and grounding contingentism, see Skiles (2015), Leuenberger (2020), and Bader (2021).

[221] For a typical exposition of the moving spotlight theory, see Broad (1923).

[222] Moreover, this theory is different from presentism as presentists reject all B-theoretic facts involving past and future times. Also, it is different from growing block theories because growing block theorists reject all B-theoretic facts beyond the B-theoretic facts which count as the present and the past and believe that some new B-theoretic facts can come into existence through the passage of time, whereas moving spotlight theorists hold that all B-theoretic facts are already there, and none of them can come into or out of existence through the passage of time.

Now we have seen two accounts of time which are compatible with the combination of the timeless conception of God and **Sovereignty**. One is the view that (i) there are only B-theoretic facts, and (ii) there are no A-theoretic facts. The other is the moving spotlight theory on which there are both B-theoretic and A-theoretic facts. As we have seen in the foregoing discussion, on each view, all God has to do when he creates the world is nothing more than bring about B-theoretic facts. In other words, on these two views, there is no difference in what kinds of facts God brings about. If so, then how can God make the world a purely B-theoretic one or a moving-spotlight-theoretic one? The question can be easily answered if the concept of structure is in our metaphysical toolkit. As Sider suggests, for a world to be purely B-theoretic is for its temporal structure to consist of joint-carving B-relational predicates, e.g. 'be earlier than' and 'be simultaneous with', but not tense operators, e.g. 'presently' and 'it was the case.'[223] On the other hand, for a world to be purely A-theoretic, e.g. presentist, is for its temporal structure to consist only of tense operators. Likewise, a moving-spotlight-theoretic world may be understood as a world whose temporal structure consists of both B-relational predicates and A-theoretic tense operators. Given the foregoing characterizations, God can determine the temporal structure of the world by making (i) only his B-theoretic concepts structural or (ii) both his B-theoretic concepts and A-theoretic concepts structural. If the former, then the world will be a purely B-theoretic world. If the latter, then the world will be a moving-spotlight-theoretic world.[224]

Is it possible that the timeless God creates a purely A-theoretic world, i.e. a presentist world, given **Sovereignty**? I cannot see how God can do so. On the theistic version of the moving spotlight theory sketched above, A-theoretic facts metaphysically depend on facts

[223] See Sider (2011), ch.11.
[224] To be sure, if reality's temporal structure is absolute rather than divine, i.e. not dependent on God's will, then God will not be able to determine the temporal structure of reality.

about God because they are grounded in (though not necessitated by) B-theoretic facts which are divinely caused by or grounded in facts about God. However, if the world is purely A-theoretic and consist of no B-theoretic facts, then (i) A-theoretic facts will be directly brought about by facts about God (via either grounding or divine causation), and (ii) no B-theoretic facts will be brought about by any facts about God. Now the contents of God's creative willings are either tensed or tenseless. If the former, then the problem about the timeless God's relation to A-theoretic facts, as noted above, will recur. If the latter, then God will bring about some B-theoretic facts, e.g. the fact that the World War II is earlier than the COVID-19 pandemic, whose existence is incompatible with presentism. Either way, God cannot create a purely A-theoretic world. Therefore, the following three theses are jointly incompatible: (i) presentism, (ii) **Sovereignty**, and (iii) the timeless conception of God. Also, an argument against the compatibility between (i) the growing block theory, (ii) **Sovereignty**, and (iii) the timeless conception of God can be made by a similar reasoning. Thus, I contend that for those who insist on both **Sovereignty** and the timeless conception of God but still take tensed facts seriously, the best hope is the moving spotlight theory.

In this subsection, we have seen how we may understand the timeless God's relation to time in terms of postmodal concepts. I now turn to the temporal conception of God.

## 5.2 Temporal God and divine foreknowledge

In this section, let us focus on the temporal conception of God, according to which God exists in time, and therefore several facts about him, e.g. his beliefs and willings, occur in time as well. Given the temporal conception of God, let us have a look at a notorious

argument for the incompatibility between God's omniscience and creaturely libertarian freedom, which can be stated as follows:[225]

(P1) God believed at $t_1$ that Peter will have a hamburger at $t_2$ (where $t_1$ is a past time, and $t_2$ a future time.) [Assumption.]

(P2) For every proposition *P*, and every time *t*, necessarily, if God believes *P* at *t*, then *P*. [From omniscience.]

(P3) For every proposition *P*, if *P* reports a fact about the past, then no one (now) has the ability to render *P* false. [From the fixity of the past.]

(P4) For every proposition *P*, every propositions *Q*, and every agent *x*, if (i) necessarily, if *P*, then *Q*, (ii) *P* is true, and (iii) *x* does not have the ability to render *P* false, then *x* does not have the ability to render *Q* false. [From the transfer of powerlessness principle.][226]

(P5) No one has the ability to render (P1) false. [From (P1) and (P3).]

(P6) Necessarily, if (P1), then Peter will have a hamburger at $t_2$. [From (P2).]

(P7) No one has the ability to render <Peter will have a hamburger at $t_2$> false. [From (P1), (P4), (P5), and (P6).]

(P8) Peter does not has the ability to render <Peter will have a hamburger at $t_2$> false. [From (P7).]

Given the libertarian assumption that *x* is free with regard to *A* only if *x* has the ability to do *A* and the ability to not do *A*, it then follows that Peter is not free with regard to having a hamburger at $t_2$. As Peter's having a hamburger at $t_2$ is an arbitrary example, the foregoing argument can be generalized to all creaturely actions so that the incompatibilist conclusion is established: God's foreknowledge entails that no creatures have libertarian free will.

[225] This argument was raised by Pike (1965).

[226] (P4) is a logical consequence which follows from van Inwagen's (1983) rules **Alpha** and **Beta** in his famous 'consequence argument' for incompatibilism.

This argument has four assumptions, i.e. (P1)-(P4). There are several ways to reject this argument. For instance, the so-called open theists reject (P1).[227] They believe that the propositions about creatures' free actions in the future, e.g. <Peter will have a hamburger at $t_2$>, are not true on the ground that the future is open in the sense that these propositions' truth values are not yet settled. Since <Peter will have a hamburger at $t_2$> was not true at $t_1$ (according to open theism), and the omniscient God did not, does not, and will not believe in anything untrue, open theists contend that the omniscient God did not believe at $t_1$ that Peter will have a hamburger at $t_2$. Or put differently, open theists accept that God's foreknowledge is incompatible with creaturely libertarian freedom.[228] Nevertheless, due to their insistence on the latter, open theists draw the conclusion that God does not have foreknowledge about creaturely libertarian freedom.

There is another attempt to block this argument which focuses on (P3). Ockhamists hold that (P3) does not apply to all truths about the past. That is, it is not the case that all past facts are such that no one can now make them not occur. Specifically, they contend that (P3) does not apply to propositions like (P1).[229] Ockhamists hold that the incompatibilist argument fails because (P5), which allegedly follows from (P1) and (P3), is false. To understand the idea of Ockhamism, it is helpful to introduce the distinction between 'hard' facts and 'soft' facts about the past. Consider the following three truths about the past:

(S1) The World War II ended in 1945, 76 years prior to my writing this sentence.

(S2) David Beckham played his last match in the Premier League in 2003.

(S3) Emma correctly predicted yesterday that Peter will have a hamburger today.

