An Account of Power and Possibility in Spinoza

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Introduction

One of Spinoza's most famous theses is his necessitarianism. It claims that nothing—*nothing*—could have been otherwise than it actually is. God's existence, the laws of physics, my decision to eat cereal this morning—it's all as necessary as 2+2=4. Necessitarianism lends itself quite well to Spinoza's rationalism. In its broadest aspirations, rationalism, as I use the term, is an attempt to explain everything. If something exists, there is a reason explaining why it exists. If a relation that holds, there is a reason explaining why it holds. Similarly for things that don't exist and for relations that don't hold—there are reasons for that too. If necessitarianism is true, then everything is sufficiently explained by its cause. Things exist because they were caused to exist and relations hold because they were caused to hold. So necessitarianism goes hand in hand with Spinoza's rationalism. If there were any contingent or brute facts, then they would count as unexplained. In addition to cohering well with Spinoza's general philosophical outlook, necessitarianism also provides his system with many benefits. Perhaps most importantly, it constitutes the backbone of his theory of well-being: we can gain control over our passions and reach beatitude only through a recognition of the necessity of all things.

Necessitarianism faces a number of problems, however. Most famously, it seems to leave no room for traditional moral concepts like praise and blame. We blame people for immoral acts primarily because we think that they *could* have, and should have, done otherwise. If every action is necessary, then nobody could have done otherwise than she actually did and nobody is blameworthy. So necessitarianism cannot help but undermine traditional morality. But it also faces a number of problems unrelated to morality. First, it just *seems* false. For example, it seems fairly obvious that I might have had toast this morning rather than cereal. After all, I remember

deliberating about the choice and I didn't feel compelled either way. Nothing about the way I woke up or the happenings of the previous night spoke in favor of any particular breakfast. Necessitarianism seems to leave this general feeling of contingency unexplained. Second, the concept of possibility plays an important, and plausibly indispensable, role in philosophical argumentation. Among other things, it undergirds the practice of using hypothetical cases as philosophical evidence. If nothing is merely possible, as necessitarianism claims, then it's not obvious that there *are* any hypothetical cases. There are only actual cases. And if we cannot help ourselves to hypothetical cases, then the ways we can argue shrink considerably. The benefits of necessitarianism seem to come at a very high cost.

My dissertation is an examination of several key issues pertaining to Spinoza's necessitarianism. In the first two chapters, I aim to defend Spinoza against the two non-moral objections to necessitarianism mentioned above. First, I will offer an interpretation of his theory of possibility which aims to explain why so much of the world seems—in a robust sense—to be contingent. Things appear contingent to us because of the tendency of the mind to project its own features onto the world (in this case, its ignorance of causes). Second, I will argue that Spinoza's necessitarianism can accommodate the use of hypothetical cases. It does so by construing hypothetical cases not as genuine possibilities, but as actually existing linguistic entities such as sentences.

For the remainder of the dissertation, I will focus on a particularly important use of hypothetical cases that appears in one of Spinoza's arguments for God's existence. There Spinoza argues that God exists because God is more powerful than any other substance or substances would be, if they existed. I focus on this argument not merely as an illustration of Spinoza's use of hypothetical cases. Rather, the concept of power is a concept traditionally tied to the concept of

possibility: a thing's power tells us what it's possible for the thing to do. For example, I have the power to lift a car only if it's *possible* for me to lift a car. In the final two chapters, I argue that Spinoza uses the concept of power and its traditional modal connotation in order to answer two objections to monism, namely, that it cannot explain the existence of diversity or motion. In other words, I argue that Spinoza's necessitarianism allows him to leverage a traditionally modal concept in order to solve two problems about *actuality*. I here outline all six chapters.

Chapter One

One of the most difficult aspects of Spinoza to interpret is his theory of error. On one hand, he is explicit that every idea, insofar as it relates to God, is true. Every idea agrees with or corresponds to some actually existing thing out there in the world. Spinoza is committed to this claim by his thesis that, for every idea, there is something in the body which is the expression of that idea and which is the idea's primary object of representation. But on the other hand, he is quite aware that people err all the time. If it weren't for our cognitive mistakes, we would already be living in full beatitude. Unfortunately, error is usually understood to mean that an idea or belief *fails* to agree with or correspond to reality. So Spinoza appears to endorse two conflicting claims about the existence of error and it becomes very difficult to find a way to fit error into Spinoza's system.

In Chapter One I focus on the problem of error as it pertains to beliefs about possibility. Obviously an error of *some* kind occurs when we form beliefs about possibility and contingency. Spinoza is explicit time and again that there is nothing contingent in things. The standard reading of his account of possibility interprets it as an *error theory*: possibility is a concept with an empty extension. I argue against this reading on the basis that it fails to respect Spinoza's commitment to the truth of all ideas. Beliefs about possibility cannot be false, at least not in the sense that error

theory intends, i.e. by having an empty extension. If the concept lacked an extension, then there would be ideas which lacked expressions in the body, a clear violation of one of Spinoza's most central doctrines.

As a replacement, I offer a projectivist interpretation of possibility. For Spinoza, there are two ways of representing the world: through reason and through the imagination. When we represent the world through the imagination, we tend to represent it as having features which really belong only to our own mental states. That is, in imagination we *project* our mental states onto the world. I argue that this happens even with beliefs about possibility and contingency. Beliefs about possibility and contingency represent first and foremost an image in the body. On the basis of representing an image in the body, they can also represent external objects in the world. When we form beliefs about possibility, we continue our general tendency to project properties of our own mental states onto the world itself—in this case properties pertaining to causal ignorance. Beliefs about possibility are errors, not because they have empty extensions, but because they mask what their content is in the first place. My account can therefore explain how beliefs about possibility are errors without jeopardizing parallelism.

Chapter Two

Spinoza's preferred method of argument—at least in Part One of the *Ethics*—is *reductio ad absurdum*. He asks his reader to consider some hypothetical case in which a non-Spinozistic thesis is true. For example, in E1p6 he asks us to entertain a hypothetical finite substance. He then draws out the inherent contradictions which are contained in the hypothetical case and which are thereby latent in philosophical theories that accept the case as a genuine possibility. On its face, this practice seems inconsistent with necessitarianism. By entertaining a merely hypothetical case, one seems to be admitting the possibility of counterfactual scenarios. But necessitarianism denies

that there are anything other than actual scenarios. Spinoza therefore needs some account of how counterfactuals—especially counterfactuals involving competing philosophical theories—can be true.

I argue that a solution lies in distinguishing between two kinds of kinds of hypothetical cases in Spinoza: (i) those involving states of affairs which are internally consistent but which are ruled out by the order of nature (all-things-considered impossibilities), and (ii) those which are internally inconsistent (*per se* impossibilities). Recent accounts of counterfactuals in Spinoza tend to focus exclusively on the former. I argue that doing so prevents an understanding of Spinoza's methodology, because many of his most important arguments involve hypothetical cases which are *per se* impossible.

I defend a linguistic account of *per se* impossibilities. The hypothetical cases in Spinoza's arguments are really nothing but words which fail to express any genuine content. When we consider something like a finite substance, we are just focusing on scribbles on a page and are under the illusion that they represent something possible. I argue that the linguistic account provides a framework for explaining how *reductio* arguments function within a necessitarian system. Hypothetical cases are in fact just complex linguistic entities. Spinoza can reveal the inherent contradictions involved in such cases by showing how they involve a commitment to contradictory sentences. Specifically, I argue that he relies on definitions of *words* as a tool for revealing the hidden contradictions. A definition enables a disentangling of the hypothetical case into its constituent parts. Once it is decomposed, the contradictory sentences that the case involves become apparent.

Chapter Three

In Chapter Four I focus on an important argument for monism which relies on the use of hypothetical cases. There Spinoza argues that God—the substance with all the attributes—exists because he is the most powerful substance. If any other substance or collections of substances existed rather than God, then they would be more powerful than God. In Chapter Three I examine going interpretations of Spinoza's concept of power and argue that they all have significant shortcomings. Spinoza's universe has two important features: it is conceptually self-sufficient or complete and it is dynamic, rather than static, in nature. I argue that the two most prevalent interpretations of power fail to take both features into account. One account captures the conceptual self-sufficiency of Spinoza's system at the expense of its acting, dynamic features. The other account captures the dynamic features while failing to adequately explain its conceptual completeness. A successful interpretation of Spinoza's argument must somehow capture both features in a single notion of power.

Chapter Four

I distinguish between two aspects of God's power which correspond to his dynamic and conceptually complete nature. God's dynamic power is his power as a substance to be self-caused. In *this* sense, God is no more powerful than any other substance. But God's conceptual self-sufficiency consists in his power to explain different fundamental aspects of reality. God is more powerful than other substances because there is nothing in the world that is not explained by his nature. Other substances explain only certain corners of reality and not others. For example, a merely thinking substance could explain thought, but not extension.

I then interpret the argument from power as resting on two key premises: first, that reality is as complete as it could be, and second, that the world is more complete with God than with any

other collection of substances. By relying on a principle claiming that the universe is as complete as it could be, I argue that Spinoza utilizes a principle of perfection. Throughout the *Ethics,* Spinoza equates *our* perfection with our power—both our ability to be our own causes and our ability to generate more effects. So by making the universe as complete as it could be, Spinoza sets it up as an archetype for human perfection. Humans become more perfect to the extent that they emulate God's perfection, namely his power.

Chapter Five

I examine two common objections to Spinoza's monism: the problem of diversity and the problem of the origin of motion. The problem of diversity refers to a tension in Spinoza's ontology. The universe is ultimately a single being, lacking in all variation. Yet there seems to be an incredible level of diversity. Spinoza must explain how God—the only thing there is—could produce any diversity if he himself is not diverse. The problem of the origin of motion is the problem of explain the existence of motion. According to most early moderns, matter is inert and it can be put in motion only with the help of a transcendent, spiritual God. But no such God exists for Spinoza. So he must explain how matter, in some sense, moves itself.

I outline these two problems and argue that they are identical to a third problem, namely the grounding of possibility. The grounding of possibility asks: in virtue of what are possible things possible? I argue that the three problems are identical for Spinoza. God is the cause of diversity and motion in the exact same sense in which he grounds possibilia. Furthermore, I argue that commentators and critics often overlook their connection and, in doing so, misinterpret important parts of Spinoza's system.

Chapter Six

In the final chapter I argue for a solution to all three problems. The solution is based on the idea that God's essence is power itself—power constitutes the bottom floor of Spinoza's ontology. I apply the power-based interpretation to the three problems in the following way. First, power grounds all possibilia because all possibilia are either expressions of God's power or derived from those expressions. Second, motion exists because motion is the expression of God's power in the physical realm. If there weren't motion, then matter wouldn't express God's essence. Lastly, Spinoza can evade the problem of diversity because God is not *one* being but just power itself. If God is not countable, then the problem of diversity never gets off the ground.

Abbreviations

E = *Ethics* (d = definition; a = axiom; p= proposition; d = demonstration; c = corollary; s = scholium; exp = explication; genda = General Definitions of the affects; app = appendix)

TdIE = *Treatise on the Emendation of the Intellect*

DPP = *Descartes's Principles of Philosophy*

CM = *Metaphysical Thoughts*

KV = *Short Treatise on God, Man, and His Well-Being*

TTP = *Theologico-Political Treatise*

S = *The Letters* (Ep = letter)

G = *Opera,* ed. C. Gebhardt

C = *The Collected Works of Spinoza*, vol. I, ed. E. Curley

AT = *Oeuvres de Descartes*, eds. Ch. Adam and P. Tannery

CSM = *The Philosophical Writings of Descartes*, vols. I–II, trans. J. Cottingham, Robert Stoothoff, and Dugald Murdoch

CSMK = *The Philosophical Writings of Descartes*, vol. III (the Correspondence), trans. J. Cottingham, Robert Stoothoff, Dugald Murdoch, and Antony Kenny

OCM = *Oeuvres Complètes de Malebranche*, ed. A. Robinet

LO = *The Search for Truth and Elucidations of the Search for Truth*, trans. Lennon and Olscamp

M = *Monadology*

All other works are cited by year.

Chapter 1: Spinoza's Theory of Possibility

Spinoza faces a potentially serious problem regarding error. On one hand, error seems to be a rather common occurrence. People routinely misremember birthdays, misconduct scientific experiments, and deliver pizzas to the wrong addresses. In fact, Spinoza thinks that error is nearly ubiquitous. Anytime a person relies on the imagination to learn about the world, the inevitable result is error (E2p41). The general category of the imagination covers a fairly large swath of activities and includes such everyday phenomena as sensory perception (E2p17), language use (E2p40), and numerical representation (Ep12). It follows that we err *a lot*—pretty much every minute of our waking lives involves some sort of cognitive mistake. On the other hand, however, Spinoza is explicit that "all ideas, insofar as they are related to God, are true" (E2p32). A true idea is an idea which agrees [*convenit*] with its object (E1a6). So every idea agrees with some actually existing thing out there in the world. Furthermore, every idea of an idea agrees with some actual idea occurring in the mind (E2p21). Call Spinoza's commitment to the existence of error the Error Thesis and his commitment to the truth of all ideas the Truth Thesis. He faces an apparent dilemma: the Error Thesis and the Truth Thesis seem incompatible: either (i) all ideas successfully represent and nobody ever errs or (ii) error occurs and not all ideas are true.[1]

It is not my aim to solve Spinoza's general problem of error.[2] Instead, I will examine the problem of error as it pertains specifically to ideas about possibility and contingency. Spinoza is a

[1] Bennett discusses the problem in depth. See his (1984: 168-84; 1986; 2001: ch.10).

[2] I suspect that the problem of error results from the tendency to interpret Spinoza's theory of truth as a correspondence theory. There is strong reason, both textual and theoretical, to think that he instead endorses something like a coherence theory of truth. If truth is about coherence between ideas, then the mere fact that an idea corresponds to an object is insufficient for its being true. See Walker (1985) and Curley (1994) for a discussion.

necessitarian. He famously claims that "in nature there is nothing contingent, but [*sed*] all things have been determined from the necessity of the divine nature to exist and produce an effect in a certain way" (E1p29). This strongly suggests that all ideas about possibility and contingency are, in *some* important sense, mistakes. The challenge for interpreters is to characterize the nature of these mistakes and to do so in a way that is consistent with Spinoza's commitment to the Truth Thesis.

Towards this end, I will argue that Spinoza endorses a *projectivist* theory of possibility. When a person forms an idea about possibility or contingency, the idea represents first and foremost something in the body, namely an image. The mind then "spreads" particular features of the idea onto things in the external world. In other words, when we form ideas of possibility and contingency, we represent the world *as if* it is has properties which are really only had by the idea. I will examine the account in much more detail below. Its chief virtue will prove to be its ability to adequately explain the nature of the mistakes that are involved in ideas about possibility and contingency. The mistake is not that such ideas fail to represent anything real, but that they poorly convey what they are intended to represent in the first place.

The chapter will proceed as follows. In the first section, I will discuss the most natural interpretation of Spinoza's views on possibility, namely that which construes him as an error theorist. I will argue that the error-theoretic interpretation fails to accommodate the Truth Thesis. In Section II, I will discuss a second, though slightly less natural, interpretation: dispositionalism. I will argue that it coheres with both the Truth and Error Theses, but that it violates the doctrine of the independence of the attributes. In section III, I will lay out the general features of a projectivist account and illustrate how projection occurs in sensation. In section IV, I will argue that the projection of possibility and contingency mirrors the form of projection in sensation. In the final

section, I will explain how necessitarianism remains a controversial philosophical thesis despite the fact that Spinoza's account of possibility is not an error theory.

I. Error Theory

Spinoza's views on possibility and contingency are not as easy to pin down as one might think. It's easy to read the *Ethics* and think to yourself: "everything is necessary and, therefore, nothing is possible or contingent." But reading it this way raises at least two problems. First, not everyone thinks that Spinoza is a necessitarian.[3] Though this debate is interesting, I will assume that Spinoza endorses a full-blown necessitarianism.[4] Second, even if we assume that he is a necessitarian, not everyone agrees that necessity and possibility are, on Spinoza's account, interdefinable. The interdefinability of possibility and necessity refers to the idea that necessity and possibility can be defined solely in terms of one another. For example, x is necessary if and only if not-x is not possible. Similarly, x is possible if and only if not-x is not necessary. The interdefinability of modal concepts is central to much theorizing about modality, beginning with Aristotle.[5] Most readers of Spinoza assume that he accepts it.[6] This is why he is so often interpreted

[3] I am aware of only three recent proponents of anti-necessitarian readings: Curley and Walski (1999) and Martin (2010). Less recently, Bennett (1984) argues that Spinoza is inconsistent; sometimes he advocates necessitarianism and sometimes determinism.