Although (S1)-(S3) are about the past, they do not report the so-called 'hard' facts about the past because people *do* have abilities to render them false even after the occurrence

[227] Notable proponents of open theism include Hasker (1989) and Swinburne (2016).
[228] Therefore, open theists are also incompatibilists with regard to God's foreknowledge and creatures' libertarian free actions.
[229] See, for example, Adams (1967), Freddoso (1983), and Plantinga (1986).

times in question, i.e. after 1945, 2003, and yesterday. For instance, if I had not written the very sentence in question, then (S1) would not have been true. Therefore, the fact reported by (S1) would not have occurred. If so, then I have the ability to make a fact about the past not occur. Likewise, if Beckham were to join Manchester United again and play a match today, then (S2) would be false too. For the last match which he played in the Premier League would then be in 2021 rather than 2003. Finally, if Peter were to eat a sandwich rather than a hamburger today, then (S3) would be false as Emma's prediction would not be correct. In light of these examples, we may say that not all facts about the past are such that no one can make them not occur. The foregoing facts are usually called 'soft' facts about the past as they are facts about the past which people have the abilities to make not occur. On the other hand, the 'hard' facts about the past are fixed in the sense that no one has the ability to make them not occur.[230] For instance, consider the following three truths about the past:

(H1) The World War II ended in 1945.

(H2) David Beckham played a match in the Premier League in 2003.

(H3) Emma predicted yesterday that Peter will have a hamburger today.

Everyone will agree that none of them are such that if someone were to do something after the occurrence times in question, then they would be false. The facts reported by (H1)-(H3) are therefore fixed, hard facts about the past.

Given the distinction between soft facts and hard facts about the past, it is easy to see that (P3) is not true of all facts about the past. Instead, it is only true of hard facts about the past. This then leads to a revised principle of the fixity of the past as follows:

[230] Compare: we say that some facts about the future, e.g. my eating an egg tomorrow, are *open*, rather than fixed, in the sense that I have the abilities to make them occur or not occur (given that I am free with regard to what I am going to eat tomorrow.) Soft facts about the past are also 'open' in this sense.

(P3*) For every proposition *P*, if *P* reports a *hard* fact about the past, then no one has the ability to render *P* false.

Now the Ockhamist response to the incompatibilist argument is just to say that God's past beliefs about creaturely libertarian free actions (in the future) are *not* hard facts about the past. Therefore, they hold that (P3*) does not apply to truths which report God's past beliefs about creaturely libertarian free actions because what these truths, e.g. (P1), report are *soft* facts about the past. They claim that if Peter were not to have a hamburger at $t_2$, then God would not believe at $t_1$ that Peter will have a hamburger at $t_2$. For them, Peter has the ability to make God not have a certain past belief.

Given the distinction between hard facts and soft facts about the past, the question of whether Peter (and other libertarian creatures) have the abilities to make God not have certain past beliefs turns out to be the crux of the debate between Ockhamists and incompatibilists. To answer this question, Ockhamists have attempted to provide various characterizations of hard/soft facts so that God's past beliefs about creaturely libertarian free actions in the future will fall under the category of soft facts. On the other hand, incompatibilists have tried to argue that God's past beliefs about creaturely libertarian free actions are hard facts about the past. In this following subsection, I will have a look at a common approach to define hard/soft facts, which I call the 'modal' approach. I will argue that Ockhamists should give up this approach as there are several problems with the modal definitions of hard/soft facts. Then I will turn to another way to define hard/soft facts in which the (postmodal) notion(s) of *dependence* plays an important role.

### 5.2.1 Modal definitions of hard/soft facts

Marilyn McCord Adams (1967) was the first contemporary philosopher who proposed a clear definition of hard/soft facts. Her definition goes as follows: A fact *F* is a soft fact about the past relative to a time *t* iff it (metaphysically) entails the occurrence or the non-

occurrence of some fact about the future (relative to *t*.) Consider (S1)-(S3) again. According to Adams's definition, what (S1) reports is classified as a soft fact relative to 1945 because it entails the occurrence of my writing a certain sentence in 2021. Likewise, (S2) entails the non-occurrence of Beckham's playing any match in the Premier League after 2003. And (S3) entails the occurrence of Peter's having a hamburger today. Most importantly, Adams's modal analysis also delivers the welcome result that God's past beliefs about creaturely free actions in the future are soft facts about the past because God's past beliefs entail, as required by his omniscience, the occurrence of some future actions, e.g. creaturely free actions in the future.

On the other hand, (H1)-(H3) are classified as reporting hard facts about the past according to Adams's definition. For none of them entails the occurrence or the non-occurrence of some facts about the future. (H1) is compatible with the possibility that the whole world ends, i.e. goes out of existence, in 1945, and therefore nothing happens later. If so, then (H1) does not entail the occurrence of any fact about the future. Also, (H1) does not seem to entail the non-occurrence of any fact about the future.[231] Thus, what (H1) reports is a hard fact about the past. Similarly, (H2) and (H3) also report hard facts about the past according to Adams's definition.

There are other definitions of hard facts which also draw on modal concepts. For instance, Freddoso (1983) defines the notion of hard facts as follows: A fact *F* is a hard fact at *t* iff (i) possibly, *F* occurs at the first moment of time, (ii) possibly, *F* occurs at an intermediate moment of time, and (iii) possibly, *F* occurs at the last moment of time. Also, Hasker (1988), though an opponent of Ockhamism himself, provides a modal definition of hard facts according to which a fact *F* is hard at *t* iff the occurrence of *F* at *t* is compatible

[231] See, however, Fischer (1983) for an argument to the effect that (H1) does entail the non-occurrence of some fact about the future.

with the world's ending at *t*. Again, the concepts of possibility and compatibility involved here are modal ones.

I now turn to problems with these modal definitions of hard/soft facts. Let us firstly have a look at some counterexamples to them. Consider the fact that God willed or decreed at $t_1$ that Peter will have a hamburger at $t_2$.[232] Since God is omnipotent, it is impossible that God willed so but it turns out otherwise. That is, this fact entails Peter's having a hamburger at $t_2$. It also follows that it could not occur at the last moment of time. Likewise, it is not compatible with the world's ending at $t_1$. Therefore, according to the aforementioned modal definitions of hard/soft facts, God's past decrees or willings about future actions are classified as soft rather than hard facts. However, recall that one crucial feature of soft facts is that they are such that people have the abilities to make them not occur. But it seems quite implausible that people have this sort of abilities to change God's past decrees. God's past decrees should be classified as hard rather than soft facts about the past.

There is another counterexample which is about creatures rather than God. Suppose that there exist a certain kind of basic physical particles which are essentially indestructible: they are mereologically simple, numerically conserved, without any antimatter counterpart, and so on. Since they are essentially indestructible, their existence entails their persistence forever. Hence, every fact which entails the existence of this sort of particles, e.g. the fact that a particle of this kind moves toward a certain direction at a certain time *t*, will entail the occurrence of some future fact, e.g. the existence of the particle at some time later than *t*. Likewise, they are incompatible with the world's ending at the times when they occur. Thus, every fact which entails the existence of this particle will be a soft fact according to modal definitions. However, it seems that some facts about the particle itself, e.g. the fact that it has a certain mass at *t*, are undeniably hard facts about the past.

[232] This counterexample is given by Todd (2013).

These counterexamples reveal some deeper problems with modal definitions. First, they show that the success of modal definitions relies on some controversial modal hypotheses, e.g. that necessarily, nothing is essentially indestructible. However, it is unclear why one's definition of hard/soft facts should rely on these hypotheses at all. Second, if modal concepts are what Ockhamists utilize to characterize the distinction between hard facts and soft facts, then it seems hard to classify God's past beliefs (about creaturely future actions) and God's past decrees (about creaturely future actions) as different kinds of facts about the past. For both of them (i) entail some future actions, (ii) are incompatible with the world's ending immediately, and so on. All modal profiles which God's past beliefs have are equally had by God's past decrees. Thus, we could not differentiate these two sorts of facts about the past merely in terms of modal concepts. Third and most importantly, as Zagzebski points out, even if these modal Ockhamists successfully come up with a definition which (i) avoids these counterexamples, and (ii) classifies God's past beliefs about future actions as soft facts, they still need to provide some independent reason *why* their proposed definition really captures the putative distinction between hard and soft facts.[233] Recall Lewis's famous satire: one won't have mighty biceps just by being called 'Armstrong.'[234] Likewise, a fact about the past will not become soft just by being classified so according to some artificial, gerrymandered definition of hard/soft facts.