[4] Garrett (1991) offers what many consider a definitive defense of the necessitarian reading. Koistinen (2003) also presents a compelling argument for the stronger reading.

[5] See chapters 12 and 13 of *De Interpretation.*

[6] Newlands (2013), for instance, writes that if necessitarianism is true, "then Spinoza thinks the actual world is the only possible world" (2). Martin (2010) claims in similar fashion that "necessitarianism is the view that whatever is actual is necessary, that there is only one possible world" (26). Nadler (2011) writes that "since God's nature is necessary in itself, that nature could not possibly have been different" (87-8). Bennett (1984), too, opens his chapter on necessity with the claim that "Spinoza commits himself to the remarkable conclusion that there are no contingent truths, i.e. that this is the only possible world" (111).

as claiming that the actual world is the only possible world. But not everyone agrees.[7] If possibility and necessity cannot be defined in terms of each other, then it doesn't follow straightforwardly from necessitarianism that nothing is merely possible or contingent. As I said, it is more difficult than it seems to figure out Spinoza's exact view on the matter.

But on its face, his theory of possibility seems like an error theory. Error theory about x, in its technical sense, is the view that ascriptions of x are truth-apt, but always false. The error-theoretic interpretation is far and away the standard interpretation.[8] It reads Spinoza as claiming that there is nothing in the world which answers to the concept of possibility—it is a concept with an empty extension. Spinoza himself leaves this impression early and often. For example, in the TdIE, dated 1658, he writes:

> I call a thing impossible whose nature implies that it would be contradictory for it to exist; necessary whose nature implies that it would be contradictory for it not to exist; and possible whose existence, by its very nature, does not imply a contradiction—*but whose necessity or impossibility of existence depends on causes unknown to us, so long as we feign its existence. So if its necessity or impossibility, which depends on external causes, were known to us, we would be able to feign nothing concerning it*. C 23-4, G II 19/31-20/7, my emphasis

Had we just known better, we would have never believed in anything like possibility or contingency. In fact, Spinoza goes on to say that "if there is a God, or something omniscient, he can feign nothing at all." From God's perspective, nothing is seen as possible or contingent. Since God is omniscient, it seems to follow that nothing *is* possible or contingent.

This account reappears soon after the TdIE in the CM, Spinoza's appendix to his exposition of Descartes' *Principles*:

> A *thing* is called *possible*, then, *when we understand its efficient causes, but do not know whether the cause is determined*. So we can regard it as possible, but neither as necessary nor as impossible. If, however, we attend *to the essence of the thing*

[7] See Mason (1986) and Miller (2001).

[8] Bennett (1984: 114-5) outlines its motivations well.

> *alone, and not to its cause*, we call it *contingent*. C 308, G I/242/11-16, emphasis original[9]

Again, things are called merely possible or contingent only because we don't know enough about the causes of their existence. The account crops up again in the *Ethics*. After the initial E1p29 argument for necessitarianism, Spinoza explains that

> a thing is called contingent only because of a defect in our knowledge. For if we do not know that the thing's essence involves a contradiction, or if we do know very well that it's essence does not involve a contradiction, and nevertheless can affirm nothing certainly about its existence, because the order of causes is hidden from us, it can never seem to us either necessary or impossible. So we call it contingent or possible. E1p33s1

In all three of these works, Spinoza diagnoses an *error* or *mistake* in our beliefs about possibility and contingency. Absent these errors, we wouldn't have developed the concepts to begin with. I think the most natural reaction to these passages is to interpret Spinoza as an error theorist. Della Rocca captures this reaction well: "If, so the objection goes, necessitarianism is true, then why does it seem to us (falsely) that things could have been otherwise than they actually are? What explanation can be given for this massive error on our part?" (2008: 78).

I think that it is tempting but ultimately inaccurate to interpret Spinoza as an error theorist. It's tempting for obvious reasons: beliefs which assert a thing's possibility and contingency are mistakes. Any interpretation of Spinoza must make sense of this. But an adequate interpretation must also cohere with the Truth Thesis. The error-theoretic interpretation satisfies the first constraint at the expense of the second. Given the importance of the Truth Thesis for Spinoza, the error-theoretic interpretation should be rejected.

The Truth Thesis follows from two propositions in Part Two of the *Ethics*. First, Spinoza writes in E2p7 that "the order and connection of ideas is the same as the order and connection of

[9] Both the CM and the KV date from roughly 1661.

things" because "a mode of extension and the idea of that mode are one and the same thing, expressed in two ways." For every idea, there exists something in the physical realm which is the idea's expression in extension (and for every body, some idea which is its expression in thought). This thesis is known as parallelism and it constitutes one of the most central propositions of the *Ethics*. Second, E2p13 states that "the object of the idea constituting the human mind is the body, or [*sive*] a certain mode of extension which actually exists, and nothing else." In other words, not only is there a bodily expression for every idea, but the bodily expression functions as the primary object of the idea.[10] E2p7 and E2p13 together entail the Truth Thesis: every idea agrees with its object because every idea represents its expression in extension.

The Truth Thesis precludes the existence of extensionless or empty concepts.[11] Since concepts are ideas (E2d3), an extensionless concept would entail the existence of a mental state which lacked a corresponding physical state. Spinoza is aware of the problems that empty, or even partly empty, concepts would involve:

[10] There are probably two main motivations for E2p13. First, it coheres well with parallelism. Second, it allows for the representation of distant objects without relying on anything like action at a distance. Ideas represent distant objects in virtue of how they affect the body, the first object of representation (E2p14, E2p26).

[11] The ban on extensionless concepts also helps to explain Spinoza's preference for deflationary accounts of his philosophical terms. People call good or valuable those things which they desire and associate with an increase in power (E1app). The meanings of "goodness" and "value" are then identified with whatever it is that explains the origin of their use. Spinoza also explains the content of "purpose," "evil," "beauty," and "ugliness" with reference to their historical origins. The meaning of "evil" is identified with that which is contrary to health or to the worship of God because it was for this purpose that the term evolved. The meaning of "beautiful" is that which is conducive to health. In the TTP, Spinoza takes this line with regards to miracles. He argues that "[t]he word miracle can be understood only with respect to men's beliefs, and means simply an event whose natural cause we—or at any rate the writer or narrator of the miracle—cannot explain by comparison to any other normal event" (G III/28). Similarly, a person is a prophet because he has a vivid imagination and a gift for using it for the purposes of moral edification. In all these cases, key terms are explained by how their use is believed to have evolved. LeBuffe discusses Spinoza's focus on explaining a term's use in the context of his value theory (2010a: 166-8).

> [I]f the object of the mind were something else also, in addition to the body, then since (by 1p36) nothing exists from which there does not follow some effect, there would necessarily (by 2p12) be an idea in our mind of some effect of it. But (by 2a5) there is no idea of it. Therefore, the object of our mind is the existing body and nothing else, q.e.d. E2p13d

So if error theory were true, then the concept of possibility would lack an extension, undermining both parallelism and the Truth Thesis. Because of their importance to Spinoza's system, I think there are sufficient grounds for rejecting the error-theoretic interpretation. The concepts of possibility and contingency must represent some feature of the body.

II. Dispositionalism

A second, though slightly natural, interpretation is dispositionalism. As I use the term, dispositionalism about x is the view that there are true ascriptions of x to the extra-mental world, but that x is a property which makes essential reference to mental states. For example, dispositionalism about color is the view that tables, books, and mugs really do have color properties but that the content of these color properties depends in important ways on how they appear to color perceivers. As an interpretation of Spinoza's theory of possibility, dispositionalism grants that some extra-mental objects really are possible or contingent, but it cashes these properties out in terms of how the objects are perceived by finite minds.[12, 13]

Dispositionalism gets its primary motivation from Spinoza's definitions of contingency and possibility in Part Four of the *Ethics*:

> D3: I call singular things contingent insofar as we find nothing, while we attend only to their essence, which necessarily posits their existence or which necessarily excludes it.

[12] Dispositionalism is very much in the air during the early modern period. For instance, Descartes hints at dispositionalism about color in the *Principles*, a position later explicitly endorsed by Locke. Hobbes also construes moral properties—good and bad—in dispositionalist ways.

[13] Miller (2001) and Mason (1986) arguably both count as advocates of the dispositionalist interpretation, though they do not explicitly describe their interpretations in these terms.

> D4: I call singular things possible, insofar as, while we attend to the causes from which they must be produced, we do not know whether those causes are determined to produce them.

These definitions suggest that some things really *are* contingent. For example, my existence really is contingent because when I attend to my essence, I find nothing that which either posits or excludes my existence. Spinoza admits as much in E2a1: "the essence of man does not involve necessary existence, that is, from the order of Nature it can happen equally that this or that man does exist, or that he does not exist."

It may seem that dispositionalism is in direct violation of E1p29 and its denial of contingency. In fact, passages like E2a1, E4d3, and E4d4 are cited as evidence for anti-necessitarian readings.[14] But Spinoza often equivocates between ordinary and revisionary senses of "possibility" and "contingency." The dispositionalist is free to help herself to the distinction. According to the ordinary, metaphysical sense, contingency/possibility are categorical properties of objects themselves. When Spinoza claims in E1p29 that there is nothing contingent in nature, he is using the ordinary sense. His reason for employing the ordinary sense is obvious: this is the sense in which his contemporaries use the term. He can distance his account from theirs by denying that there is anything "in things [*in rebus*]" which answers to their account. But the ordinary sense of possibility and contingency violates parallelism: there is nothing "in things [*in rebus*]" which answers to the concept. So Spinoza is forced to develop a revisionary sense of the concept. According to the revisionary sense, possibility and necessity are properties somehow bound up with the mind's ignorance. It culminates in Spinoza's definitions of Part Four of the *Ethics*. The dispositionalist interprets those definitions in a manner that is ultimately realist. Some things really

[14] See, for instance, Bennett (1984) and Koistinen (1998).

are contingent or possible, but the property of contingency is tied up with the causal ignorance of finite minds.

Dispositionalism is an improvement over error theory because it can accommodate both the Error Thesis and the Truth Thesis. Ideas of possibility or contingency are *mistakes* because they are intimately bound up with ignorance. Only those who lack knowledge of causes ever form ideas of possibility or contingency. But ideas of possibility and contingency are still *true* in the sense that they are concepts which have an extension. They represent things in the world—everyday objects like cars, houses, etc. It's just that the properties they represent make essential reference to ignorance.

Despite these advantages, however, dispositionalism fails as an interpretation of Spinoza because it violates the doctrine of the independence of the attributes. Dispositionalism grants that my laptop, for instance, really is contingent. But this property is a relational property consisting of the fact that a finite mind cannot determine solely on the basis of the laptop's essence whether it exists or not. Notice, however, that my laptop is physical. So the dispositionalist interpretation entails that at least one of my computer's properties—namely, its contingency—can be understood only with reference to essentially mental properties about knowledge and ignorance. The dispositionalist interpretation therefore entails that there are things existing under the attribute of extension whose properties must be conceived through the attribute of thought. Spinoza disallows these sorts of cross-attribute conceptions because of his general ban on conceiving thought and extension in terms of each other. In E1p10 he argues that "each attribute of a substance must be conceived through itself" because "an attribute is what the intellect perceives concerning a

substance, as constituting its essence." Since substances are self-conceived, so too are attributes.[15] The ban on cross-attribute conceptions applies to substances and modes alike: "the modes of each attribute involve the concept of their own attribute, but not of another one" (E2p6d). So dispositionalism violates the independence of the attributes and should be rejected.

III. Projection in Sensation

Error theory and dispositionalism both have significant shortcomings as interpretations of Spinoza's theory of possibility. Error theory violates the Truth Thesis, whereas dispositional fails to cohere with the independence of the attributes. In the next section, I will defend a projectivist interpretation of possibility and contingency. I will argue that it satisfies both the Truth and Error Theses and, unlike dispositionalism, does not violate the independence of the attributes or any other key Spinozistic thesis. [16] In this section, however, I will define projectivism and argue that during sensation the mind projects ideas of secondary qualities onto external objects.

Projectivism is rather difficult to nail down in its general form. It is all too often used to refer to incompatible kinds of theories. For instance, sometimes it is represented as a kind of realism and other times as a form of anti-realism.[17] So I will not attempt to make my definition of projectivism consistent with its use in the metaethics or philosophy of mind literature. Rather, I will define it by stipulation. I hope the reader will find that it is in the spirit of how others use the term. But nothing depends on this.

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[15] See Della Rocca (1996: chs. 7-9) for a detailed discussion of the importance of Spinoza's doctrine of the independence of the attributes.

[16] To my knowledge, LeBuffe (2010a: 152-9) is the only commentator to offer a projectivist account of Spinoza. But LeBuffe's interpretation is aimed at normative and evaluative, rather than modal, terms.

[17] For instance, Craig (2000) argues for the compatibility of projectivism and realism in Hume's theory of causation. Many interpret projectivism as a kind of anti-realism or quasi-realism, e.g. Boghossian and Velleman (1989) and Blackburn (1993), respectively.

A theory of property P qualifies as a projectivist theory if and only if the following conditions three are met:

1. P is not a property of the external world (the Falsity Condition).

2. People tend to ascribe P to the external world and doing so involves a category mistake (the Category Mistake Condition).

3. Subjects who ascribe P to the external world experience the external world *as if* P were a property of it (the Phenomenology Condition).

All three conditions have a distinct purpose. First, the Falsity Condition aims to capture the intuition that projection involves an error of some sort. It will prove important for interpreting Spinoza in a way that coheres with the Error Thesis. Second, the Category Mistake condition tries to capture the distinction between mere mistakes and the more serious sorts of mistakes that occur in projection. A category mistake occurs when a property P is predicated of an object O *and* O falls within a domain of objects which are ineligible for predications of P.[18] For example, it is a category mistake to predicate truth of a table or redness of the number four. Tables can be neither true nor false and numbers cannot be colored. The Category Mistake Condition will allow Spinoza to distinguish the serious error that is involved in ideas of possibility and contingency from more mundane errors, like the error that kids make when they believe that there are dragons. Third, the Phenomenology Condition functions to distinguish an all-things-considered judgment or belief that P from an experience as if P. The distinction will prove important for making sense of what the mind does when it "spreads" itself onto the world.

One of the primary functions of the imagination is the representation of external objects. Spinoza explains that "the affections of the human body whose ideas present external bodies to us, we shall call images of things…and when the mind regards bodies in this way, we shall say that it

[18] The idea originates in Ryle (1949), though he does not define it in precisely this way.

imagines" (E2p17s). During the representation of external objects there is an affection of the body—an image—and an affection of the mind which corresponds to this image. Spinoza often refers to the latter as an "idea of the imagination." An idea of the imagination represents both the image in the body—which is the idea's expression in extension—and an external object. More precisely, the idea of the imagination represents the external object on the basis of representing the idea's expression in extension.[19] Among the features of external bodies that the mind represents are its secondary qualities, e.g. their colors, tastes, odors, and so on. The ideas which represent these features are *ideas of secondary qualities*. They serve as a relatively uncontroversial way to illustrate how projection occurs within Spinoza's framework. The basic idea is this: in the sensation of secondary qualities such as color, odor, or taste, the mind treats properties of ideas of the imagination as if they are properties of the external objects which they represent.

The Falsity Condition

I think the best way to demonstrate that sensation involves a projection of ideas of secondary qualities is to go through the three conditions for projection individually. But doing so requires that we focus on a particular property of ideas of secondary qualities which is the candidate for projection. Ideas of secondary qualities have many properties—they are finite, mental, they have duration, and so on—and not all of these properties are relevant to projection. In fact, some of the properties had by ideas of secondary qualities are shared by external objects, e.g. durational properties. I think the most natural candidate for projection in this context is the *conscious* or *qualitative* feature of ideas of secondary qualities. There are at least two reasons to

[19] There is some confusion about why the relation of the idea to its physical expression deserves the title of representation. For example, even if we represent external objects *on the basis* of how they affect our body, it does not seem to obviously follow that we *represent* our bodies in the process. See Bennett (1984: 155-8), Wilson (1999: 131-3), and LeBuffe (2010a: ch. 3) for discussion.

behind this choice. First, Spinoza is very familiar with the Cartesian account of the mind. One of the primary aims of that account is to demonstrate that nothing in the physical world resembles the formal reality of ideas. But it is only in the case of secondary qualities that we tend to think that the physical world resembles the formal reality of ideas (AT VII 75/CSM II 52). Since the formal reality of any idea is its conscious features (AT VII 160/CSM II 113), it follows that the Cartesian account is partly an attempt to disabuse people of the notion that the physical world can resemble anything like the conscious features of ideas of secondary qualities. Since Spinoza is very familiar with the Cartesian account generally, and of its treatment of secondary qualities in particular, there is reason to think he follows Descartes on this front. Second, the examples of projection that Spinoza offers in E1app make most sense when interpreted as conscious features of ideas of secondary qualities.[20] So, I will assume that the candidate property for projection is the conscious feature of ideas of secondary qualities.

The Falsity Condition follows straightforwardly from the Category Mistake Condition. That is, if attributing the conscious features of ideas of secondary qualities to the external world is confused, then doing so is false. Nonetheless, we can also demonstrate the Falsity Condition independently. Ideas in general are modes of substance understood through the attribute of thought. Because ideas of secondary qualities fall under the attribute of thought, they must be conceived independently of the attribute of extension (E1p10). There is nothing under the attribute of extension which could be conceived as conscious or thinking. So there is nothing in extension which resembles the conscious features of an idea of a secondary quality. Ideas of secondary qualities *represent* something under the attribute of thought, namely an external object, as well as a part of the human body. But the external object and the human body are both as different from

[20] That passage is discussed below.

the idea as extension is from thought. So there is nothing outside the mind which corresponds, in its intrinsic nature, to the conscious features of an idea of a secondary quality.

The Category Mistake Condition

A category mistake is a judgment that is not only false, but, due to an ontological mismatch between subject and predicate, never stood a chance of being true. Spinoza seems aware of the general distinction between mere mistakes and category mistakes. For example, in a letter to van Blyenbergh, he writes that

> since theology has usually… represented God as a perfect man, it is therefore natural to say that God desires something, that God is displeased with the deeds of the impious and pleased with those of the pious. But in philosophy, where we clearly understand that to ascribe to God those attributes which make a man perfect would be as wrong to ascribe to a man the attributes that make perfect an elephant or an ass, these and similar words have no place, and *we cannot use them without utterly confusing our concepts*. Ep23. S 166, emphasis added

In order to represent God as morally perfect, one must represent him as having desires for what is good and a potential for pleasure and displeasure. But desire and pleasure are modes of thought that do not pertain to God insofar as he is a substance and so "we cannot say that God wants something from somebody, or that something is pleasing or displeasing to him" (ibid.). The mistake that van Blyenbergh makes is more than just an error—it is what Spinoza calls a confusion of concepts (in this case the concepts of substance and mode). A mere mistake requires only mismatch between representational content and the world. But a confusion of concepts entails that the representational content is of the wrong sort to begin with.

So Spinoza is aware of the general distinction between mere mistakes and category mistakes. The idea that sensation in particular involves a category mistake is present throughout much of Descartes' work, which Spinoza was familiar with. For example, in the *Principles*, Descartes writes:

> So that we may distinguish what is clear from what is obscure, it must be carefully noted that pain and color and the like are clearly and distinctly perceived when they are considered as nothing more than sensations or thoughts. When, however, these are judged to be things existing outside our mind, there can clearly be no way of understanding what they are. AT VIIIA 33, CSM I 217

In this context, pain and color are phenomenal properties, i.e. properties which exist only insofar as one is consciously aware of them. Due to our reliance on sense perception from childhood on, the mind tends to think that phenomenal properties belong to material objects. For example, when I prick my finger I judge that the pain is in my hand, and when I look at the book on my desk I judge that the blue is on the surface of the book. But a clear and distinct perception of mind and body informs me that pain and blue are properties only of the mind and not of the material world. The essence of matter is pure extension, so it cannot be pained or colored. We commit a category mistake, in Descartes' view, when we suppose that phenomenal properties are actually properties of matter.[21]

Spinoza is explicit in his agreement with Descartes here. We can interact with external bodies in sensation only because "the human body is affected by external bodies [which] involve the nature of the human body and at the same time the nature of the external body" (E2p16).[22] But the mind has the unfortunate habit of thinking that the overlap in natures is greater than it really is: "the ideas which we have of external bodies indicate the condition of our own body more than the nature of the external bodies" (E2p16c2). External bodies, after all, do not have the exact same natures as the human body. If they did have the exact same natures, then the external body and the human body would be the same thing (E2d2). At the end of E2p16c2, Spinoza refers the reader to

[21] *That* we commit this mistake is due in part to the material falsity of ideas of secondary qualities (AT VII 43-4/CSM II 30).

[22] This follows from Spinoza's earlier claim that causation requires that the cause and effect have something in common (E1p3).

E1app for examples of how the mind exaggerates what the human body has in common with other bodies:

> [good, evil, order, beauty, ugliness, etc.] are also *nothing but modes of imagining, by which the imagination is variously affected; and yet the ignorant consider them the chief attributes of things*, because…they believe all things have been made for their sake, and call the nature of a thing good or evil, sound or rotten and corrupt, as they are affected by it. For example, if the motion the nerves receive from objects is conducive to health, the objects by which it is caused are called beautiful; those which cause a contrary motion are called ugly. Those which move the sense through the nose, they call pleasant-smelling or stinking; through the tongue, sweet or bitter, tasty or tasteless; through touch, hard or soft, rough or smooth, and the like; and finally, those which move the ears are said to produce noise, sound, or harmony…*All these things show sufficiently that each one has judged according to the disposition of his brain; or rather, has accepted affectations of the imagination as things.* So it is no wonder…that we find so many controversies to have arisen among men, and that they have finally given rise to skepticism. For although human bodies agree in many things, they still differ in very many. And for that reason what seems good to one, seems bad to another; what seems ordered to one, seems confused to another; what seems pleasing to one, seems displeasing to another, and so on…That is why we have such sayings as "So many heads, so many attitudes," "everyone finds his own judgment more than enough," and "there are as many differences of brains as of palates." These proverbs show sufficiently that *men judge things according to the disposition of the brain, and imagine, rather than understand them…We see, therefore, that all notions by which ordinary people accustomed to explain Nature are only modes of imagining, and do not indicate the nature of anything, only the constitution of the imagination*. Emphasis added

The discussion initially concerns how we mistake features of our *bodies* for features of external bodies. But Spinoza's examples—tastiness, pleasure, etc.—suggest that the confusion also involves features of our *minds*. This is likely because the human mind does not know its body well (E2p27). When we sense external bodies, we judge that they possess features of our own bodies, as well as features of our minds which correspond to those features of our bodies.[23] In the sensation

[23] The fact that Spinoza lumps purposefulness in with sensations further supports this claim. Traditionally, teleology or purposefulness was understood to require intentionality on the part of its cause (Ott 2009: 90-2). This is what leads Descartes to mock the Aristotelians as positing "little minds" in objects when they posit final causes (Letter to Mersenne, AT III 648/CSMK 216). By lumping purposefulness in with sensations, Spinoza is suggesting that we attribute *mental* features to the external world we sense it.

of secondary qualities, we mistakenly attribute to the world properties which are really just properties of ourselves, e.g. sensory ideas of odor, taste, and color. But these features are not properties which the external world is even eligible to have. Hot stoves are not candidates for feelings of displeasure, raspberries are not candidates for sensations of sweetness, and tables are not candidates for sensations of hardness.

The Phenomenology Condition

Projection involves some sort of spreading of the mind onto the world. In order to give this metaphor some substance, the phenomenological component associated with a projection of P needs to extend beyond by the phenomenology associated with an all-things-considered judgment that P. It is not all that easy to make this distinction within Spinoza's framework. Bennett expresses his doubts when he writes that "Spinoza holds as a matter of doctrine that all mental states approximate to the nature of belief, so that he cannot deeply distinguish depicting something as F from believing it to be F" (1984: 158). The mind is just beliefs, all the way down. Nonetheless, we can still mark a difference between a representation as if—i.e. depicting—and belief, even if it is not a deep or fundamental one. In other words, Spinoza can distinguish a representation as if P from a mere belief that P even if the difference is not grounded in two fundamentally different kinds of mental states.

In order to defend this distinction, I must clarify in what sense beliefs and representations have any phenomenological components in the first place. There are at least two distinct concepts that go by the name *phenomenology* and one of them is straightforwardly incompatible with Spinoza's theory of the mind. The first concept refers to the purely qualitative features of a given mental state, e.g. the unpleasantness of pain or the brightness of sensations of yellow. This concept of phenomenology fits in most easily with the Cartesian account of the mind, according to which

the essence of thought consists in conscious awareness (AT VII 160/CSM II 113). But Spinoza intends to replace the Cartesian account with one according to which thought is essentially representational.[24] He claims that "the first thing which constitutes the actual being of the human mind is nothing but the idea of a singular thing which actually exists" (E2p11). So, the most salient difference between the mental and the physical doesn't lie in the consciousness of the mind, but in its basic capacity to be *about* things.[25] Mental states are, at bottom, representations. If the existence of phenomenology requires the existence of purely qualitative or nonrepresentational features of mental states, then it is something which Spinoza must reject. The mind's essence is the representation of actual existents and so there are no features of mental states which don't involve some sort of representational content.

But phenomenology can also refer to the "what it's like" character of conscious mental states. The phenomenology of pain, for instance, refers to what it's like to be in pain and the phenomenology of yellow refers to what it's like to look at the sun. For some, the second concept of phenomenology reduces to the first: what it's like to experience pain is to be aware of a purely qualitative unpleasant feeling. Spinoza rejects this reduction because he denies the existence of any purely qualitative features of the mental. But he nevertheless retains a concept of consciousness. We are not automata, after all. He claims, for example, that "desire can be defined as appetite together with consciousness [*conscientia*] of that appetite" (E3p9s) and he includes as an axiom that "we feel [*sentimus*] that a certain body is affected in many ways" (E2a4). He and Descartes disagree about how to characterize this feature, but they nevertheless agree that

[24] See Bennett (1984: 155), Simmons (2001: 43), and Della Rocca (1996: ch. 1; 2008: ch. 3).

[25] Bodies—e.g. a map—can be about things, but their capacity is derived from the capacity of minds.

something stands in need of characterization.[26] So Spinoza can accommodate the concept of phenomenology as long as we use it to refer to the "what it's like" component of conscious mental states and remain neutral about its ontological underpinnings.

Spinoza aims to explain the phenomenology of conscious mental states in terms of their representational content. Two mental states possess distinct phenomenological components if and only if they possess distinct representational content, e.g. one represents x and the other y. Spinoza can talk about distinct representational contents—and therefore distinct phenomenological components— existing within a single mind only because the human mind, like the human body, is a composite individual which is composed of other composite individuals:

> The idea that constitutes the formal being of the human mind is not simple, but composed of a great many ideas. The idea that constitutes the formal being of the human mind is the idea of a body (by P13), which (by Post. 1) is composed of a great many highly composite individuals…Therefore (by P7 [parallelism]), the idea of the human mind is composed of these many ideas of the parts composing the body, q.e.d. E2p15, E2p15d

Each of these ideas represents, first and foremost, the goings-on of its bodily counterpart, namely the motion or rest of that body (E3p2, E5pref, E1p32c2). These kinetic properties then function to ground a representation of the external world because it is through a collision with other bodies that our body interacts with the outside world. So each idea represents the motion of its bodily

[26] Nadler interprets Spinoza as a representationlist, but he writes: "Spinoza, I believe, does take this challenge [of explaining consciousness] seriously, more so than anyone else of his time" (2008: 467). His remark would be flatly contradictory if representationalism entailed the non-existence of phenomenology. In this way, the disagreement between Descartes and Spinoza is similar to that of contemporary representationalists and qualia realists. Advocates of both positions take themselves to be explaining the character of experience. But if representationalists denied that there is a phenomenology unique to experience, then they wouldn't describe their view as a rival to qualia realism. See, for example, Tye (2002: 141-2) and Kind (2008: 285-6).

expression and, through that motion, external objects.[27] When the kinetic properties of the parts of the human body differ amongst each other (E2a2*), the representational content of their ideas also differ. For instance, when I hold two very different objects in each hand, the representational content of my hand-ideas differs because the kinetic properties of my hands differ. The entire human mind—which is the aggregate of all these little minds consists of an aggregate of the various reports coming from different parts of its mind. This aggregate mind corresponds to the entire human body. The most salient kinetic property of the entire human body is its fixed pattern of motion (E2lem7), which acts as the bodily counterpart to an all-things-considered judgment.[28]

Sensation is one form of imagistic representation. When the imagination grounds a person's overall judgment, the phenomenological components of sensation and of an all-things-considered judgment overlap. But the two can come apart when the representational content of an all-things-considered judgment conflicts with the content of an image:

> For example, when we look at the sun, we imagine it to be about 200 feet away from us. In this we are misled so long as we remain ignorant of its true distance. But when its distance is learned, the error is removed, not the imagination, i.e., the idea of the sun that explains its nature only insofar as the body is affected by it. And so, although we come to know its true distance, we shall nevertheless imagine it as near to us. For as we have said in 2p35s, we do not imagine the sun to be near just because we are ignorant of its true distance but because the mind conceives the sun's size insofar as the body is affected by the sun. Thus, when the rays of the sun falling upon the surface of the water are reflected toward our eyes, we imagine it just as if it were in the water, even if we know its true place. E4p1s

The defective content of the image is not dissolved in the presence of a true idea, but merely overruled.[29] As a result, my experience of the sun is such that it appears to me *as if* it is only 200 feet away. It appears this way even if I know, and therefore believe, that it is not 200 feet away.

[27] See Nadler (2008) for a more detailed account of this phenomenon.

[28] Cf. Garber (1994: 58).

[29] See E2p17s for a discussion of why the content of the image remains.

The "as if" refers to the phenomenological leftovers of the image's content. It is like thinking to myself "P, definitely P," but continuing to hear little voices shouting "~P!" I know that the little voices are mistaken, but they nonetheless continue to make themselves heard. So there are at least two sources of phenomenology, viz. that of the image and that of the true idea. Imagistic representation therefore has a phenomenology that is not reducible to the phenomenology of an all-things-considered judgment.[30]

The upshot of the preceding discussion is that the representation involved in ideas of secondary qualities has its own phenomenology and it cannot be reduced to the phenomenology of belief. For example, the experience one has when looking at a blue sky cannot be reduced to a belief that the sky is blue. Why? Because we can have the experience *even if* we believe that the sky is not in fact blue. As a result, we experience the world *as if* objects are colored, *as if* surfaces are hard or cold, *as if* food is tasty, and so on. The world seems to us infused with properties which are ultimately only properties of our own minds. Furthermore, the feature of the idea which affects the phenomenology of my experience is precisely the feature that explains the category mistake present in sensation, viz. tastiness, pleasure, feelings of cold, etc. In summary, ideas of secondary qualities meet the requirements of a projectivist theory.

IV. The Projection of Possibility

In this section I will lay out a case for interpreting Spinoza's theory of possibility along the same projectivist lines as ideas of secondary qualities. First, I will argue that the Truth Thesis commits Spinoza to the view that ideas about possibility represent first and foremost something in the body, namely an image which prevents a representation of its causes. Second, I will explain

[30] This line of reasoning mirrors the kind employed in order to demonstrate that sensory perception is not the same as belief. For instance, my sensory perception of a pink elephant during a hallucination persists even after my belief that there is a pink elephant disappears.

how the mind projects its own causal ignorance onto the world and represents it as possible or contingent. Lastly, I will outline two ways in which ideas of possibility and contingency qualify as category mistakes.

The Falsity Condition

The Falsity Condition states that the projected property does not really exist in the external world. As we've seen, this should not be interpreted to mean that the concept of possibility is *empty*. The Truth Thesis requires that ideas represent first and foremost something in the body. So, even ideas of possibility successfully represent something in the body. But it remains to be determined *what* exactly in the body they represent. Ideas differ from each other insofar as they represent different features of the body. They must represent something more specific. It helps to remember that they are bound up with causal ignorance and that ignorance of any kind occurs only as the result of the imagination (E2p40). So ideas of possibility likely represent some feature of bodily images, viz. whatever feature precludes causal information.