It seems to me that these problems are genuine ones. Thus, I take this to be another instance of the uselessness of modal concepts in some issues of theistic metaphysics. Recently, in light of the foregoing counterexamples and problems, an increasing number of participants in the debate have been determined to utilize some postmodal concepts, e.g.

[233] See Zagzebski (1991), pp. 74-6.
[234] See Lewis (1983a), p. 366.

grounding and causation, to provide their preferred characterizations of the distinction between hard and soft facts.[235] Let us now turn to this new attempt.

### 5.2.2 Hard/soft facts and dependence

To have an idea of the new approach, let us firstly consider a case of the asymmetry between the past and the future. Let us ask why, given the openness of the future and the fixity of the past, we have the abilities over our future, but not past, actions? It seems fair to say that we have controls over our future actions because they are caused (or will be caused) by our present decisions. In other words, the future causally depends on the present. On the other hand, the past does not causally depend on the present.[236] The direction of causal dependence provides an explanation of the asymmetry between the past and the future.

Now consider the soft facts reported by (S1)-(S3). Why are they soft facts? One may generalize the foregoing line of thought and say: they are soft facts about the past because they somehow depend on someone's current or future actions. It is noteworthy that the dependence relation here may not be a causal one. For instance, the fact that the World War II ended in 1945, 76 years prior to my writing this sentence is likely not caused by my current action. Instead, it is better to understand the fact as being *grounded* in (i) a hard fact about the past, i.e. the ending of the World War II in 1945, and (ii) a fact about the present, i.e. my writing a certain sentence. Since the fact is partially grounded in a fact about the present, it metaphysically depends on my current action. This explains why I have the ability to render (S1) false.

[235] See Merricks (2009) and (2011a), Todd (2013), Swenson (2016), Law (2021), and Wasserman (Forthcoming).
[236] Unless there are cases of backward causation. However, if there were cases of backward causation, then it would be fair to say that the past is also somehow under our controls.

The foregoing discussion suggests that the distinction between hard facts and soft facts are better understood in terms of various dependence relations like causation and grounding.[237] This leads to the following postmodal definition of soft facts: A fact *F* is a soft fact relative to a past time *t* iff *F* stands in some dependence relation to some fact *F'* about the future (relative to *t*).[238] It is noteworthy that this postmodal definition does not face the problem raised by Zagzebski. For on this definition, the softness of facts about the past is explained by their dependence on future actions within one's power. The classification is not gerrymandered but well-motivated.

Given the postmodal definition of hard/soft facts, the debate between Ockhamists and their opponents boils down to the question of whether God's past beliefs about creaturely future free actions depend on facts about creatures' free actions in the future, or on any future facts which are within creatures' control. If yes, then Ockhamists win as God's past beliefs are soft. If no, then the incompatibilist argument stands as God's past beliefs are hard.

Patrick Todd, who also endorses a dependence-based account of hard/soft facts, contends that God's past beliefs are as hard as any human being's past beliefs because both of them do not depend on what will happen in the future. He writes: "… one does not count as believing that something will happen even in part in virtue of [its] occurrence… not even God could count as believing that you will perform an action partially in virtue of your performing it."[239] He also cites Pike's own words to support his contention: "…it is implausible to suppose that one and the same state of mind of the person who is God at $t_1$ would count as different beliefs given different behavior of Jones at $t_2$."[240] The underlying

[237] The dependence relations may also include constitution, realization, and set-membership, namely what Wilson (2014) calls 'small-g' grounding relations or what Bennett (2017) calls 'building' relations.
[238] This definition is inspired by Swenson's (2016) and Law's (2021) accounts of the fixity of the independent past.
[239] Todd (2013), p. 841.
[240] Pike (1993), p. 135. Fischer also raises the same concern in his (1983), pp. 76-7

thought here is that God's beliefs are fully determined by God's intrinsic state of mind. Given the same intrinsic mental state, God's beliefs will be the same. Furthermore, since God's past intrinsic mental state itself, which arguably does not depend on creatures' future free actions, is a hard fact about the past, God's past beliefs, which are determined by this hard fact, should be hard facts too.

Let us call God's intrinsic mental state at $t_1$ '*M*' and suppose that *M* counts as God's belief (at $t_1$) that Peter will have a hamburger at $t_2$. Then the foregoing informal idea of the incompatibilist argument may be formulated as follows:

(P9) <*M* existed at $t_1$> reports a hard fact about the past. [Assumption.]

(P10) Necessarily, if *M* existed at $t_1$, then God believed at $t_1$ that Peter will have a hamburger at $t_2$.[241] [Assumption.]

(P11) Necessarily, if *M* existed at $t_1$, then Peter will have a hamburger at $t_2$. [From (P6) and (P10).]

(P12) No one has the ability to render <*M* existed at $t_1$> false. [From (P3*) and (P9).]

(P13) No one has the ability to render <Peter will have a hamburger at $t_2$> false. [From (P4), (P9), (P11), and (P12).]

(P14) Peter does not has the ability to render <Peter will have a hamburger at $t_2$> false. [From (P13).]

Now there are at least two ways for Ockhamists to reject the foregoing argument. One may argue against (P9). To do so, one has to argue that God's past intrinsic mental state is also a soft fact. Instead, one may reject (P10). That is, one may contend that God's past intrinsic mental state does not determine his past beliefs. There have been attempts to argue against (P9) which can be found in the literature.[242] On the other hand, as far as I know, no

[241] The consequent of (P10) is just (P1).
[242] See, for example, Craig (1989) and Swenson (2016), pp. 668-70.

Ockhamist has tried to argue against (P10). As I find the idea that God's past intrinsic mental state is a soft fact somewhat implausible, I will take the second route, i.e. to argue against (P10). Specifically, I will argue that Ockhamists can reject (P10) on the ground that the *contents* of God's past beliefs (about creatures' free actions in the future) are *not* determined by God's past intrinsic mental state. To understand the foregoing idea better, it may be helpful to consider the relation between contents and mental states in the following creaturely case.

Suppose that Peter, who lives on Earth, has a duplicate, call him Peter*, who lives on the so-called Twin Earth whose surface is full of XYZ rather than $H_2O$ molecules. Since Peter and Peter* are duplicates, they are intrinsically the same. However, if content externalism is true, then the contents of their beliefs may be different.[243] For the contents of Peter's beliefs may involve $H_2O$ but not XYZ while the contents of Peter*'s beliefs may involve XYZ but not $H_2O$. Hence, given content externalism, their intrinsic brain states do not fully determine the contents of their beliefs.

Now I suggest that Ockhamists may hold that the contents of God's past beliefs about creatures' free actions in the future are also determined externally. Specifically, they may hold that these contents do not wholly depend on God's past intrinsic mental state, but (at least) partially on creatures' free actions in the future. If so, then the argument from the hardness of God's past intrinsic mental state can be rejected as (P10) is not true. As noted above, the merit of this suggestion is that Ockhamists need not deny the quite plausible claim that God's past intrinsic mental state is a hard fact, which no one has the ability to make not occur. What they need to do is to hold that whether this hard fact counts as some certain belief is a matter about the determination of its content which may depend on some future fact(s).

[243] See Kripke (1972) and Putnam (1975).

A crucial question about the foregoing suggestion is this. If the contents of God's past beliefs about creatures' free actions in the future are not fully determined by his past intrinsic mental state, then an account of how external factors enter the picture should be given. In the case of Peter and his Twin Earth duplicate, it is widely agreed, despite some minor differences among content externalists, that the relevant external factors, i.e. $H_2O$ and XYZ, can determine the contents of Peter's and Peter*'s beliefs because there are some causal chains linking these external factors to their brain states. As their brain states, which are intrinsically the same, have different causal histories, their beliefs also have different contents. Likewise, if Ockhamists are to appeal to content externalism, they also need to tell a story of how the contents of God's past beliefs about creatures' free actions in the future are determined externally. Let us see how this can be done in the following subsections.

### 5.2.3 Causal account

Borrowing the idea presented in the foregoing discussion about $H_2O$ and XYZ, Ockhamists may propose a causal account on which God's past beliefs about creaturely future free actions *causally* depend on creaturely future free actions themselves. On this account, these contents are determined externally because God's past intrinsic mental state is (backwardly) caused by creatures' future free actions. Consider (P1) again. Ockhamists may say that God's past belief which his intrinsic mental state at $t_1$, i.e. *M*, counts as has the content that Peter will have a hamburger at $t_2$ because *M* is caused by Peter's having a hamburger at $t_2$. On this causal account, although *M* itself is a hard fact, God's having the past belief (with the content that Peter will have a hamburger at $t_2$) which *M* counts as is still a soft fact as this belief depends for its content on some future fact, i.e. Peter's having a hamburger at $t_2$. Just as Peter's brain state may count as different beliefs due to the

difference in the external environments, God's intrinsic mental state may count as different beliefs due to the difference in creatures' future free actions.

One may notice that the foregoing causal account relies on the possibility of backward causation. That is true. However, I would like to point out that this kind of backward causation involved in this account is relatively benign in comparison with others. To see why, let consider Peter's having a hamburger at $t_2$ again. Suppose that Peter also has the ability, or is free, to have fish and chips at $t_2$. Given the foregoing causal account, it then follows that if Peter were to have fish and chips rather than a hamburger at $t_2$, then God's past intrinsic mental state at $t_1$ would be backwardly caused by Peter's having fish and chips at $t_2$. However, as the intrinsic mental state of God at $t_1$ is taken to be a hard fact, the same hard fact *M*, instead of any other fact, would still obtain if Peter were to do otherwise at $t_2$. In other words, Peter's being able to do otherwise at $t_2$ does not imply that he can (now) make any change to the fixed past. The hard fact about the past in question, namely *M*, remains the same no matter what Peter is going to eat at $t_2$. Instead, Peter's doing otherwise at $t_2$ only implies that Peter brings about a change to the cause of a hard fact about the past (where the cause itself is a future fact.) And the latter sort of change is quite unproblematic as the backward cause in question lies in the open future, which is within Peter' causal control.

As we have seen, although the causal account relies on the possibility of backward causation, it does not require that free creatures have the abilities to change or make a difference to hard facts about the past. It may be helpful if we compare this causal account with Wasserman's (forthcoming) causal account of God's past beliefs' dependence on future facts. On Wasserman's account, creatures' free actions in the future also backwardly cause past facts about God. However, he accepts that free creatures in the future have

choices about hard facts about the past, including God's past intrinsic mental state.[244] That is, Wasserman's account delivers the result that free creatures have the abilities to make a difference to hard facts about the past. On the other hand, it is quite different for the causal account proposed in this subsection. Free creatures, on this account, have no choices about hard facts about the past, e.g. God's past intrinsic mental state, as they, so to speak, are 'over and done with.' Thus, it avoids one major cost of accepting backward causation. Moreover, on this account, some certain hard facts' causal 'histories' are still up to free creatures as their (backward) causes lie in the open future rather than the fixed past.[245] This sort of backward causation, I believe, is less repellent because it has nothing to do with the notorious idea of changing the (fixed) past.

### 5.2.4 Active externalist account

I now suggest a different account which does not rely on the possibility of any sort of backward causation. Let us consider the 'extended mind' thesis proposed by Clark and Chalmers (1998). They suggest that some information may be stored within objects in one's external environment. For instance, some part of the memory of Otto, a patient of Alzheimer's disease, may be stored in his diary (which is external to his body) as long as his access to the diary is sufficiently reliable. Now if different sentences were to be written in Otto's diary, then he would have different memory. In this case, the body of Otto, which includes his brain, remains intrinsically the same while the contents of his memory may be different. It is Otto's body, in conjunction with the relevant external objects, which realizes Otto' beliefs, desires, and so on. Clark and Chalmers call this sort of content externalism 'active externalism' as the external environment plays an active role in constituting one's mental life. Active externalism is distinct from the standard causal version of content

[244] See his (forthcoming) Section 5.
[245] The term 'histories' is somewhat embarrassing as they actually occur in the future rather than the past.

externalism because it says that the contents of one's propositional attitudes are not caused by but constituted by things in the environment external to one's body. Physical facts about these external objects realize some of one's mental states, e.g. beliefs and memories.

Similarly, Ockhamists may provide an active externalist account of the contents of God's past beliefs about creatures' free actions in the future.[246] They may say that the contents of God's past beliefs about creatures' free actions in the future are stored in things external to God, i.e. creatures' future free actions themselves. To uphold this claim, they may appeal to the theological view that God is omnipresent in the literal sense, i.e. that God is wholly present in every spatio-temporal region.[247] If so, then God's access to creatures' future free actions should also be sufficiently reliable.[248] These future facts, in conjunction with God's intrinsic mental state, constitute God's 'extended' mind, so to speak. On this account, God's past belief that Peter will have a hamburger at $t_2$ is realized by and thereby depends on Peter's future action (and God's past intrinsic mental state.) Therefore, this fact should count as soft according to the dependence-based definition of hard/soft facts.

The active externalist account does not rely on the possibility of backward causation. Instead, it only requires that diachronic composition (holding between God's past intrinsic state and free creatures' future actions) is possible. This idea is considerably less controversial than backward causation as many defend the coherence of the idea of temporal parts.[249] Moreover, even though some metaphysicians, e.g. endurantists, are reluctant to the idea of temporal parts of material objects, it is widely agreed that events

[246] See Hunt (2013) for an interesting proposal of this sort.
[247] See the relevant discussion in 4.1.3.
[248] It is noteworthy that the contents of human beliefs cannot be stored in future facts in the same way because human beings are not omnipresent and thereby do not have sufficiently reliable access to every future fact.
[249] See, for example, Lewis (1986), pp. 202-4, and Sider (2001).

can have temporal parts. Since God's mental state and creatures' free actions are events, the diachronic composition here should be even less objectionable.