In E2p28d, Spinoza compares ideas of the imagination—the mental expression of images—to "conclusions without premises." The metaphor is rather apt. An idea follows from its cause in a manner similar to how conclusions follow from their premises. In other words, the cause necessitates the idea much in the way that premises necessitates a conclusion: "from a given determine cause the effect follows necessarily; and conversely, if there is no determinate cause, it is impossible for an effect to follow" (E1a3). Ideas of the imagination are like conclusions without premises precisely because they lack full information about the causes of their objects. When an idea of the imagination represents an image, it does so without representing how the order of nature led up to it. Similarly, ideas of ideas of the imagination represent ideas of the imagination without representing their causes. As Bennett puts it, in imagination there is a bump which disrupts the

mind's representation of its environment's causal flow (1984: 163). If ideas of the imagination were adequate, then they would contain full information about how images were caused. Adequate ideas always count as knowledge and "knowledge of an effect depends on, and involves, the knowledge of its cause" (E1a4).[31] So if ideas of possibility are tied up with causal ignorance, then they seem to constitute a feature of ideas of the imagination. Which feature? The feature which fails to represent the causes of images.[32]

Construing ideas of possibilities as features of ideas of the imagination coheres with both the Truth and Error Theses. An idea of possibility is *true* because it represents something in the physical realm, namely an image. But the idea is also an error because images have sufficient causes, contrary to how the idea represents it. As E2p36 states, "inadequate and confused ideas follow with the same necessity as adequate, or clear and distinct ideas." Since all ideas have sufficient causes, so too do the objects of those ideas. So images have sufficient causes despite the fact that ideas of possibility represent them as uncaused.[33] Since there is nothing in the world that is uncaused, the Falsity Condition is satisfied.

The Phenomenology Condition

If Spinoza's account qualifies as projectivist, then the causally ignorant among us experience the world *as if* it contains possibility/contingency. In general, as I argued in the previous section, the extra phenomenology component underlying as-if representation is just the

[31] Spinoza thus endorses a causal constraint on knowledge. For any idea to count as knowledge, one must know its cause (and its cause's cause). Della Rocca defends the causal constraint well (1996: 70).

[32] Bennett (1984) argues, fairly convincingly in my opinion, that Spinoza's account of error is motivated in part by a desire to avoid positing any fundamentally negative facts, e.g. misrepresentations. Error must ultimately bottom out in incomplete representations (168-84).

[33] More specifically, the concept of *contingency* fails to represent the causes of things (E4d3), whereas the concept of *possibility* fails to represent whether a cause determines its effect (E4d4).

representational content of an idea which persists even after an all-things-considered judgment rejects that content as false. Similarly in the case of possibility: "it depends only on the imagination that we regard [*contemplemur*] things as contingent" (E2p44c1). We experience the world as contingent as a result of the imagination. But the process behind this representation of contingency requires explication. After all, imagistic representation seems to contain no modal information—it represents only what is the case, as opposed to what could be the case. Kant, for instance, famously denies that intuitions provide any cognition beyond what is actual.[34] Fortunately, Spinoza is in fact quite explicit about the process: we represent the world as contingent as the result of the association of ideas.

Ideas of the imagination represent first and foremost their expression in extension. But they also represent external objects which cause a change in the body, as well as anything which the imagination associates with those objects: "if the human body has once been affected by two or more bodies at the same time, then when the mind subsequently imagines one of them, it will immediately recollect the others also" (E2p18). For example, I represent coffee by bringing the liquid to my lips, the vapors to my nostrils, etc. The mind can directly represent only those bodies which cause changes in the human body (e.g. the coffee that touches my tongue). But if I drink coffee only whenever the sun rises, then I will begin to associate coffee with sunrises and I will imagine the sunrise whenever I imagine the taste or smell of coffee. This association of ideas is a form of indirect representation. Once the associative mechanisms run their course, representation develops multiple layers and comes to include more than just whatever actually bumps up against the human body.

[34] *The Critique of Pure Reason* (B edition: 3-4).

Perhaps initially the association occurs as the result of an inference. But eventually it becomes automatic and the associated object becomes a part of the content of representation:

> And from this we clearly understand why the mind, from the thought of one thing, *immediately passes to the thought of another*, which has no likeness to the first: as, for example, from the thought of the word "pomum" a Roman will immediately pass to the thought of the fruit, which has no similarity to that articulate sound and nothing in common with it except that the body of the same man has often been affected by these two, that is, that the man often heard the word "pomum" while he saw the fruit…And so each one, according as he has been accustomed to join and connect the images of things in this way or that way, will pass from one thought to another. E2p18s, emphasis added

Once the association is sufficiently strong, we tend to look right through the direct content to the indirect content. For example, when we represent the squiggles "pomum," we don't even notice doing so but instead pass straight to the representation of apples.[35] This indirect content of representation varies from person to person, depending on their past experiences:

> And in this way each of us will pass from one thought to another, as each one's association has ordered the images of things in the body. A soldier, having seen traces of a horse in the sand, will immediately pass from the thought of a horse to the thought of a horseman, and from that to the thought of war, and so on. But a farmer, will pass from the thought of a horse to the thought of a plow, and then to that of a field, and so on. And so each one, according as he has been accustomed to join and connect the images of things in this way or that way, will pass from one thought to another. Ibid.

Spinoza utilizes the mechanism behind the association of ideas to explain how imagistic representation involves a representation of contingency:

> Let us suppose, a child, who saw Peter for the first time yesterday, in the morning, but saw Paul at noon, and Simon in the evening, and today again saw Peter in the morning. It is clear from P18 that as soon as he sees the morning light, he will immediately imagine the sun taking the same course through the sky as he saw on the preceding day, or [*sive*] he will imagine the whole day, and Peter together with

[35] Similarly, Descartes writes in the opening chapter of *Le Monde*: "Words…bear no resemblance to the things they signify, and yet they make us think of these things, frequently even without our paying attention to the sound of the words or to the syllables. Thus it may happen that we hear an utterance whose meaning we understand perfectly well, but afterwards we cannot say in what language they were spoken" (AT XI 4/CSM I 81).

> the morning, Paul with noon, and Simon with the evening…But if it should happen at some time that on some other evening he sees James instead of Simon, then on the following morning he will imagine now Simon, now James, together with the evening time, but not both at once. For it is supposed that he has seen one or the other of them in the evening, but not both at once. His imagination, therefore, will vacillate and he will imagine now this one, now that one, with the future evening time, that is he will regard neither of them as certainly future, but both of them as contingently future. E2p44s

The general phenomenon seems to be the following. A particular mind, over the course of its history, represents external object O without representing its causes. Furthermore, it represents O as sometimes being accompanied by A and sometimes by B. The mind comes to associate O with both A and B. But A and B are incompatible with one another, so the mind cannot imagine them accompanying O simultaneously. Thus, it enters a state of limbo. Whenever it imagines O, it does not know whether it is A or B that accompanies it. It expects that one of them will be present, but it lacks the causal information to tell which. The mind then projects this uncertainty onto the object itself. The projection of uncertainty is the representation of contingency. Spinoza cites E2p18s in his E2p44s argument. This suggests that he intends the representation of contingency to be understood as a form of indirect representation. Perhaps we initially represent objects as contingent as the result of an inference. But eventually the representation becomes automatic and our perception of the world is infused with contingency. We see right through the history of associations and see only the contingency.

The phenomenology of action illustrates the how the process works. Opponents of necessitarianism sometimes object to it on the basis of apparent introspective evidence. When we introspect during the performance of seemingly free actions, the objection goes, we find a certain feeling of freedom. We don't merely infer that they are free—rather, the phenomenology of the actions suggests their freedom. For instance, Descartes argues that we "experience [*experimur*] within us the kind of freedom which enables us always to refrain from believing things which are

not completely certain" (AT VIIIA 6/CSM I 194). It is not sufficient for Spinoza to point out that the feeling of freedom is compatible with necessitarianism. The onus is on him to explain why there is a phenomenology of freedom to begin with. In E2p35s, he writes:

> Men are deceived in that they think [*putant*] themselves free [NS: i.e. they think that, of their own free will, they can either do a thing or forbear doing it], an opinion which consists only in this, that they are conscious of their actions and ignorant of the causes by which they are determined. This then is their idea of freedom—that they do not know any cause of their actions.

The passage initially reads like an explanation of a *belief* that one is free. But Spinoza presents the example of human action alongside the example of the image of the sun. We already saw that the image of the sun has a phenomenology distinct from that of a mere belief. So it is likely that human action has its own phenomenology as well, also distinct from a mere belief. Spinoza can explain this phenomenology of freedom by means of the association of ideas. The first time an action is performed, it lacks any associations:

> In 2p18s we showed the cause why the mind, from considering one thing, immediately passes to the thought of another—because the images of these things are connected with one another, and so ordered that one follows the other. This, of course, cannot be conceived when the image of the thing is new. Rather the mind will be detained in regarding the same thing until it is determined by other causes to think of other things. E3DAIV

But over time I come to form associations which ultimately lead to a feeling of freedom. For example, as an adult, I experience a feeling of freedom when I refrain from snapping at my friend. I feel free in doing so because I have a history of associating anger with both impulse and resolve. Sometimes when I'm angry I lose patience and snap at my friends. Other times I bite my lip. As a child I had no feeling of freedom because I lacked a history of associating anger with both resolve and impulse. Without this dual association there is no basis for a feeling of freedom. With time, I came to experience cases when my anger was coupled with restraint, and other cases when my

anger led to an outburst. After enough of these experiences, the association of anger with a mixed history of reactions became automatic. Only then did I come to experience myself as free.

Since the perception of contingency just is the projection of a history of distinct and mutually exclusive associations, this process generalizes to cases beyond action. For example, when I look out the window at the building across the street, I represent it as contingent. I've seen many buildings in the past. Some tall, some short, some made of brick, others of wood, and so on. So I come to associate buildings with all sorts of designs and materials. I've seen enough buildings in my life for the association to be automatic. There is no inference—the building *appears* to me as contingent. Furthermore, associations sometimes vary from person to person (E2p18s). I might represent the contingency of certain objects more strongly than others if the associative history underlying them is richer. But since I am ruled by the imagination, my entire life is seen through the lens of contingency.

The Category Mistake Condition

The phenomenon of projection arguably involves some sort of category mistake. Rotten food is the wrong sort of thing to be disgusting, at least in the sense of possessing an intrinsic grossness. Similarly, cakes are the wrong sort of thing to be intrinsically delicious. Ideas of possibility involve potentially two distinct category mistakes or "conceptual confusions": a confusion of modes with substance and a confusion of thought with extension. The confusion of modes with substance is perhaps the greatest mistake one can make in Spinoza's framework. It is the confusion that Spinoza accuses van Blyenbergh of and he also warns specifically against it in the *Ethics.* For example, in E1p15s, he argues that philosophers err in their judgment that matter is divisible precisely because they confuse the divisibility of material modes with the divisibility

of material substance.[36] The projection of possibility or contingency is just the projection of causal ignorance. But causal ignorance is a feature of finite modes. So when possibility or contingency is attributed to substance, the result is a category mistake. For example, when the theist claims in E1p17s1 that God could have acted otherwise than he did, she is projecting her causal ignorance onto God (though she doesn't recognize it as such). In doing so, she attributes to God what is really just a feature of modes.

The second category mistake consists in a confusion of thought with extension. When a person attributes possibility to physical objects, he projects a feature of mental modes—ignorance—onto non-mental objects. In doing so, he confuses the mental and the physical. For example, I often think to myself that it's possible that my car break down today. Even if it survives the day, I still think it could have broken down and that I merely got lucky. But my car is a physical mode under the attribute of extension. So my belief that it's possible for my car to break down today is as confused as if I were to believe that ideas are square-shaped or that my sensation of pleasure has mass.

[36] "If someone should now ask why we are, by nature, so inclined to divide quantity, I shall answer that we conceive quantity in two ways: abstractly, or superficially, as we imagine it, or as substance, which is done by the intellect alone. So if we attend to quantity as it is in the imagination, which we do often and more easily, it will be found to be finite, divisible, and composed of parts; but if we attend to it as it is in the intellect, and conceive it insofar as it is a substance, which happens with great difficulty, then (as we have already sufficiently demonstrated) it will be found to be infinite, unique, and indivisible. This will be sufficiently plain to everyone who knows how to distinguish between the intellect and the imagination—particularly if it is also noted that matter is everywhere the same, and that parts are distinguished in it only insofar as we conceive matter to be affected in different ways, so that its parts are distinguished modally, but not really."

IV. Necessitarianism and Projectivism

The general problem of error is the problem Spinoza faces in trying to explain how the Truth and Error Theses are compatible. The specific, modal version of the problem is one of explaining how ideas of possibility are mistakes without jeopardizing the Truth Thesis. I argued that error theory fails as an interpretation of Spinoza precisely because it violates the Truth Thesis. But once we reject error theory as an interpretation, necessitarianism seems to lose some of its bite. Ideas of possibility are true, after all. This might strike some as a bad result. Spinoza delayed the publication of the *Ethics* because of its necessitarianism, so he obviously knew that it is a controversial thesis.[37] Any interpretation needs to explain its controversy.

On the standard interpretation, necessitarianism is a controversial thesis because it entails that people rely heavily on a concept with an empty extension. They think that some things are possible, but nothing is. On my interpretation, the error lies elsewhere. The concept of possibility has an extension and is therefore a useful concept with the potential to faithfully represent reality, at least to an extent. But people nonetheless err when they form ideas of possibility because ideas of possibility conceal their own representational content. In other words, people are ignorant of what their concept of possibility really is.

We can get at the distinction between the two kinds of errors through a comparison with Hume's account of the idea of necessary connection. According to Hume, philosophers err in their

[37] In Ep75, he responds to a letter from Henry Oldenburg, Secretary of the Royal Society: "I see at last what it was that you urged me not to publish. However, since this is the principal basis of all the contents of the treatise which I had intended to issue, I should here like to explain briefly in what way I maintain the fatalistic necessity of all things and actions." It is likely that Spinoza's audience would interpret his necessitarianism in light of the Interdefinability Thesis. Leibniz reads it that way and he might be the most careful reader of Spinoza in the early modern period. So Spinoza's awareness of his audience could potentially explain why he delayed publication of the *Ethics.* Furthermore, Spinoza often read people well. He was astute enough to know not to trust Leibniz (Ep72; S 331).

beliefs about necessary connection. But their error is not the simple error of claiming that necessary connections exist when they do not. The error instead lies in the way in which they characterize the *content* of ideas of necessary connection. They characterize the idea of necessary connection as representing some real relation holding between objects. But this is not its content. Rather, the idea of necessary connection represents a feeling of expectation. It is the feeling that a person gets when an object makes an impression on her after she's become accustomed to seeing that object constantly conjoined with another object. Hume does not deny that there are things in the world which fall under the concept of necessary connection. Rather, he argues that philosophers are just mistaken about the content of the concept to begin with. It is a concept about the goings-on of the mind and not about a real relation out there in the world.[38]

If Spinoza's account of possibility merits the comparison with Hume, then necessitarianism retains its controversy. The concept of possibility is a concept whose content is an image in the body and not some metaphysical sticker that can be applied directly to objects. The non-necessitarianism of Leibniz et al is therefore not so much false as *confused*. Leibniz et al will no doubt deny this charge. So Spinoza's necessitarianism is still a very bold thesis despite the fact that he is not an error theorist.

[38] Like Spinoza, Hume's own commitments push him towards this revisionist view. Hume's Meaningfulness Principle states that propositions are meaningful only if there are impressions corresponding to the terms being used: "when [one] suspects that any philosophical term has no idea annexed to it (as is too common) he always asks *from what impression that pretended idea derived?* And if no impression can be produced, he concludes that the term is altogether insignificant (648-9, emphasis original). So if the extension of 'necessary connection' were merely empty, then it would not be meaningful. But no meaningless statement is truth-apt. So Hume cannot be an error theorist about *anything*, let alone about necessary connection. So, if Hume's account is meant to refer to something other than feelings of expectation, then it is an account without any meaning. See Marusic (2014) for a discussion of how the Meaningfulness Principle motivates a projectivist account of necessary connection.

Bibliography

Bennett, Jonathan. *A Study of Spinoza's Ethics*. Indianapolis: Hackett Publishing, 1984.

---. *Learning from Six Philosophers: Volume 1*. New York: Oxford University Press, 2001.

---. "Spinoza on Error." *Philosophical Papers* 15 (1986): 59-73.

Berkeley, George. *An Essay Towards a New Theory of Vision*. New York: The Bobbs-Merrill Company, 1963.

Blackburn, Simon. *Essays in Quasi-Realism*. Oxford: Oxford University Press, 1993.

Boghossian, Paul and David Velleman. "Color as a Secondary Quality." *Mind* 98 (1989): 81-103.

Craig, Edward. "Hume on causality: Projectivist *and* realist?" In R. Read and K. Richman (eds.), *The New Hume Debate*. London: Routledge, 2000: 113-121

Curley, Edwin, and Gregory Walski. "Spinoza's Necessitarianism Reconsidered." In *New Essays on the Rationalists*, edited by R Gennaro and C. Huenemann, 241-62. Oxford: Oxford University Press, 1999.

Curley, Edwin. "Spinoza on Truth." *Australasian Journal of Philosophy* 72 (1994): 1-16.

Copenhaver, Rebecca. "Thomas Reid on Acquired Perception." *Pacific Philosophical Quarterly* (91), 2010.

Della Rocca, Michael. *Representation and the Mind-Body Problem in Spinoza*. Oxford: Oxford University Press, 1996.

Garrett, Don. "Spinoza's Necessitarianism." In *God and Nature in Spinoza's Metaphysics*, edited by Yirmiyahu Yovel, 191-218. Leiden: E.J. Brill, 1991.

Hume, David. *A Treatise of Human Nature.* Ed. by L.A. Selby-Bigge, Second Edition. Oxford: Oxford University Press, 1978.

Kant, Immanuel. *Critique of Pure Reason*. Trans. by Paul Guyer and Allen Wood. Cambridge: Cambridge University Press, 1998.

Kind, Amy. "How to Believe in Qualia," in *The Case for Qualia*, (ed) Edmond Wright. Cambridge, MA: MIT Press, 2008: 285-98.

Koistinen, Olli. "Spinoza's Proof of Necessitarianism." *Philosophy and Phenomenological Research*, 66, no. 2 (2003): 283-310.

---. "On the Consistency of Spinoza's Modal Theory." *The Southern Journal of Philosophy* 36 (1998): 61-80.

LeBuffe, Michael. *From Bondage to Freedom: Spinoza on Human Excellence*. Oxford: Oxford University Press, 2010.

---. "Theories about Consciousness in Spinoza's *Ethics*." *The Philosophical Review* 119 (2010): 531-63.

Leibniz, G.W. *Theodicy*. LaSalle, Illinois: Open Court Publishing Company, 1985.

Marshall, Eugene. "Spinoza's Cognitive Affects and their Feel." *British Journal for the History of Philosophy* 16 (2008): 1-23.

Martin, Christopher. "The Framework of Essences in Spinoza." *British Journal for the History of Philosophy* 16 (2008): 489 – 509.

---. "A New Challenge to the Necessitarian Reading of Spinoza." *Oxford Studies in Early Modern Philosophy*, Volume V. Ed. by Daniel Garber and Steven Nadler. Oxford: Oxford University Press, 2010.

Marusic, Jennifer Smalligan. "Hume on the Projection of Causal Necessity." *Philosophy Compass*, 2014.

Mason, Richard. "Spinoza on Modality." *The Philosophical Quarterly*, Vol. 36, No. 144 (Jul., 1986), pp. 313-342.

McDowell, John. "Values and Secondary Qualities." In *Morality and Objectivity*, ed. Ted Honderich. London: Routledge, 1984. 110-129

Miller, Jon. "Spinoza's Possibilities." *The Review of Metaphysics*, Vol. 54, No. 4 (Jun., 2001), pp. 779-814.

Nadler, Steven. "Spinoza and Consciousness." *Mind* 117: 575-601.

Newlands, Samuel. "Spinoza's Modal Metaphysics." *The Stanford Encyclopedia of Philosophy* (2013), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/win2013/entries/spinoza-modal/>.

Ott, Walter. *Causation and Laws of Nature in the Early Modern Philosophy*. Oxford: Oxford University Press, 2009.

Reid, Thomas. *Inquiry and Essays*. New York: the Bobbs-Merrill Company, 1975.

Ryle, Gilbert. *The Concept of Mind*. Chicago, Illinois: the University of Chicago Press, 2000 [1949].

Spinoza. *The Collected Works of Spinoza*, volume I. Translated by Edwin Curley. Princeton: Princeton University Press, 1985.

Spinoza. *The Letters*. Translated by Samuel Shirley. Indianapolis: Hackett, 1995.

Tye, Michael. "Representationalism and the Transparency of Experience." *Nous* 36 (2002): 137-51.

Walker, Ralph. "Spinoza and the Coherence Theory of Truth." *Mind* 94 (1985): 1-18.

Ward, Thomas. "Spinoza on the Essences of Modes." *British Journal for the History of Philosophy*, Volume 19, Issue 1, January 2011, pp. 19-46.

Wilson, Margaret. *Ideas and Mechanism.* Princeton, NJ: Princeton University Press, 1999.

Chapter 2: Spinoza and Modal Reasoning

Spinoza's necessitarianism poses a number of problems. One problem involves the world's apparent contingency: if everything happens necessarily, then why does so much of what we experience seem contingent? As I argued in the previous chapter, when we are ignorant of causes, we tend to project this ignorance onto the world itself. The result is a representation of the world as contingent. My concern in this chapter lies with a separate problem that Spinoza's necessitarianism raises. Many of our standard forms of inference and argumentation are grounded in the thought that things could have been different than they in fact are. But if necessitarianism rules out all such possibilities, then it seems to undermine many, if not most, of the ways that philosophers argue. So I will focus here on the ways in which necessitarianism affects Spinoza's general philosophical methodology. More positively, I will examine the ways in which Spinoza attempts to justify the use of standard forms of argumentation within a necessitarian framework.

The use of hypothetical counterexamples is a mainstay in philosophy, both past and present. One is asked to entertain a non-actual scenario and to draw substantive conclusions after sufficient consideration of it. For example, Avicenna asks us to consider a hypothetical person who is created in free fall and who experiences no sensory stimulation. We are then supposed to draw the conclusion that awareness of the self is non-sensory. Spinoza is no stranger to this kind of argumentation. Throughout the *Ethics* (and elsewhere), he relies heavily on arguments that have the following form:

(1) If p, then q.

(2) But q is absurd and therefore impossible.

(3) Therefore, $\sim p$.

We are asked to entertain a non-actual proposition, *p*, and then to confirm that *q* follows from it. So far, the argument is just a standard *reductio* argument. But necessitarianism entails that *p* is not only non-actual, but also impossible.[39] As a result, Spinoza asks his readers to entertain a proposition or state of affairs that is impossible and then to draw true and informative conclusions from them. In line with contemporary parlance, let us call an inference from an impossible proposition a *counterpossible* inference.

Can Spinoza explain how counterpossibles function? Even today, they are not well understood.[40] For example, standard accounts of general argumentative validity do not do a very good job of capturing our intuitions about which counterpossibles inferences are valid and which are not. So the pessimist would answer: "If *we* don't adequately understand how we make inferences from impossibilities, then it's very unlikely that Spinoza had any plausible story to tell." Bennett qualifies as a pessimist when he declares that "Spinoza was no logician; his modal thinking seems to have been neither skilful nor knowledgeable" (1984: 124).[41] This pessimism coheres with the traditional narrative according to which a well-worked-out theory of modality doesn't appear on the scene until Leibniz. It is Leibniz, and his notion of a possible world as a maximally consistent set of truths about finite substances, who first introduces philosophy to sophisticated analyses of modality.

I want to be optimistic and push in the opposition direction. I believe that Spinoza is a surprisingly good candidate for understanding counterpossible inferences. Why? Because his necessitarianism makes *every* inference from a non-actual state of affairs or from an actually false

[39] It follows even without necessitarianism as long as we stipulate that (1) should read "necessarily, if *p*, then *q*."

[40] See, for instance, Nolan (1997) and the opening section of Brogaard and Salerno (2013).

[41] Some systematic attempts to interpret Spinoza as having something like a framework for incorporating possibility include Mason (1986), Miller (2001), and Newlands (2010b).

proposition into a counterpossible. What would amount to a run-of-the-mill counterfactual conditional for someone like Leibniz or Descartes is a counterpossible for Spinoza. Furthermore, I believe that his frequent use of them puts pressure on him to have an account about how they function. So I will argue that Spinoza thought about these issues and that he possesses a framework, albeit it rough, which explains his use of these inferences. Furthermore, I will argue that his reliance on the practice of using counterpossible inferences informs us not only about his views on modality, but also about the nature of the definitions in the *Ethics* and his attitude towards language more generally.

In the first section, I will highlight a number of examples from Part One of the *Ethics* in which Spinoza uses counterpossible reasoning. (If you need no convincing of his use of them, feel free to skip to the next section.) In the second section, I will survey some ways that commentators have attempted to analyze Spinoza's counterfactuals within a framework of *per se* possibility. I will argue that these analyses succeed for some kinds of counterfactuals but that they fail to account for conditionals with *per se* impossible antecedents. As a result, they fail to get to the heart of Spinoza's views on modal reasoning. In Section III, I will argue that Spinoza's monism commits him to the view, most explicit in early works, that *per se* impossibilities cannot be expressed except in words. As a result, they constitute merely linguistic entities. In Section IV, I will defend a linguistic account of counterpossible inferences, according to which nominal definitions provide rules for making the inferences. I will conclude by highlighting some consequences of my reading for understanding Spinoza's methodology.

I. Examples from the *Ethics*

E1p5

E1p5 is the "No Shared Attributes" thesis, which states that "[i]n Nature there cannot be two or more substances of the same nature or attribute." Spinoza offers the following argument in support of it:

> (1) If there were two or more numerically distinct substances, then they would differ qualitatively from one another.[42]
>
> (2) If these substances differed in terms of their attributes, then each attribute would belong to only one substance.[43]
>
> (3) "[A] substance is prior in nature to its affections."
>
> (4) So, in considering a substance, one can set aside its affections (from (3)).
>
> (5) If their affections were set aside, the two substances would not differ qualitatively from each other.[44]
>
> (6) Therefore, the substances would be numerically identical (from (5), (2) and (1)).[45]

Ignore the soundness of the argument. What interests us is Spinoza's use of (1), (2), and (5). All three claims are conditional in form. Furthermore, given Spinoza's monism—God is the only possible substance—all three conditionals have impossible antecedents.

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[42]"If there were two or more distinct substances, they would have to be distinguished from one another either by a difference in their attributes, or by a difference in their affections."

[43]"If [they are distinguished] only by a difference in their attributes, then it will be conceded that there is only one [substance] of the same attribute."

[44] "But if [two substances are distinguished only] by a difference in their affections…if the affections are put to one side and the substance considered in itself [and] truly, then one [substance] cannot be conceived to be distinguished from another."

[45] "…that is, there cannot be many [substances], but only one."

E1p6c

Spinoza argues that one substance cannot be produced by another. In his alternative demonstration of the proposition, he offers his reader another conditional with an impossible antecedent: "if a substance could be produced by something else, the knowledge of it would have to depend on the knowledge of its cause (by A4). And so (by D3) it would not be a substance."

E1p8d

Every substance, Spinoza argues, is either finite or infinite. Now suppose that a finite substance exists. But

> then (by D2) it would have to be limited by something else of the same nature, which would also have to exist necessarily (by P7), and so there would be two substances of the same attribute, which is absurd (by P5). Therefore, it exists as infinite, q.e.d.

Spinoza uses a counterpossible that can be separated into two distinct conditionals. First: if a substance were finite, then it would be limited by something else of the same nature. Second: if a substance were limited by something else of the same nature, then there would be two substances of the same attribute.

E1p11d

Spinoza's proofs for God's existence contain numerous counterpossibles. Some examples include:

- If God didn't exist, then his essence wouldn't involve existence (first proof).
- If something other than God prevented him from existing, then that thing would not share a nature with God (second proof).
- If God's nature were the cause of his non-existence, then his nature would not be perfect (second proof).

- If only finite things existed, then they would be more powerful than an absolutely infinite being (third proof).

God exists necessarily and the antecedents of all four conditionals are therefore impossible.

E1p12 and E1p13

Spinoza offers roughly the same argument twice to demonstrate that substance and its attributes are both indivisible. He asks his readers to suppose, for *reductio,* that a substance is divisible. Then he asserts two conditionals. First, if the parts of substance were infinite, then a substance would have been produced by something else (the composite). Second, if the parts were finite, then an absolutely infinite substance could be destroyed. Substance is necessarily without parts, so both conditionals contain necessarily false antecedents.

E1p14

E1p14 constitutes Spinoza's first explicit statement of monism: "Except God, no substance can be or be conceived." All other substances are impossible. In the demonstration, Spinoza utilizes a counterpossible conditional which claims that "if there were any substance except God, it would have to be explained through some attribute of God, and so two substances of the same attribute would exist, which (by P5) is absurd."

The examples don't stop at E1p14. Others include E1p17, E1p21, E1p25, and E1p26. But you get the idea. Throughout Part One of the *Ethics*, Spinoza heavily relies upon counterpossible conditionals. As a result, many of his arguments assume that substantive, non-trivial truths follow from propositions that are necessarily false. I would venture that, at least in the first half of Part One, this is Spinoza's main argumentative strategy.

II. Initial Accounts

Given the frequent use of counterpossibles, two initial questions arise. The first question is metaphysical. How, according to Spinoza, does anything *follow* from impossibilities? Spinoza

obviously doesn't think just anything follows from impossibilities. If he did, then he could deduce monism in the very first counterpossible. Rather, only a narrow range of conclusions follow from impossibilities. So one must determine what relationship those conclusions have to impossibilities that other conclusions lack.[46] The second question is epistemological. Given that some things follow from impossibilities, how does Spinoza think we come to *grasp* these relations? That is, in addition to determining the nature of the relationship between impossibilities and the conclusions that follow from them, one must also determine how the mind comes to faithfully represent that relationship.

Before I examine potential answers to these questions, I would like to preempt a very natural reaction to them. *Per impossibile* arguments—such as the examples above—constitute a species of *reductio* argument. In light of this fact, it is all too natural to respond: "*Reductio*-style arguments are common throughout the history of philosophy, especially in the medieval and ancient periods.[47] They constitute one of the most basic forms of philosophical argumentation and Spinoza, like everyone else, is entitled to them. So there is no pressure to explain their use—Spinoza can use them even if he doesn't have any story to tell about how they work." It's true that the early moderns often take *reductio* arguments for granted. Arnauld's *Port Royal Logic*, for instance, contains no explicit discussion of them despite their frequent use. However, the precise nature of *reductio* arguments is not universally agreed upon. For example, Arnauld would no doubt construe them as a form of *a priori* argument because they involve an inference from causes to

[46] This question closely resembles the more contemporary question: what is the best analysis of counterpossibles that renders some informative and true? Of course, we shouldn't expect Spinoza to have anything like the technical answers offered by present-day philosophical logicians. We shouldn't even expect that he would be interested in the same philosophical questions as us.

[47] Kneale and Kneale discuss the use of *reductio* arguments in ancient philosophy (1962: 7-10).

effects. But Leibniz opts to classify them as *a posteriori* arguments because they tell us only *that* something is true and not why it is true.[48] In other words, *reductio* argument prove the truth of their conclusions merely by ruling out competitors; on their own, they fail to make explicit the sufficient reason which explains their conclusions. So it is an open question how *reductio* arguments in general, and *per impossibile* arguments in particular, function. So I think that Spinoza owes us a justification for their use. However, even if one grants that he is entitled to them, I hope to show that examining in detail how he uses them can prove rather instructive.

The Following-From Account

Some conclusions, and not others, follow from impossibilities. So one might think that any adequate answer to these questions will incorporate Spinoza's notion of "following from." The most obvious use of the notion first appears in E1p16 when Spinoza claims that infinite things—which includes everything—follows from the divine nature.[49] So, if we understand *that* relation, then we have the answer to the metaphysical question: things follow from impossibilities in whatever way that everything follows from God. Call this the *Following-From Account*. In addition to answering the metaphysical question, it also offers a straightforward answer the epistemological question: we can come to grasp how conclusions follow from impossibilities in the exact same way that we come to grasp how anything follows from God.

The Following-From Account has the virtue of being able to transform the problem of counterpossibles from a special problem about Spinoza's methodology into a more general problem about Spinoza's metaphysics, namely one of determining the nature of the following-from relation. Determining that relation is rather difficult, for a number of reasons. First, despite

[48] Adams (1994: 109).