Now we have seen two externalist accounts about the contents of God's past beliefs about creaturely free actions in the future. There may be more options which Ockhamists may adopt. For instance, one may hold that since an omniscient God can never have a false belief, the contents of his past beliefs must be constrained by what truths there were.[250] According to this line of thought, if Peter were to eat otherwise at $t_2$, the past truth about Peter's future action would have been different. And since this past truth had been different, the content of God's past belief about Peter, which was constrained by the past truth about Peter's future action, would also have been different.[251]

It is not my aim to defend any of these accounts in length here.[252] Instead, they are merely tentative ones. The point of these subsections is simply that the incompatibilist claim that God's past intrinsic mental state fully determines God's past beliefs about creaturely free actions in the future is far from undisputable. In other words, it is not implausible, pace Pike, Fischer, and Todd, to suppose that one and the same mental state of God at $t_1$ would count as different beliefs given different behavior of Peter at $t_2$. Given the prima facie coherence and tenability of the foregoing accounts, it is the incompatibilists who owe us a reason why the contents of God's past beliefs cannot be determined externally. I therefore conclude that the argument from the hardness of God's past intrinsic

[250] Specifically, one may hold that the contents of God's past beliefs about creaturely free actions in the future must be constrained by past truths about what creatures will freely do in the future.
[251] This sort of possibility has been raised and discussed in Wasserman (forthcoming), pp. 6-7. See also Craig (1987), p. 82, and Merricks (2009) and (2011).
[252] For instance, some might raise the question of how God, on these accounts, may make providential use of his foreknowledge given that God's intrinsic mental state that counts as his foreknowledge will be the same no matter what creatures freely do in the future. My own view is that Ockhamist accounts in general do not provide an answer to this question. In order to answer it, Ockhamists need to appeal to other resources, e.g. Molinism, which is the main topic of the next section.

mental state, as it stands, does not succeed in refuting Ockhamism. Now I turn to another question about God and time: divine providence.

## 5.3 Libertarian freedom and divine providence

If God is omniscient and perfectly good, then it is likely that he has a plan for his creatures. Creatures' wellbeing will then fall under his divine providence. For a fatalist God, this is not a problem as he can determine every minute detail of the history of the universe. However, if creatures have libertarian freedom, then our account of divine providence will not be that easy, as the course of the history will be jointly written by God and his libertarian creatures. Thus, God cannot determine every detail on his own. In this section, I will focus on a widely discussed and highly controversial account of divine providence, i.e. Molinism.[253] More precisely, the following discussion will center around a putative kind of divine knowledge which Molinists believe to be a core component of God's divine providence, namely middle knowledge. I will investigate, again, in light of postmodal concepts, objections to middle knowledge and responses to them. Before doing so, let me now briefly introduce the basic idea of Molinism.[254]

If God is omniscient, then he knows all truths, including necessary ones and contingent ones. Historically, God's knowledge of necessary truths was called by Molinists 'natural knowledge' as they believed that all necessary truths are determined by God's nature/essence rather than his will.[255] In addition to natural knowledge, God also has 'free' knowledge, i.e. knowledge of contingent truths which are determined by his free will.

[253] In this chapter, I take Molinism to be an account of how a sovereign God may control and guide the course of the universe given creaturely libertarian freedom rather than an account of how creaturely libertarian freedom may be reconciled with God's infallible foreknowledge.
[254] For a detailed explanation and defence of Molinism, see Flint (1998).
[255] Their position may be classified as a version of theistic essentialist theory of modality discussed in section 4.5. However, theistic essentialist theory is not the only option for Molinists, as Vander Laan (2015) points out that Leftow's (2012) account of modality, which can be viewed as a version of theistic voluntarism discussed in section 4.3, is also compatible with the central claims of Molinism.

Molinists, theological fatalists, and open theists agree that God has both natural knowledge and free knowledge. However, Molinists alone make a further claim that God has a third kind of knowledge which is his knowledge of contingent truths which are *not* determined by God's free will. As this kind of knowledge is contingent on the one hand, and not determined by God's free will on the other, it stands between free knowledge and natural knowledge. Hence the name: 'middle' knowledge.

So what are the objects of God's middle knowledge, according to Molinism? They are what Molinists call (true) 'counterfactuals of creaturely freedom' (henceforth 'CCF'), i.e. counterfactual conditionals regarding what a creature would freely do if it were put in a certain circumstance brought about by God. For instance, the following counterfactual is a CCF: if Peter were in a circumstance *C*, say a certain fast food restaurant, then he would freely perform an action *A*, eating a hamburger. This CCF, if true, is contingently true because it is possible that if Peter were in *C*, he, as a libertarian free being, would freely not to do *A*. Also, the truth of this CCF is not determined by God's free will, as God cannot determine what Peter would freely do in this circumstance; otherwise, Peter would not be genuinely free. Instead, what God can do is just to put Peter in a certain circumstance and let him freely behave.[256]

Now let us call a proposition which reports that some (possible) free creature freely does some action an '*A*-proposition.'[257] For instance, the proposition that Peter freely eats a hamburger (in a certain time and in a certain place) is an *A*-proposition. Likewise, a

[256] It is noteworthy that although most Molinists adopt the phrase 'counterfactuals of creaturely freedom', they do not use the term 'counterfactuals' in the etymological sense: contrary-to-fact conditionals. For Molinists are committed to the truth of many of their antecedents, e.g. the (actual) truth that Peter is in *C*. It seems fair to say that calling them 'subjunctive conditionals of creaturely freedom' would be more exact, though in this thesis, I will follow the common usage in the Molinist literature.

[257] This may require the existence of individual essences of merely possible creatures because in order for a Molinist God to guide and control the course of the universe, he will need to know not only what actual creatures would do in various circumstances but also what possible, but not actual, creatures would do in various circumstances. For instance, God needs to know what my merely possible twin brother would do in some circumstances in order to decide whether to create him or not. And individual essences can serve as the contents of proper names of merely possible creatures. I will come back to this issue in 5.3.1.

proposition about a merely possible creature, e.g. the proposition that Wittgenstein's son freely eats fish and chips (in a certain time and in a certain place), is an *A*-proposition as well. Then we call a proposition which reports a circumstance in which God puts his creatures a '*C*-proposition.' For instance, the proposition that Peter is in a certain fast food restaurant (in a certain time) is a *C*-proposition. It is noteworthy that a *C*-proposition can be quite informationally rich. For example, a *C*-proposition may specify everything happening in the universe except creatures' free actions. Now given *A*-propositions and *C*-propositions, we can generate a set *S* of conditionals such that for every *C*-proposition *P* and every *A*-proposition *Q*, the counterfactual conditional "if *P* were the case, then *Q* would be the case" is a member of *S*.

Given the foregoing set S, Molinists' view may be understood as the claim that there is a subset of *S* which includes all and only true CCFs. They hold that these true CCFs are the objects of God's middle knowledge. Now let us consider the following example to see why middle knowledge may play a crucial role in divine providence. Suppose that before creation, God had to make a decision about whether to create King David or not. With middle knowledge, God could know what would happen if he were to or were not to bring about a circumstance including King David's existence. For instance, God knew that if a certain *C*-proposition which entails King David's existence were true, then King David (and other free creatures) would freely do so and so. He also knew that if another *C*-proposition which entails the non-existence of King David were true, then such and such free creatures would freely do so and so. Then he could compare these two possible results of the universe and then make a decision about whether to create King David or not.

Given middle knowledge, God can know in advance what creatures would freely do and thereby arrange the course of the universe in his preferred way without violating creatures' libertarian freedom. What he needs to do is just to have a look at true CCFs and then bring

about the relevant circumstances. Given the foregoing explication of Molinism, we may now compare the Molinist account of divine providence to its rivals, say the fatalist account and the open theist account. For theological fatalists, God can control every minute detail of the course of the universe as he wishes because every contingent truth is determined by his free will.[258] However, this leaves no room for creatures' libertarian freedom. On the other hand, open theists are uncompromising in creatures' libertarian freedom. The cost is that the course of the universe may be beyond God's control as he has neither middle knowledge nor foreknowledge about creatures' free actions. Since the Molinist God is not weaker than the fatalist God in terms of sovereignty and not less generous than the open theist God in terms of creaturely freedom, Molinism provides the best account of divine providence, theologically speaking. Despite the attractiveness of Molinism, in the past fifty years, anti-Molinists have raised various objections to it, which are the topics of the following subsections. Let us start with the most famous one: the grounding objection.