[49] *Ex necessitate divinae naturae infinita infinitis modis (hoc est, omnia, quae sub intellectum infinitum cadere possunt) sequi debent*.

the fact that it is one of the most frequently mentioned relations in the *Ethics* and despite the fact that Spinoza clearly intends it as a technical term, it is never explicitly defined. Second, determining the precise nature of the following-from relation requires understanding the relationship between substances and their modes. The things that follow from God's nature are his modes, so the following-from relation is closely tied up with the nature of substance. Despite these difficulties, we can say enough about the relation to rule out the Following-From Account as a plausible account of counterpossibles.

Whatever following-from amounts to, it is at least co-extensive with the causal relation.[50] E1a3 claims that all effects follow from their causes. So if x is an effect of y, then x follows from y. But the conditional actually runs in both directions. Recall E1p16, which states that "from the necessity of the divine nature there must follow infinitely many things". In the first corollary to E1p16, Spinoza argues that "[f]rom this it follows that God is the efficient cause of all things which can fall under an infinite intellect." So if x follows from y, then y is the cause of x. As a result, Spinoza very likely accepts the biconditional that x follows from y if and only if y is the cause of x. Let us supplement the biconditional with a plausibly innocuous claim about causation and existence: if x causes y, then x exists (either eternally or at some time). In other words, existence is a pre-condition for entering into a causal relation. Nothing causes nothing.

It now becomes clear why we cannot analyze counterpossibles in terms of the following-from relation. Many of the antecedents in Spinoza's counterpossibles contain *necessarily non-existent* entities. For instance, the antecedents in the *per impossibile* arguments of Part One make mention of such entities as one-attribute substances, divisible substances, and finite substances. None of these entities could exist, let alone does exist (either eternally or at some time). Because

[50] Newlands (2010a: 480-3) contains a nice discussion of the following-from relation and its connection to causation.

they are non-existent, they cannot enter into a causal relation. So, if the consequents of the counterpossibles in question really do follow from the antecedents—as Spinoza seems to think—then they follow in a manner dissimilar from the way existent things follow from God.[51]

Per Se Accounts

Per se accounts of possibility, like that of the early Leibniz, claim that some states of affairs which are necessary all-things-considered nonetheless obtain contingently when considered in themselves. Leibniz explains:

> Indeed, even if God does not will something to exist, it is possible for it to exist, since, by its nature [*sua natura*], it could exist if God were to will it to exist. "But God cannot will it to exist." I concede this, yet, such a thing remains possible in its own nature [*sua natura*] even if it is not possible with respect to the divine will, since we have defined 'possible in its nature' as that which, in itself, implies no contradiction, even though its coexistence with God can in some way [*aliquo modo*] be said to imply a contradiction. 1989: 21

Spinoza sometimes seems to endorse a *per se* notion of possibility. For example, in E1p33s1 he distinguishes between (i) those things which are necessary or impossible due to their essence and (ii) those which are necessary or impossible due to their causes.[52] Everything is either necessary or impossible. But some things are necessary due to their natures—e.g. God—whereas other things are necessary only due to their place in the order of nature—for example, you and me.

Lin (2007) latches onto this distinction with the aim of providing Spinoza with a *per se* account for analyzing counterfactuals:

> while a counterfactual situation in which I took a lethal dose of cyanide yet lived is made impossible by the *ordo naturae*, it is also impossible given my nature and the

[51] Timothy Yenter suggested to me a modification of the Following-From Account. On the modified version, the following-from relation would be analyzed with the conditional: "if y and x exist, then x follows from y iff y is the cause of x AND if y and x do not exist, then x follows from y iff y would cause x if they existed." But this modified account appeals to counterpossibles in the conditional, so it can avoid the problem of explaining how non-existents enter into causal relations only by giving up on explaining how counterpossibles function.

[52] He makes this same distinction elsewhere, for example in the CM (C 306).

> nature of cyanide. A counterfactual situation in which I ate an apple and lived is also made impossible by the *ordo naturae*, but it is not made impossible by my nature and the nature of apples. In this sense, then, we can speak of a counterfactual situation that is possible *per se*—i.e., not made impossible by the natures of the involved individuals—without implying that such situations are possible *tout court*. 283-4[53]

On this view, some counterpossibles are true because the impossible antecedent is impossible not in itself (*per se*) but only due to the order of nature. Consider the counterfactual, "If I had taken a high dose of cyanide, then I would have died." We can ask our two questions. First, given that I never took a high dose of cyanide, how does it follow that I would have died had I taken such a dose? I would have died because there are laws of nature governing the behavior of finite modes (E1p26d, E1p8s2). Furthermore, God's attributes contain the formal essences of non-existent modes, including the state of affairs of my taking a high dose of cyanide (E2p8). I would have died had I taken a high dose of cyanide because (i) laws of nature govern the potential behavior of finite modes and (ii) it is written into the laws of nature that humans cannot survive high doses of cyanide; their natures are incompatible. Second, how do we *know* that I would die if I took cyanide, given that I never did and never will? We can know it if we have adequate ideas of the laws of nature. Lin's account therefore seems capable of handling counterfactuals of this sort.[54]

Newlands (2010b) offers a similar *per se* account.[55] He argues that Spinoza is operating with a "principle of conceptual plenitude" (73). According to this principle, there is a spectrum of conceivability such that, for any mode, one can conceive of that mode in more or less isolation from the order of nature. For example, on one end of the spectrum I can conceive of myself in

[53] We ought to replace "lethal" with "high" so as to avoid worries about triviality. Lin also emphasizes the role of *per se* possibilities in making sense of counterfactual reasoning in Leibniz (2012: 445).

[54] See Lin (2012) for an extended discussion of *per se* accounts in Leibniz and Spinoza.

[55] Newlands and Lin differ in that only Newlands thinks that *per se* possibility is, for Spinoza, a genuine form of possibility. For Lin, *per se* possibilities can still be impossible *simpliciter*.

isolation from the order of nature by bracketing all but my intrinsic properties. This would be to conceive of myself or my existence narrowly. On the other end of the spectrum, I can conceive of myself as one mode in an infinite chain of modes, all of which are necessitated by earlier modes. This would be to conceive of myself widely. These two extremes are not the only options. I can also conceive of myself as the result of a middle-class upbringing but ignore the upbringing of my parents. With this principle in mind, Newlands writes:

> What should we make of Spinoza's repeated uses of these ''insofar as'' modes are ''attended to,'' ''considered as,'' and ''conceived as'' qualifiers in his claims about modality? Why should the possible non-existence of an existing mode turn on whether the mode is conceived in relation to ''all of nature'' or independently of at least some of those relations? Read straightforwardly, Spinoza's idea seems to be that the modality of finite objects can vary according to broader and narrower ways of being conceived. Modal ascriptions, on such an account, are sensitive to these ways of being conceived. 76

On Newlands' account, the proposition expressed by the sentence "I am currently typing these words" can be conceived *both* as contingently true and as necessarily true, though not under simultaneous conceptions. I conceived it as contingently true when I ignore the rest of the order of nature, and as necessarily true if I include it. Similarly, the claim "I am swimming right now" can be conceived both as contingently false and as necessarily false, depending on how much of the order of nature I conceive when I conceive of myself swimming. Furthermore, both ways of conceiving my swimming are equally true, according to Newlands, because *per se* possibility and possibility-according-to-the-order-of-nature are equally good descriptions of modal space (64). Modal properties, on this account, are relative to the context they are conceived in.

If we embed these claims about my swimming in conditionals, then the truth value of the conditional will vary in the same manner. Consider the seemingly true conditional, "If I were

swimming right now, then I would be in a pool".[56] Newlands' account allows us to explain its truth because it allows us to treat the antecedent as *possibly* true. When we consider the entire order of nature, the antecedent is impossible. But when we bracket the order of nature and consider only my intrinsic properties, the antecedent is possible. As a result, Newlands' account—like Lin's—allows Spinoza to *deny* that the conditional in question is a counterpossible. It qualifies as a counterpossible only when we consider the entire order of nature. When we ignore the entire order of nature, we see that it really is true that I could be swimming right now. After all, there is no contradiction involved in my swimming right now. When the conditional becomes a normal counterfactual, Spinoza has the resources to explain how the consequent follows from the antecedent. Once we consider the *per se* possibility of my swimming, we can infer from the laws of nature (include laws governing the desires of humans), that it is currently cold and I don't want to be swimming outside. Newlands' account therefore answers our two questions in the same way that Lin's account does. Certain conclusions follow from things which are impossible from the perspective of the order of nature because there are laws of nature governing their behavior. Furthermore, we can know that those conclusions follow by knowing the laws of nature.

As elegant as it is, the *per se* account is by itself insufficient to explain Spinoza's use of counterpossibles. The *per se* account works—assuming it works at all—only for those conditionals which have *per se* possible states of affairs as antecedents. But many of Spinoza's counterpossibles fail to satisfy this condition; most of them involve antecedents which are *per se* impossible. As an example, consider one of the E1p5 conditionals:

> E1p5: if there were two or more numerically distinct substances, then they would differ qualitatively from each other.

[56] It was cold when I first wrote this paragraph.

At least one of the substances mentioned in the antecedent is *per se* impossible. We know that at least one of the substances of E1p5 is impossible all-things-considered. Its all-things-considered impossibility follows straightforwardly from Spinoza's monism. And as we saw, there are only two sources of a thing's all-things-considered impossibility: it could be impossible due to its nature or to its external cause (E1p33s1, E1p11d). It is only in the latter case that an all-things-considered impossibility qualifies as *per se* possible. In other words, an all-things-considered impossibility is also *per se* possible only if its impossibility lies in an external cause. But the source of the impossibility of the E1p5 substances cannot be their external causes, because substances are causally autonomous and cannot interact with other substances—if substances could causally interact, then they wouldn't be substances. The only remaining source of its all-things-considered impossibility is the fact that the substances in question are *per se* impossible.[57] As a result, even if *per se* accounts of possibility allow for an analysis of some counterfactuals, they leave untouched many of the counterpossibles which Spinoza relies on throughout the *Ethics.* An additional story would need to be told which explained why certain conclusions follow from things which are *per se* impossible.

The limitations of the *per se* account involve more than just its narrow scope. The counterfactuals which the account does capture depend, in an important ways, on counterpossible conditionals. The *per se* account requires the distinction between internal and external sources of necessity, as outlined in E1p33s1. But Spinoza proves E1p33 by using E1p16, E1p29, E1p11, and E1p14c1. All of these propositions either contain use of counterpossibles (E1p11 and E1p14) or depend on other propositions that contain use of counterpossibles (e.g. E1p29 cites E1p26, which contains a counterpossible). Perhaps Spinoza could distinguish between sources of necessity

[57] Garret (1979) defends the view that the nature of substance renders non-divine substances impossible in themselves.

without any previous use of counterpossibles. But he *doesn't*. Counterpossibles *in fact* play a central role in the early parts of the *Ethics*.

III. A Linguistic Account of Impossibility

I posed two initial questions about counterpossibles: (i) how does anything follow from an impossibility and (ii) how can we grasp this relation? We can come to understand Spinoza's answers to these questions by examining the ontology of impossibilities together with the mental characteristics of those who entertain them. I will argue in this section that impossibilities are merely linguistic beings that we mistakenly judge to represent genuine possibilities. I will argue that, in addition to explicitly endorsing it, Spinoza, I will argue, is committed by his monism to this linguistic view of impossibility. If impossibilities could be expressed in anything more than words, then the essences of non-divine substances would be conceived through God. In the following section I will argue that we can draw substantive philosophical conclusions from merely linguistic beings by using nominal definitions as inference rules.

The Phenomenon of Feigning

In the TdIE, Spinoza offers a systematic account of the phenomenon of feigning. Feigning is, roughly, the phenomenon of having false or unjustified beliefs. Spinoza's goal is to provide an account of feigning, as well as a procedure which will enable us to bring the habit to an end, i.e. to "discuss only what Method demands, i.e. what false, fictitious, and doubtful ideas are concerned with, and how we shall be freed from them" (C 23, G II/19/19-21). Spinoza's technical term for feigning—"fingere"—is notoriously difficult to translate.[58] But he explicitly connects the phenomenon of feigning to the analysis of modal concepts:

[58] English translations include "feigning," "supposing," "assuming," "hypothesizing," and "forming fictitious hypotheses" (Miller: 783).

> I call a thing impossible whose nature implies that it would be contradictory for it to exist; necessary whose nature implies that it would be contradictory for it not to exist; and possible whose existence, by its very nature, does not imply a contradiction—but whose necessity or impossibility of existence depends on causes unknown to us, so long as we feign its existence. So if its necessity or impossibility, which depends on external causes, were known to us, we would be able to feign nothing concerning it. C 23-4, G II 19/31-20/7

Spinoza immediately draws the conclusion that "if there is a God, or something omniscient, he can feign nothing at all." Let us set aside the details of the analysis of modality that Spinoza offers here. What is more important (for our purposes) is the connection between a thing's modal status and the act of feigning. Feigning is a state of ignorance such that one can treat some false proposition *p* as true only if one lacks some knowledge about *p*. This lack of knowledge gives rise to a belief in the contingency or possibility of things which are, in fact, neither contingent nor possible. As a result, one can treat as possible something which is in fact impossible—one can feign that possibly-p—only if she lacks some knowledge about the impossibility in question. For example, we can entertain both the possibility that God exists and the possibility that God doesn't exist. But if the concept of God is the concept of a necessary being, then we are entertaining an impossibility (we just don't know which one that is). It is only due to our ignorance that we're capable of entertaining it as possible.

A subject S feigns that possibly-*p* only if S believes falsely that possibly-*p* or S believes possibly-*p* without justification. Call this the Feigning Principle. In the *Ethics*, however, Spinoza clearly entertains propositions which he *knows* to be false. It is by entertaining those propositions that he argues for his own positions. So any account of entertaining impossibilities must accommodate this fact. Fortunately, Spinoza is aware of this complication and explicitly allows that we can feign something which we know to be false. For example, we can feign the earth's shape as a hemisphere even when we know that it is round:

> If we attend to these things, we shall see nothing that is not compatible with what we have already said [concerning feigning], provided we note first that we have sometimes been able to err, and now are conscious of our errors; and then, we can feign, or at least allow, that other men are in the same error, or can fall into it, as we did previously…Therefore, when I say to someone that the earth is not round, etc., I am doing nothing but recalling the error which I, perhaps, made, or into which I could have fallen, and afterwards feigning, or allowing, that he to whom I say this is still in the same error, or can fall into it. C 25, G II/21/8-19

I can feign a known proposition *p* by recalling an earlier time when I did not know that *p* and recognize that others may currently be in that same state. For example, I can feign that the earth is flat by recognizing that I thought this when I was a child and that others continue to think the earth is flat, for reasons quite similar to the sorts of reasons that led me, as a child, to think it. Likewise, when Spinoza feigns in E1p8d that substance is finite, he needs only to recall a time when, say, he confused substance with modes and, as a result, believed substance to be finite and divisible. This form of feigning is a derivative form of feigning, because it still makes essential reference to a state of ignorance, whether one's own, former ignorance or the present ignorance of others. So the qualified version of the Feigning Principle states: a subject S feigns that possibly-*p* only if either (S believes falsely that possibly-*p* or S believes possibly-*p* without justification) or (S entertains the evidence of one whom S knows to believe falsely that possibly-*p* or whom S knows to believe possibly-*p* without justification).