### 5.3.1 Grounding objection

Molinists are committed to the truths of (some) CCFs. Nevertheless, these truths do not seem like primitive features of reality.[259] Anti-Molinists therefore raise the following question: what, if any, grounds the truth of true CCFs?[260] Let us begin with some options which are non-starters. First, their truthmakers cannot be God's willings. As it is essential to Molinism that CCFs are contingent and not determined by God's free will, the claim that true CCFs are made true by God's willings is plainly incompatible with Molinism. Second,

[258] There is an impression common in some theologians' circle that the fatalist God is more sovereign than the Molinist God. However, it is noteworthy that in fact, the Molinist God can do whatever the fatalist God can do. For the former can choose not to create any free creature and then determine all contingent truths by his free will. Moreover, the Molinist can also create libertarian free creatures in such a way that they do what is desired, which is something that the fatalist God cannot do. Therefore, contrary to the common impression, the Molinist God is actually not weaker than the fatalist God in terms of sovereignty.
[259] See, however, Merricks (2011b) where he contends that CCFs are part of reality's (primitive) subjunctive aspect which does not require the existence of any grounds or truthmakers.
[260] This objection was raised by Adams (1977).

God's essence (or the fact that God has his essence) will not do either. Suppose, on the contrary, that God's nature is the truthmaker for true CCFs. Recall that truths are necessitated by their truthmakers. Therefore, on the current supposition, the truths of true CCFs are necessitated by God's having his essence. Moreover, since it is necessary that God has his essence, it is necessary the truthmaker for all *actually true* CCFs exists. It then follows that it is necessary that all actually true CCFs are made true by God's essence. Hence, true CCFs turn out to be necessarily, as opposed to contingently, true. This result is also incompatible with Molinism according to which true CCFs are contingently true.

Another answer might be that the truthmakers for true CCFs are what make their antecedents and consequents true. For instance, consider the following CCF: if Peter were in *C*, then he would freely do *A*. As for the antecedent, its truthmaker is, let us assume, God's willing to put Peter in the circumstance *C*. As for the consequent, its truthmaker is just the fact that Peter freely does *A*. Given the plausible constraint on the similarity relation, namely *Strong Centering*, it is a theorem that the conjunction of any *P* and any *Q* entails the counterfactual that if *P* were the case, then *Q* would be the case. In other words, what necessitates the truth of the conjunction of *P* and *Q* will also necessitate the truth of the counterfactual that if *P* were the case, the *Q* would be the case. Now let *P* be the proposition that Peter is in *C* and *Q* be the proposition that Peter freely does *A*. It then follows that the truthmakers for *P* and for *Q* also necessitate the truth of the CCF in question, i.e. that if *P* were the case, then *Q* would be the case. It is noteworthy that this proposal does not face the problems raised earlier. On the one hand, true CCFs are still contingently true because some part of their truthmakers, i.e. creatures' free actions, contingently exists. For instance, since Peter is a free creature, it is contingently true that he freely does *A*. On the other hand, although the other part of the truthmaker for this CCF is God's willing, his

willing alone does not necessitate the truth of this CCF. Therefore, the truth of this CCF is not determined by God's free will.

However, the foregoing proposal will face another problem: that although some true CCFs can be explained this way, not all of them can be. There are at least two kinds of true CCFs which cannot be explained this way. First, let us consider a true CCF of which the antecedent and the consequent are both false, say the conditional that if Peter were in a circumstance *C'*, then he would freely do *A'*. Since neither its antecedent nor its consequent are true, the truthmaker for this CCF cannot be what makes its antecedent and consequent true. For its antecedent and consequent are false, and false propositions do not have truthmakers. This CCF therefore need some other entity(-ies) as its truthmaker(s). Second, consider a true CCF concerning what a merely possible free creature, say Wittgenstein's son, would freely do. By the same token, the truthmaker for this CCF cannot be what makes its antecedent and consequent true because they are not true: the merely possible creature in question does not exist, and thereby can neither be in any circumstance nor freely do any action. Since Molinists are committed to not only the truth of some CCFs with true antecedents but also the truth of some CCFs with false antecedents, the view that true CCFs are made true by what make their antecedents and consequents true is clearly inadequate.

Let us now turn to the next option: true CCFs are made true by counterfactual facts.[261] For instance, the true CCF that if Peter were in *C*, then he would freely do *A* is made true by the fact that if Peter were in *C*, then he would freely do *A*. One might object to this suggestion on several grounds. For instance, one might insist that if a fact *F* is about an entity *x*, then the obtaining or existence of *F* will entail the existence of *x*, the entity which *F* is about. If so, then the counterfactual facts about merely possible creatures will also entail the existence of the merely possible creatures which they are about. Since merely

[261] This idea is suggested by Craig (2001), pp. 346-7.

possible creatures do not exist, we can infer by modus tollens that counterfactual facts about them do not exist and thereby cannot serve as truthmakers for CCFs concerning merely possible creatures.

Now one may resist this objection by denying the rationale behind it, i.e. that the obtaining of a fact must imply the existence of the object which it is about. For instance, if one accepts negative facts into ontology, then the fact that Wittgenstein's son does not exist will obtain, but its obtaining does not entail the existence of the object which it is about, i.e. Wittgenstein's (merely possible) son. However, the cost of this response is that counterfactual facts will be considered to be suspicious as negative facts.[262]

A better response to the foregoing objection is to say that counterfactual facts, which make CCFs true, are not about (actual and merely possible) objects but about their individual essences. For instance, consider the CCF that if Wittgenstein's son were in *C*, then he would freely do *A*. Let us call the individual essence of Wittgenstein's son *E*. Then one may say that the truthmaker for the CCF in question is the counterfactual fact that if *E* were instantiated in *C*, then its instance would freely do *A*. Since the truth is about *E* rather than Wittgenstein's (non-existing) son himself, there is no need to deny the principle that the obtaining of a fact implies the existence of the object which it is about. For individual essences can exist without being instantiated. Given this response, counterfactual facts, which serve as the truthmakers for true CCFs, can be understood as individual essences' instantiating modal properties like the property of being such that if it were instantiated in *C*, then its instance would freely do *A*.

The foregoing response is better. However, there is another question which one may raise according to another plausible metaphysical principle. Recall the purity principle

[262] It is noteworthy that the solution which I proposed in 3.5.1 to the problem of negative truths does not answer the objection here. For, as noted above, counterfactual facts/truths, unlike negative truths about creatures, cannot depend on God's free will.

about fundamental facts: facts involving non-structural concepts are either grounded in or divinely caused by some other facts. Now one may argue that some concept involved in the foregoing putative counterfactual fact is not structural along the following lines. Consider the counterfactual that if the distance between two electrons $e_1$ and $e_2$ were $m$ meters, then the electrostatic force between them would be $N$ newtons. (Let us assume for the sake of argument that all concepts involved in this counterfactual except the subjunctive connective are structural.) It is widely agreed that the truth of this counterfactual is not a primitive one. Instead, it is very likely that it has an explanation. One plausible explanation is that it is grounded in Coulomb's law, facts about the charges of $e_1$ and $e_2$, and, if needed, some other relevant facts about $e_1$ and $e_2$. Since this counterfactual is grounded, it should involve some non-structural concept. As we assume that all other concepts involved in it are structural, the non-structuralness must lie in the subjunctive connective 'if… then…'. If so, then according to the purity principle, counterfactual facts about creaturely freedom, which also involve the non-structural subjunctive connective, should also be grounded or divinely caused. Then the following question emerges: what grounds or divinely causes these counterfactual facts?

Again, it is clear that the counterfactual facts in question cannot be divinely caused by God's willings as Molinists insist that true CCFs are not determined by God's (free) will. Therefore, these counterfactual facts must be grounded rather than divinely caused. Can they be grounded, like the foregoing counterfactual fact about two electrons, in laws of nature and the relevant facts about the objects involved? The answer is no because on libertarianism (which entails causal indeterminism,) no laws of nature can determine what a free creature would freely do in a certain circumstance.

In fact, given the libertarian assumption that no free actions are determined or necessitated by any previous facts, Molinists had better to say that counterfactual facts

concerning what creatures would freely do should be grounded in but not necessitated by their grounds. In other words, Molinists should say that counterfactual facts which serve truthmakers for true CCFs are emergent facts according to the definition of emergence proposed in 2.4.2. I now suggest that counterfactual facts concerning what free creatures, either actual ones or merely possible ones, would freely do are grounded in (but not necessitated by) the existence of the individual essences of the free creatures which the counterfactual facts in question are about. For instance, the counterfactual fact that if the individual essence of Peter were instantiated in *C*, then its instance, i.e. Peter, would freely do *A* is grounded in the fact that the individual essence of Peter exists. The existence of the individual essence of Peter does not necessitate the counterfactual fact because given Peter's libertarian free will, it is possible that he is in *C* (or any other relevantly similar circumstance), but does not do *A*. Likewise, the counterfactual facts about merely possible creatures are also grounded in the existence of the individual essences of these merely possible creatures.

I suggest that the grounding objection may be answered if Molinists take the existential facts about individual essences to be (non-necessitating) grounds of counterfactual facts which in turn are the grounds of and truthmakers for true CCFs. On this emergentist account, true CCFs, as being (ultimately) grounded in the existence of individual essences, are not unexplained, primitive features of reality despite their indispensability in the book of the world, that is, the minimally complete description of reality.[263]

In this subsection, I have indicated how the postmodal concepts of grounding and structure can help formulate the grounding objection and a novel response to it. This is another illustration of the usefulness of postmodal concepts in theistic metaphysics.

[263] That is, they are fundamental in the sense of completeness. See subsection 2.4.2.

### 5.3.2 Priority objection

Let us now turn to another objection to Molinism which was also raised by Robert Adams (1991). Adams's objection relies on the following principle:

(12) If I freely do *A* in *C*, no truth that is strictly inconsistent with my refraining from *A* in *C* is explanatorily prior to my choosing and acting as I do in *C*.[264]

If we understand the notion of explanatory priority here in terms of the notion of dependence involved in the postmodal definition of hard/soft facts proposed in 5.2.2, then there is good reason to accept (12). To see why, let us suppose that the consequent of (12) is false. That is, suppose that there is a fact, say *F*, such that (i) my actions in *C* depend on *F*, and (ii) *F* is (strictly) inconsistent with the negation of the proposition that I do *A* in *C*. Since dependence is asymmetric, *F* does not depend on my actions in *C*. Given the postmodal definition of hard/soft facts, *F*, which does not depend on my actions, is a hard fact (relative to the time when I perform my actions in *C*). Also, according to the supposition, *F* entails that I do *A* in *C*. Hence, there is a hard fact, i.e. *F*, entailing my doing *A* in *C*. Given (P4), i.e. the transfer of powerlessness principle, it then follows that I (now) have no ability to render <I do *A* in *C*> false. Therefore, my doing *A* is not free. Here we have shown that the negation of the consequent of (12) implies the negation of the antecedent of (12). By modus tollens, we get (12).

Drawing on (12), Adams argue that true CCFs (with true antecedents) about my actions implies that my actions are not free. His reason is as follows. Molinism implies that if I freely do *A* in *C*, then the CCF that if I were in *C*, then I would freely do *A* is true. As we have seen above, this is correct given *Strong Centering*. Furthermore, the truth of this CCF is inconsistent with another proposition that that I am in *C*, but refrain from *A* because the

[264] I follow Adams's numbering in his paper. See Adams (1991), p. 350.

latter proposition, given *Strong Centering*, entails another CCF that if I were in *C*, then I would not do *A*, which is inconsistent with the former CCF.[265] Then Adams contends that the CCF that if I were in *C*, then I would freely do *A* is explanatorily prior to my actions. Or in my own words, my actions depend on the truth of this CCF. To uphold this contention, Adams gives the following argument:

(1) The truth of CCFs about me is explanatorily prior to God's decision to create me.

(2) God's decision to create me is explanatorily prior to my existence.

(3) My existence is explanatorily prior to my actions.

(4) Explanatory priority is transitive.

(5) The truth of the CCF that if I were in *C*, then I would freely do *A* is explanatorily prior to my actions.

Now if this true CCF is explanatorily prior to my actions, then according to (12), it is not the case that I freely do *A* in *C*. For there is something, i.e. the truth of this CCF, which is both explanatorily prior to my actions and inconsistent with the proposition that that I am in *C* but refrain from *A*. This is Adams's priority objection to Molinism.

Some Molinists reject the foregoing argument by saying that explanatory priority here is equivocal as it involves a variety of different relations.[266] For instance, one may say that the explanatory priority involved in (2) has to do with divine causation or grounding. On the other hand, (3) seems to be a case of ordinary causation.[267] If there are more than one specific relations of explanatory priority involved here, there is no reason to think that the generic relation of explanatory priority involved in Adams's argument should be transitive.

I believe that the foregoing response to Adams's argument is on the right track. Moreover, I would like to suggest not only that Adams's argument fails but also that,

[265] Here, for the sake of exposition, I assume that it is possible that I am in *C*.
[266] See Craig (1994) and Flint (1998), ch.7.
[267] It is unclear what kind of (fine-grained) explanatory relation is involved in (1). Perhaps it is grounding as truths, which are not concrete entities with causal powers, neither ordinarily cause nor divinely cause anything.

contrary to Adams's contention, Molinists have reason to believe that if I freely do *A* in *C*, then my doing *C* is explanatorily prior to the truth of this CCF about me. Recall that given *Strong Centering*, the conjunctive truth that I am in *C*, and I freely do *A* entails the CCF that if I were in *C*, then I would freely do *A*. As noted above, it follows that the truthmaker for this conjunctive truth also necessitates the truth of this CCF. One may therefore take the truthmaker for this conjunctive truth, i.e. the truthmaker for the true antecedent and the true consequent of this CCF, to be the truthmaker for the true CCF itself.

We have seen in the previous subsection the objection that some true CCFs may not have true antecedents and thereby cannot be grounded in this way. However, this objection does not show that *no* true CCFs can be grounded in this way. Perhaps some can. If so, then Molinists may hold a hybrid account on which (i) true CCFs with false antecedents are grounded in the existence of individual essences, and (ii) true CCFs with true antecedents are grounded in the truthmakers for their true antecedents and true consequents (as these truthmakers, which are full grounds which necessitate the truth of these CCFs, trump the existential facts about individual essences which may ground but cannot necessitate the truth of these CCFs.)[268] For instance, suppose that I freely do *A* in *C*. Then the truth of the CCF that if I were in *C*, then I would freely do *A* is grounded in the truthmaker for the truth that I am in *C* (which I take to be God's willing to place me in *C*,) and the truthmaker for the truth that I freely do *A* (which I take to be the fact that I freely do *A*.) On the other hand, the CCF that I were in *C*', then I would freely do *A*' is grounded in the existence of my individual essence, as the antecedent of this CCF is false. On this account, the fact that I freely do *A* is explanatorily prior to the truth of the CCF that if I were in *C*, then I would freely do *A* because the truth of the CCF is (partially) grounded in

[268] Alternatively, one may also take the truth of CCFs with true antecedents and true consequents to be grounded in both the existence of individual essence and the truthmakers for their true antecedents and true consequents.

a fact about my free action. If so, then (12) does not lead to the consequence that Molinism implies that no creatures' actions are free. For Molinists need not accept (1) as long as they endorse the foregoing hybrid account of grounds of true CCFs.