The Linguistic Account of Impossibility

When one entertains an impossibility, one feigns. But the phenomenon of feigning always involves *something* being feigned, namely an impossibility.[59] Impossibilities fall into two groups. First, there are *per se* impossibilities, which owe their impossibility to their own natures. These include square circles and non-divine substances. Second, there are impossibilities the source of

[59] Every instance of feigning ("fingere") involves a fiction ("fictum").

whose impossibility lies outside them in external causes. This latter group consists of modes which are *per se* possible, but which are made impossible by the order of nature. As a general rule, if some sort of internal contradiction cannot be derived from a consideration of the being in question, then it is a *per se* possibility. Because *per se* impossibilities are more fundamental to Spinoza's method, I will restrict the current discussion to them.[60]

So, what *are* these things? What is their ontological status? Technically speaking, they are nothing. Spinoza is an actualist—everything that exists is actual and therefore not impossible. Spinoza often leaves the "fictum" as a placeholder for *whatever it is* that we mistakenly judge to be impossible. For example, he distinguishes between "Being," on one hand, and "Chimearas, Fictitious Beings, and Beings of Reason," on the other:

> Let us begin, therefore, with Being, by which I understand *Whatever, when it is clearly and distinctly perceived, we find to exist necessarily, or at least to be able to* exist…From this definition, or if you prefer, description [of Being], it follows that *Chimaeras, Fictitious Beings,* and *Beings of reason* cannot in any way be classed as beings. For a *Chimaera*, of its own nature, cannot exist. [Footnote:] By the term *Chimaera*, here and in what follows, I understand that whose nature involves an explicit contradiction. C 299, G I/233/20-5, emphasis original

As a merely functional definition of *per se* impossibilities, this doesn't tell us what chimaeras are. It certainly seems as if we entertain *something* when we feign an impossibility. When I feign that a finite substance is possible, for instance, it seems to me that I'm entertaining something. So, Spinoza needs to explain what it is that I mistakenly judge to be representing a genuine possibility when I feign a finite substance. Later in the CM, after a brief summary of the distinction between sources of necessity and impossibility, he adds:

> [I]t should be noted that we may properly call a Chimaera a verbal being because it is neither in the intellect nor in the imagination. For it cannot be expressed except in words. E.g., we can, indeed, express a square Circle in words, but we cannot imagine it in any way, much less understand it. So a Chimaera is nothing but a

[60] *Per se* possibilities are non-existent modes which are contained in God's attributes (E2p8).

> word, and impossibility cannot be numbered among the affections of being, for it is only a negation. C 307, G I/241/9-16

An impossibility is just a "verbal being" [*verbo esse*]. As merely verbal, it can be expressed with words, but not with images or ideas. In the previous chapter of the CM, Spinoza explains how the mind often mistakes nonbeings for beings as the result of language. He points out that "philosophers preoccupied with words, or [*sive*] grammar, should fall into such errors…they judge the things from the words, not the words from the things" (C 301, G I/235/7-9). They often make the mistake of thinking that there are things in the world which correspond to what they're capable of expressing in words, whether written or spoken. But our power of language is more expansive than our power of thought—not everything which can be expressed in words can be taken up in thought and people often err in thinking that a string of symbols represents something outside of language.[61] In the case of chimaeras, we err in thinking that a string of symbols represents something genuinely possible.

This view of impossibilities as merely verbal isn't limited to the CM. Spinoza discusses merely verbal expression multiple places in the TdIE. In the discussion of feigning, for instance, he writes:

> [T]he less the mind understands…the greater its power of feigning is; and the more things it understands, the more that power is diminished. For example, as we have seen above, we cannot feign, so long as we are thinking, that we are thinking and not thinking; in the same way, after we know the nature of body, we cannot feign an infinite fly, or after we know the nature of the soul, we cannot feign that it is square, *though there is nothing that cannot be put into words.* C 26-7, G II/22/13-21, my emphasis

[61] In the TTP, Spinoza writes that "[a]s the prophets perceived the revelations of God by the aid of imagination, they could indisputably perceive much that is beyond the boundary of the intellect, for many more ideas can be constructed from words and figures than from the principles and notions on which the whole fabric of reasoned knowledge is reared" (21).

Once feigning ends, we cease being able to entertain certain propositions as possible (except in the derivative sense mentioned above). But we can nonetheless still utter certain words, namely those which we earlier thought represented something real or possible. Spinoza offers two examples of these merely linguistic expressions: the example of the hemispheric earth and of a burning candle that is not burning. In both examples, he claims that when we suppose that the earth is like a half-sphere or that the candle is both burning and not burning, all that we do is utter words. For example, we can still utter "there is a candle that is burning and not burning." There is nothing in the intellect, or even in the imagination, which corresponds to this sentence. In the case of the earth, Spinoza adds that "if I had understood this [falsity of the earth being a half-sphere], I could have feigned nothing at all, and it would have had to be said only that I had done something" (C 25-6, G II/21/20-1). Alexandre Koyré suggests glossing the phrase "I had done something" as "I had uttered some words" (C 26, f. 42). This gloss is well justified if the proposition in question is an impossibility and if impossibilities are merely verbal beings. In the example of the candle, Spinoza argues that once the impossibility of the proposition is recognized, "there is no fiction [*fictum*], but pure and sheer assertions" (C 26, G II/22/9-10). When one fails to feign that *p*, where *p* is impossible, the most one can do when considering *p* is utter "p".

So *per se* impossibilities are just linguistic entities which, in our ignorance, we judge to represent something possible. In the case of non-divine substances—which all the examples from Section I involved—Spinoza's ontology in fact requires this linguistic view of *per se* impossibilities. If we could express non-divine substances in ideas, then the ideas would have as their content the formal essence of the substance in question. We think of non-existent modes by thinking of their formal essences (E2p8). So it would seem that if we think of non-existent

substances, we do so by thinking of their formal essences.[62] Non-existents have no actual essences because a thing's actual essence just is its actual existence (E3p7). So the only way to think about them is to think about their formal essence. But Spinoza is explicit that everything is conceived through God, including things' formal essences (E1p15, E1p25). This is just the inevitable result of monism. Entities that might otherwise be allocated to a Platonic third-realm—e.g. abstracta and propositions—get absorbed by God. Since monism requires that everything be conceived through God, even the formal essences of non-divine substances would be conceived through God. But, as the essences of *substances*, they couldn't be. E1d3 defines a substance as "what is in itself and is conceived through itself." So, if we could express non-divine substances in thought, then they must be both conceived and not conceived through God (given monism and the definition of substance, respectively). As a result, Spinoza is committed to the linguistic view of *per se* impossibilities. The essence and existence of non-divine substances can be expressed only in words. As Spinoza says in the CM passage quoted above, "impossibility cannot be numbered among the affections of being".

The Context-Sensitivity of Philosophical Terms

A finite substance can only be expressed in words. But, in themselves, the words "finitude" and "substance" are unproblematic. It is only in conjunction when they fail to have any thoughtful content. Spinoza can maintain this distinction due to his view that the representational power of words supervenes on the representational power of thoughts. A word or sentence represents x only if the corresponding mental state of the utterer represents x; words possess representational content only derivatively. So an occurrence of "finitude" or "substance" adequately represents something

[62] See Martin (2008) and Ward (2011) for recent discussions of Spinoza's formal essences.

only if it is part of an utterance of someone with knowledge. Spinoza endorses this view in both early and late writings. In the TdIE, he writes:

> As for what constitutes the form of the true, it is certain that a true thought is distinguished from a false one not only by an extrinsic, but chiefly by an intrinsic denomination…[I]f someone says, for example, that Peter exists, and nevertheless does not know that Peter exists, that thought, in respect to him, is false, or, if you prefer, is not true, even though Peter really exists. Nor is this statement, Peter exists, true, except in respect to him who knows certainly that Peter exists. G II/26/15-25; C: 31

The sentence "Peter exists" is truth-apt only if the person uttering the sentence has a true idea which represents that Peter exists. When the sentence floats free from such an idea, it loses its status as truth-apt. Spinoza's idea here seems to be that in order to be truth-apt, a sentence must have content. But a sentence gets its content only through an association with an idea.

Spinoza spells out this account in more detail in Part Two of the *Ethics*. The squiggles on a page and the sound waves in the air (and the ideas of either) get their content only through an association with an idea:

> And from this we clearly understand why the mind, from the thought of one thing, immediately passes to the thought of another, which has no likeness to the first: as, for example, from the thought of the word "pomum" a Roman will immediately pass to the thought of the fruit, which has no similarity to that articulate sound and nothing in common with it except that the body of the same man has often been affected by these two, that is, that the man often heard the word "pomum" while he saw the fruit…And so each one, according as he has been accustomed to join and connect the images of things in this way or that way, will pass from one thought to another. E2p18s

The representational power of words is derived from that of ideas. The word "pomum" and the idea of the word both have apples as their content only in virtue of an association with the prior mental image of an apple. Without that association the word "pomum" would represent nothing—it is not the essence of extension to represent—and the idea of the word would represent only a series of squiggles on a page.

Because the content of words supervenes on the content of ideas, it is possible for a linguistic item to represent something in one context, but not in another.[63] "Finite" and "substance" can refer to finitude and substance, respectively, when the terms are uttered by a knowing mind (who would never predicate finitude of substance). But when the terms are conjoined—as in the sentence "a finite substance exists"—the linguistic expression ceases to have anything but merely apparent content. It seems to have genuine content because many people are deceived into thinking that the two terms represent a genuine possibility when they are conjoined. But the content is merely apparent because the sentence's having content would require that the formal essence of a finite substance be conceived through God (which is of course impossible). It is by combining otherwise unproblematic words that we are prone to creating fictitious beings, i.e. things which are "nothing but two terms connected by a sheer act of the will" (C 302, G I/236/12-14).

Let us take inventory briefly. When I entertain an impossibility I feign that the impossibility is possible only because of my ignorance of the thing in question. For instance, if I feign the possibility of a finite substance, then it is because I lack some knowledge about the nature of finitude and/or the nature of substance. Furthermore, *per se* impossibilities are merely linguistic artifacts. In my ignorance, I mistakenly judge of a merely linguistic entity—for instance, the sentence "a finite substance exists"—that it represents a genuine possibility. I can take this linguistic entity to represent a genuine possibility only because of my ignorance of the nature of finitude or substance. In the next section I will provide an account of *how* one is able to draw any substantive philosophical conclusions from a consideration of merely linguistic entities.

[63] This feature of Spinoza's thought is closely connected to his holism about representation more generally. Della Rocca (1996: chs. 3-4) and Garrett (2008) defend the latter at length.

IV. The Role of Definitions

Spinoza is left with an inconsistent triad:

(A) *Per se* impossibilities are merely linguistic and so do not have propositional content.

(B) We can make inferences from *per se* impossibilities.

(C) In order to make an inference from x, x must have propositional content.

I've argued that Spinoza accepts (A) due to his commitment to monism. If *per se* impossibilities had propositional content, then it would be in virtue of their formal essences being conceived through God. But non-divine substances cannot be conceived through God; so they can be expressed only in words. Spinoza seems obviously committed to (B). In addition to using counterpossibles frequently in the *Ethics*, Spinoza describes them in his early discussion of feigning:

> [W]hen the mind attends to a fictitious thing which is false by its very nature [a *per se* impossibility], so that it considers it carefully, and understands it, and deduces from it in good order the things to be deduced, it will easily bring its falsity to light. And if the fictitious thing is true by its nature, then when the mind attends to it, so that it understands it, and begins to deduce from it in good order the things that follow from it, it will proceed successfully, without any interruption. C 28, G II/23/27-II/24/27[64]

But it is still an open question *how* he thinks we make these inferences. Because impossibilities are linguistic, it is likely that the mechanism behind counterpossible inferences is also linguistic in nature. My view is that Spinoza uses nominal definitions—definitions of words—to dissolve the complex linguistic entities which he identities with *per se* impossibilities. He can then deny (C) and argue that we can make inferences from impossibilities despite their lack of content.

[64] This is evidence that the use of counterpossibles persists across the range of Spinoza's works. Miller (2001: 794) takes this passage to suggest a hypothetico-deductive method of reasoning in the case of both true and false ideas. This cannot be right, though, for reasons outlined in the beginning of Section II.

Feigning is an all-too-common result of thinking about composite or complex, rather than simple, phenomena:

> [F]ictitious ideas cannot be clear and distinct, but only confused, and since all confusion results from the fact that the mind knows only in part a thing that is a whole, or composed of many things…it follows, first, that if an idea is of some most simple thing, it can only be clear and distinct…Secondly, it follows that if, in thought, we divide a thing that is composed of many things into all its most simple parts, and attend to each separately, all confusion will disappear. Thirdly, it follows that a fiction cannot be simple, but that it is made from the composition of different confused ideas…or rather, from attending at once, without assent, to such different ideas. For if they were simple, it would be clear and distinct, and consequently true. G II/24/16-30; C: 29

The cure for feigning requires focusing on the few simple ideas that one already has, and to use these ideas to separate out, and ultimately dissolve, the complex, fictitious ideas.[65] Feigning of impossibilities will disappear only after the purported possibilities in question—one-attribute substances, finite substances, etc.—are decomposed into their conceptual parts, e.g. finitude, attributes, substance, and so on.

Towards this end of breaking down complex entities into their constituent parts, Spinoza routinely cites definitions. Definitions are capable of dissolving complex ideas because the best definitions are simple definitions. This follows from two claims Spinoza makes in the outline of his methodology. First, knowledge is founded on good definitions (C 39, G II/35/23-4). This is just a feature of the geometrical method. If one starts with epistemically flawed definitions, then any propositions derived from them will inherit those flaws. Second, knowledge is founded on simple, rather than complex, ideas (C 37, G II/32/19-20). This preference for simplicity over complexity is symptomatic of Spinoza's preference for the synthetic method over the analytic method. According to the former, philosophy proceeds by way of multiplying one's knowledge

[65] Garrett (2003: ch. 3) contains a nice discussion of this therapeutic method. But Garrett focuses only on the separation of true and false ideas. The mechanism driving the separation is the dissolution of complex ideas into simpler ones.

through the derivation of propositions from an initial set of self-evident axioms and clear definitions. Knowledge requires simple ideas because the first stage of adequate knowledge proceeds by way of demonstration; the existence of simple ideas guarantees true, and therefore reliable, starting points. [66] In the TdIE, Spinoza writes that "ideas that are clear and distinct can never be false. For the ideas that are conceived clearly and distinctly, are either most simple, or composed of most simple ideas, i.e., deduced from most simple ideas" (C 30-1, G II/26/9-13). With a simple idea there is no opportunity for error.

We can see how this process works in the case of a finite substance. We err when we suppose that there could be such a substance. The confusion doesn't lie, at least not necessarily, in our ideas of finitude and substance. Rather, the confusion results when we take ideas or words which in isolation represent genuine possibilities and use them in conjunction. Given this diagnosis, we can draw inferences from impossibilities by attending to simple definitions. This should not come as a great surprise given the special role Spinoza affords to definitions and the role that complexity plays in contributing to modal errors in the first place. Our attention to simple definitions begins the process of separating out, and ultimately dissolving, the verbal being in question. In fact, all the counterpossible conditionals in Part One of the *Ethics* cite either (i) a definition or (ii) some proposition whose original proof cites a definition.[67] For example, E1p5

[66] Some definitions, given their content, will inevitably refer to things other than themselves. A mode, for instance, is defined as "that which is in another through which it is also conceived" (E1d5).

[67] This practice of citing definitions to make counterpossible inferences might strike some as obvious. After all, the most frequent uses of counterpossible reasoning occur in Part One of the *Ethics*, especially the first fifteen or so propositions. Spinoza has very little but definitions to cite at this point, so he seems almost forced to cite definitions when using counterpossibles. But not all of the early demonstrations of the *Ethics* bottom out in a definition. In E1p3d, for instance, Spinoza cites only axioms.

contains three counterpossibles. In his proof, Spinoza relies on E1p4, the proposition that two numerically distinct things must be distinguished by either a difference in modes or a difference in attributes. This proof, however, relies on the definitions of 'mode,' 'substance,' and 'attribute.' What Spinoza intends is for simple definitions to enable his reader to see that the verbal being in question is just that—merely verbal. Once the verbal being is dissolved, the confused idea about what is possible will also dissolve.

Consider Spinoza's E1p8 argument. Let the underlined type indicate the parts of the argument which can be expressed only in words and which thereby fail to have any genuine content (given Spinoza's commitment to (A) above).

(1) A finite substance exists. (feigned for *reductio*)

(2) If a finite substance exists, then it is limited by something of the same nature.

(3) If a substance is limited by something of the same nature**,** then two substances share an attribute.

(4) Therefore, two substances share an attribute.

(5) No two substances can share an attribute.

(6) Therefore, there are no finite substances.

The underlined parts of the argument fail to have any content because something has content ultimately only if it represents an essence conceived through God. But a merely linguistic entity like the phrase "a finite substance" does not represent any essence conceived through God. It is a merely verbal being. Since (4) expresses no content, it does not contradict (5), at least not in terms of propositional content. Without such a contradiction, (6) does not follow (since (6) is the rejection of the *reductio*). So if Spinoza's argument works, then it cannot be because it generates contradictory propositions.

Let me suggest an alternative reading of the argument. Again, any underlined text fails to represent.

(1) "a finite substance exists." (feigned for *reductio*)

(2) If you accept the sentence "a finite substance exists," then you should accept "a finite substance is limited by something of the same nature."

(3) If you accept the sentence "a substance is limited by something of the same nature" then you should accept "two substances share an attribute."