Again, we have seen how postmodal concepts, on the one hand, help us understand the priority objection in a clearer way and, on the other hand, offer us some interesting response to it. This is another example of how postmodal concepts may contribute to our theorizing about first-order questions of theistic metaphysics.

## 5.4 Concluding remarks

In the previous section, we have revisited two objections to Molinism. The examination of these objections again shows how theistic metaphysicians may benefit from postmodal concepts. On the one hand, although the formulation of Molinism itself does not explicitly require postmodal concepts, postmodal concepts can help formulate the two important objections to it, namely the grounding objection and the priority objection, in better ways. On the other hand, we have seen that once these objections are construed postmodally, some unprecedented responses, e.g. the response to the grounding objection which draws on the notion of emergence, may come into play, just like what we have seen in the discussions of God's relation to temporal structure in 5.1.1 and of Ockhamism in 5.2.2. I therefore conclude that with postmodal concepts, theistic metaphysicians can make progress in the study of the relation between God and time, among other topics.

# 6 Postmodal Concepts and Theistic Metaphysics

As stated in Chapter 1, the overall goal of this thesis is to provide a way of doing theistic metaphysics by means of postmodal metaphysical tools. This goal has been achieved, I hope, by what I have done in Chapters 1-5. I now summarize what has been done so far. In Chapter 1, I provided some motivations for the introduction of postmodal concepts, including the concepts of grounding, divine causation, and structure, to the metaphysical toolkit of theistic metaphysicians. Specifically, I suggested that these postmodal concepts could help improve our formulations of a number of important claims or positions in theology and/or philosophy of religion, e.g. the doctrine of divine sovereignty and theistic idealism, in some better ways, and offer theistic metaphysicians some new perspectives on old, long-standing questions like cosmological arguments and apophatic theology.

Chapter 2 was a study on the natures of two postmodal concepts which are especially relevant to theistic metaphysics: the concept of divine causation and the concept of divine structure. These concepts were examined at a rather abstract level. Several second-order questions regarding them, e.g. whether these two concepts themselves are structural and how they are related to the notions of fundamentality, were raised. I attempted to give my own answers to these questions, many of which, of course, were not conclusive but tentative. I hope that the discussions are sufficient to show that these (and perhaps more) second-order questions are worth further investigations. On the other hand, although Chapter 2 itself only addressed few first-order metaphysical questions, it still laid down some constraints or principles, e.g. the purity principle and the modal constraint on complete facts, which, as we have seen, play important roles in various first-order questions addressed later in Chapters 3-5.

In Chapter 3, I used postmodal concepts to formulate and examine theistic Platonism, theistic activism, theistic Aristotelianism, theistic trope theories, and a number of theistic extreme nominalist theories, including my own theistic concept nominalism. I argued that postmodal concepts provided both better formulations of these positions and a clearer understanding of arguments for/against them, e.g. the bootstrapping objection, than modal concepts. This chapter showed that the choice of metaphysical tools not only mattered in a metaontological way but also contributed to our theorizing about first-order questions like the problem of universals.

Chapter 4 focused on theistic accounts of modality. The accounts discussed there included theistic modal realism, theistic combinatorialism, theistic voluntarism, theistic power theory, and theistic essentialist theory. Unlike Chapter 3, the point of Chapter 4 was not that postmodal concepts provided better formulations of these accounts of modality. It was no wonder that modal concepts themselves, on pain of non-informativeness and circularity, were not suitable for this job. Instead, what Chapter 4 indicated was that postmodal concepts were exceptionally helpful for formulating many interesting objections to these accounts, especially the argument from sovereignty (against theistic modal theism) and the argument from negative grounds (against theistic power theory).

Finally, postmodal concepts were applied to issues about the relation between God and time in Chapter 5. I discussed problems with the timeless conception of God, e.g. how A-theoretic facts may depend on facts about a timeless God, and suggested how postmodal concepts could help answer them. Two well-known positions in the literature, namely Ockhamism and Molinism, were also examined. As for Ockhamism, I argued that postmodal concepts played a role in our understanding of a crucial notion featured in the debate concerning Ockhamism, i.e. the notion of hard facts about the past. As for Molinism, I proposed postmodal construals of two objections to it, namely the grounding objection

and the priority objection. Again, postmodal concepts not only generated better formulations of pre-existing positions and objections in the literature on God and time but also shed new light on how these problems could be handled.

This is what I have done in this thesis. I believe that these discussions have satisfactorily illustrated how to do theistic metaphysics in a postmodal way. Although these discussions, due to the length of this thesis, are by no means comprehensive enough to cover every issue in this field, I am eagerly anticipating more applications of this postmodal approach in theistic metaphysics, or more generally, in philosophy of religion.

To conclude this thesis, I would like to say some final words about the postmodal approach. Specifically, I would like to make it clear that this approach is not comprehensive by pointing out two qualifications of it (in case they have not been explicit enough.)

## 6.1 Postmodal concepts and their limits

We have seen that the three postmodal concepts proposed in Chapter 1 could produce various fruitful results in the inquiries of theistic metaphysics. However, these results by no means indicate that they are all and only the tools which theistic metaphysicians need. On the one hand, postmodal concepts alone are not enough for theistic metaphysicians to deal with several issues. For example, as I have argued in 2.4.2, in order to capture the completeness conception of fundamentality, which plays an important role in many first-order issues of theistic metaphysics, the modal concept of necessitation is indispensable. Another example concerns the issue of omnipresence. As noted in 4.1 and 5.2.4, a literal understanding of the doctrine of divine omnipresence requires that God is located in every spatio-temporal region. Now this literal understanding can be precisified further by distinguishing between different kinds of location, e.g. weak location, exact location, and

entension.[269] This will then give rise to various accounts of omnipresence, which may have bearing on other issues of theistic metaphysics. However, in order to formulate specific accounts of (literal) omnipresence, theistic metaphysicians also need these locative concepts, which arguably cannot be defined in terms of the three postmodal concepts proposed in Chapter 1. Therefore, theistic metaphysicians need concepts in addition to the three proposed postmodal concepts. In other words, these concepts are not *sufficient* for some issues of theistic metaphysics.

On the other hand, there seem to be some issues to which postmodal concepts are not relevant. For instance, consider the project of perfect being theology, i.e. the attempt to answer the question of what divine attributes God has by investigating what properties a perfect being is supposed to have. Many perfect being theologians draw on modal reasoning, e.g. counterfactual reasoning or imagination, to figure out whether God would be better if he were to have a certain property. In order to evaluate how successful their approach is, one may need to carry out some study of modal epistemology. However, it is unclear whether this requires postmodal concepts. Thus, it is unclear whether postmodal concepts are not *necessary* for every issue of theistic metaphysics.

I have specified two qualifications of the postmodal approach. Of course, there are still many things which could be said and discussed about the postmodal approach to theistic metaphysics. I will, however, end it here, as Mellor's sage remark has suggested: "The last bad habit . . . is that of discussing philosophy instead of doing it, i.e. of doing meta-philosophy… whose remit I take to be what philosophy is and how to do it."[270]

[269] See, for example, Parsons (2007), Hudson (2009), and Pruss (2013).
[270] Mellor (2012), p.8.

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