(4) Therefore, you should accept the sentence "two substances share an attribute".

(5) You already reject the sentence "two substances share an attribute".

(6) Therefore, you should reject the sentence "a finite substance exists".

Spinoza thinks that his readers are prone in their states of ignorance to accept certain verbal beings as representing genuine possibilities. Given that the argument cannot be understood in terms of the content of the underlined text, I suggest instead that he uses *ad hominem* arguments whose aim is to demonstrate that the reader accepts conflicting sentences. Spinoza is no stranger to *ad hominem* arguments. The TTP, for instance, is filled with them.[68] An *ad hominem* argument of the sort here constitutes a challenge to make our use of language consistent. Once the conflict is revealed, the reader will, under pain of irrationality, ultimately reject those verbal entities which led to the conflict.

In order to make a plausible case for this reading, I need to explain the force of the "should" which appears in (2), (3), (4), and (6). I also need to explain why Spinoza's think that (5) is true. Let's start with (2). Why should Spinoza's reader accept this conditional? She should accept it given the definition of "finite," which Spinoza cites in his E1p8 argument: "A thing is called

[68] Perhaps most well-known is Spinoza's list of "dogmas of universal faith" (S: 167-8). See Yovel (1985) for a discussion of the rhetorical uses of languages in the TTP.

finite…when it can be limited by another thing of the same nature." What about (3)? Spinoza cites E2p2, which claims that "two substances whose attributes are different have nothing in common." In his proof of E2p2, Spinoza cites his definition of 'substance.' In (2) and (3), Spinoza is relying on his readers' sympathy towards his earlier definitions. (5) is the application of E1p5, which Spinoza thinks he has already earned by the time he offers his E1p8 argument.

But what about (4) and (6)? Neither follows straightforwardly from a definition or any other earlier part of the *Ethics*. So where does the force of the "should" come from? I think it lies in two rather plausible principles regarding the consistent use of language. The force of (4) lies in the general principle that one should accept those sentences that one should accept. Given that Spinoza's reader accepts the antecedent of (3), the general principle allows Spinoza to say that she should likewise accept the consequent as well. The inference is then, for lack of a better word, *modus ponens* applied to sentence endorsement. The "should" located in (6) finds its support in a second plausible principle: if accepting "p" requires—whether by itself or along with anything else accepted previously—both accepting and rejecting "q", then reject "p". Spinoza thinks that accepting the sentence "there is a finite substance" commits one to accepting a sentence—"two substances share an attribute"—which she is already committed to rejecting (from E1p5). Therefore, he thinks we should reject the original sentence which led to this conflict.

In general, *ad hominem* arguments aim to reveal a latent contradiction in a person's beliefs. When the errors in question are about impossibilities, a person cannot compare *representations* in order to reveal a contradiction. But verbal beings have no content. In these cases, the only thing one can compare is his beliefs about those sentences which he assumes are contentful. That is, the only hope we have is to compare the syntax of sentences we accept in order to see that two (or

more) of our accepted sentences conflict. Only after this recognition can we begin to form true ideas concerning God.[69]

V. Conclusion

If this *ad hominem* strategy is truly analogous to Spinoza's use of counterpossible reasoning, then it would work only if Spinoza has reason to think that his readers would accept the definitions of the *Ethics.* If he wants us to make inferences that enable us to judge that certain linguistic entities fail to represent genuine possibilities, then he can legitimately do so only if he expects us to accept the definitions which undergird those inferences. The normative force of the inference lies in the acceptance of the relevant definition, e.g. the definitions of 'finite' and 'substance'. As a result, my interpretation provides evidence for interpreting Spinoza as intending to use many of his definitions in ways that he expects his readers to accept.[70] He then leverages their acceptance of these definitions to reveal that their beliefs about what is possible are mistaken. My interpretation is therefore an indirect argument for the nominal reading of Spinoza's definitions.[71]

We can glean a few upshots from the account I've offered, each of which is in tension with positions in the literature. First, Spinoza's theory of modality is not as unsophisticated as one might think. Whereas Leibniz's theory of modality focuses on metaphysical possibility, Spinoza's focus lies instead partly on what one might call "linguistic possibility". There is nothing in things in

[69] E2p47s, for instance, states that "most errors consist only in our not rightly applying names to things."

[70] Perhaps the definitions fail to adequately capture the ordinary use of metaphysical terms. This purported failure is one of Leibniz's most common criticisms of Spinoza (Laerke 2009: 946). But that is a separate issue—the definitions are at least intended to roughly capture ordinary usage.

[71] As Garrett and Gueroult point out, there's nothing to prevent a definition from constituting both (i) an attempt to capture the ordinary use of a word and (ii) an attempt to capture the nature of the thing defined (2003: 150). In other words, a definition can be both real and nominal.

virtue of which we can call them possible or contingent. But there are nonetheless myriad linguistic possibilities in the sense that there are many alternatives to the actual world which can be expressed in words. This picture offers Spinoza a framework within which he can justify the use of counterpossibles. We can draw inferences from impossibilities because doing so is merely a step in the process of making our use of language consistent. Second, this account casts doubt on the hypothetico-deductive interpretation of Spinoza's definitions. The hypothetico-deductive interpretation derives from Bennett and constitutes the most prevalent rival to the nominal interpretation. According this interpretation, Spinoza does not expect his readers to accept his definitions on their own. Rather, he offers the definitions as tentative starting points which are justified or confirmed only insofar as they later produce an elegant and explanatory metaphysical system.[72] But if the initial acceptance of the definitions is essential to the success of Spinoza's *reductio* arguments, then the hypothetico-deductive interpretation is flawed.

Lastly, my account entails that language plays a central role in Spinoza's methodology. Language is the thing which gets the metaphysical gears of the *Ethics* turning. This should come as a surprise. According to a common story, the point of Spinoza's geometrical method is to detach language from the imagination and from its common uses.[73] For example, in E2p40s2 he argues that language belongs with the first kind of knowledge, which is an inadequate. Spinoza opts to locate language in the first kind of knowledge because of its tendency to engage in abstraction, which inevitably leads to confused ideas (E2p40s1). No adequate knowledge ever leads to confused ideas, so inadequate knowledge is part and parcel of the use of language. According to a

[72] Bennett (1984: 20).

[73] Hampshire (1987: 50).

common picture, it is only when language is detached from ordinary use that one can come to adequately entertain the ideas represented by the definitions and axioms of the *Ethics*.

I agree with this picture of Spinoza's view of language only if we are considering the final role of language in knowledge. The third kind of knowledge consists of a purely intellectual intuition of God and his nature. There is no place in this third kind of knowledge for deduction, let alone for language. As Spinoza writes in the *Theologico-Political Treatise*: "a thing is understood when it is perceived simply by the mind without words and images".[74] Nonetheless, Spinoza recognizes that one does not start at the third kind of knowledge (assuming one can ever get there at all). Rather, an arrival at the intellectual love of God is a long and arduous process. I argue merely that a consideration of language is an important first step in that process. By recognizing the sentences his readers would likely accept, Spinoza uses these sentences to reveal the ubiquitous confusion present in our beliefs about what is possible.

[74] S: 55, quoted in Savan (1958: 225).

Bibliography

Adams, Robert Merrihew. *Leibniz: Determinist, Theist, Idealist*. New York: Oxford University Press, 1994.

Arnauld, Antoine and Pierre Nicole. *The Port-Royal Logic* [*La logique, ou L'art de penser*]. Trans. and ed. Jill Vance Buroker. Cambridge: Cambridge University Press, 1996.

Bennett, Jonathan. *A Study of Spinoza's Ethics*. Indianapolis: Hackett Publishing, 1984.

Brogaard, Berit and Jon Salerno. "Remarks on Counterpossibles." *Synthese* 190 (2013): 639-60.

Curley, Edwin, and Gregory Walski. "Spinoza's Necessitarianism Reconsidered." In *New Essays on the Rationalists*, edited by R Gennaro and C. Huenemann, 241-62. Oxford: Oxford University Press, 1999.

Della Rocca, Michael. *Representation and the Mind-Body Problem in Spinoza*. Oxford: Oxford University Press, 1996.

Garrett, Aaron. *Meaning in Spinoza's Method*. Cambridge: Cambridge University Press, 2003.

Garrett, Don. "Representation and Consciousness in Spinoza's Naturalistic Theory of the Mind and Imagination." *Interpreting Spinoza: Critical Essays*, ed. Charles Huenemann. Cambridge: Cambridge University Press, 2008.

---. "Spinoza's Necessitarianism." In *God and Nature in Spinoza's Metaphysics*, edited by Yirmiyahu Yovel, 191-218. Leiden: E.J. Brill, 1991.

---. "Spinoza's 'Ontological' Argument." *The Philosophical Review* 88 (1979): 198-223.

Hampshire, Stuart. *Spinoza and Spinozism*. Oxford: Oxford University Press, 1987.

Koistinen, Olli. "Spinoza's Proof of Necessitarianism." *Philosophy and Phenomenological Research* 66 (2003): 283-310.

Kneale, William and Martha Kneale. *The Development of Logic*. Oxford: Claredon Press, 1962.

Laerke, Mogens. "The Problem of *Alloglossia*: Leibniz on Spinoza's Innovative Use of Philosophical Language." *British Journal for the History of Philosophy* 17 (2009): 939-53.

Leibniz, G.W. *Philosophical Essays*. Trans. by Roger Ariew and Daniel Garber. Indianapolis: Hackett, 1989.

Lin, Martin. "Rationalism and Necessitarianism." *Noûs* 46 (2012): 418-48.

---. “Spinoza’s Arguments for the Existence of God.” *Philosophy and Phenomenological Research* 75 (2007): 269–97.

Martin, Christopher. “A New Challenge to the Necessitarian Reading of Spinoza,” in *Oxford Studies in Early Modern Philosophy* (V). Ed. Steven Nadler and Daniel Garber. Oxford: Oxford University Press, 2010: 25-70.

Mason, Richard. “Spinoza on Modality.” *The Philosophical Quarterly* 36 (1986): 313-42.

Miller, Jon. “Spinoza’s Possibilities.” *The Review of Metaphysics* 54 (2001): 779-814.

Newlands, Samuel. “Another Kind of Spinozistic Monism.” *Noûs* 44 (2010): 469–502.

---. “The Harmony of Spinoza and Leibniz.” *Philosophy and Phenomenological Research* 81 (2010): 64–104.

Nolan, Daniel. “Impossible Worlds: A Modest Approach.” *Notre Dame Journal of Formal Logic* 38 (1997): 535-72.

Savan, David. “Spinoza and Language.” *The Philosophical Review* 67 (1958): 212-25

Ward, Thomas. “Spinoza on the Essences of Modes.” *British Journal for the History of Philosophy* 19 (2011): 19-46.

Yovel, Yirmiyahu. “Spinoza: The Psychology of the Multitude and the Uses of Language.” *Studia Spinozana* 1 (1985): 305-33.

Chapter 3: Spinoza's Concept of Power

I argued in the previous chapter that Spinoza is entitled to use merely hypothetical cases in order to demonstrate many of the propositions of Part One of the *Ethics*. In the next two chapters I will argue that one of Spinoza's most important arguments for monism—an argument that appears both in the correspondence and in the *Ethics*—depends on the use of such merely hypothetical cases.

In E1p11, Spinoza offers four arguments for the existence of God. In the summary of the arguments, he writes:

> [T]hings that come to be from external causes…owe all the perfection or reality they have to the power of the external cause; and therefore their existence arises only from the perfection of their external cause, and not from their own perfection. On the other hand, whatever perfection substance has is not owed to any external cause. So its existence must follow from its nature alone; hence its existence is nothing but its essence. Perfection, therefore, does not take away the existence of a thing, but on the contrary asserts it. But imperfection takes it away. So there is nothing of whose existence we can be more certain than we are of the existence of an absolutely infinite, or perfect, Being—that is, God. E1p11s

But Spinoza makes no explicit reference to perfection in the argument itself. Instead, he utilizes two peculiar claims about power:

> (a) "to be able not to exist is to lack power, and conversely, to be able to exist is to have power (as is known through itself)"
>
> (b) "since being able to exist is power, it follows that the more reality belongs to the nature of a thing, the more powers it has, of itself, to exist."

He then argues that God has the most attributes and, therefore, the most power to exist of any substance. Understanding God's perfection requires an understanding of the nature of this "power to exist."

In Chapter Four I will offer a positive account which distinguishes between what I call God's *intensional* and *extensional* power. These correspond, respectively, to the content of God's

power and the exercise of that power. All substances, if they exist, have the same degree of extensional power because they all fully exercise their power of self-causation. But only God actually exists because he has the most intensional power of any substance. The content of his power is richer than that of other substances and this prioritizes his existence over that of other purported substances. In this chapter, however, I will rehearse some of the standard interpretations of power. I will argue that they all have serious flaws and that the two most common interpretations fail precisely because they overlook the distinction between the content and exercise of God's power.

I. The Meaning of Power

The *purpose* of the final argument of E1p11 is straightforward. It aims to preempt an objection to the argument for monism that eventually culminates in E1p14.[75] Spinoza's first two arguments for God's existence are such that if they work, then they demonstrate not just God's existence, but the existence of any substance. In other words, his first two arguments rely on no special features of God but on general features of substance, e.g. that they are self-caused. But substances cannot share attributes (E1p5). So if the first two arguments demonstrate the existence of substances with fewer than all the attributes, then those same arguments also preclude the existence of God, who is defined as the substance with all the attributes (E1d6). God cannot exist if another substance possesses one of his attributes. Spinoza must therefore offer some consideration to privilege the substance with more attributes. God must have, so to speak, first dibs on the attributes. Spinoza utilizes God's greater power for this exact purpose. It is his greater power that privileges his existence over that of other, less powerful, substances.

[75]Garrett (1979: 211) was one of the first to point this out. Lin (2007: 272), Della Rocca (2002: 25), and Donagan (1988: 77-84) all echo Garrett's point. Letters 35 and 36, as well as paragraph 17 of Chapter II of KV, support this reading.

Though the purpose of the argument is clear, the *meaning* of 'power' is not immediately obvious; the relevant premises have puzzled commentators and Spinoza does not explicitly defend them. Current interpretations fall into three general categories, according to which the concept of power is (i) obscure, (ii) stipulative, (iii) or a causal concept. The causal interpretation consists of two sub-categories, which I will call the *conceptualist* and *dynamicist* interpretations. The causal interpretation is by far the most prevalent, but its acceptance is not unanimous. So before I discuss it in detail, I want to briefly resist interpretations which claim that the concept of power is either obscure or stipulative.[76]

Obscurity

The obscurity interpretation is not so much one interpretive option among many, but a rejection of all other interpretations. Nevertheless, some hold the view and it is not entirely unmotivated. Bennett, for instance, calls the third and fourth arguments of E1p11 "bizarre" (2001: 115). Both the third and fourth arguments revolve around claims about power to exist, so it is likely those claims or the general concept of power which Bennett takes to be bizarre. Similarly, Lin initially takes Spinoza's use of power to be obscure. He claims that "the meanings of the curious notions ''being able to exist'' and ''being able to not exist'' and their identification with having and lacking power respectively are obscure" (2007: 280). But Lin seems to be registering only his initial bafflement at the meaning of power, because he later proceeds to interpret power quite charitably as a causal concept.

Spinoza's discussion of power leaves one with the impression that substances are competing for existence and that it is only the most powerful substance or substances which earn

[76] The three interpretations are not mutually exclusive of each other; one could argue that Spinoza is relying on an obscure notion of causation, a stipulative notion of causation, and so on.

actually exist. Leibniz offers an ostensibly similar account of possibilities striving towards existence:

> We must first acknowledge that since something rather than nothing exists, there is a certain urge for existence or (so to speak) a straining towards existence in possible things or in possibility or essence itself; in a word, essence in and of itself strives for existence. Furthermore, from this it follows that all possibles, that is, everything that expresses essence or possible reality, strives with equal right towards existence in proportion to the amount of essence or reality or the degree of perfection they contain, for perfection is nothing but the amount of essence. 1989: 150.

The struggle that Leibniz describes here is of course metaphorical—possibilities tend towards existence just in the sense that their essence gives God a *prima facie* reason to create them. But the initial impression is one of a literal struggle. Similarly, Spinoza's final argument suggests that substances literally strive to become actual.[77] Only the most powerful substance wins out and it thereby keeps non-divine substances below the threshold of actuality.

If this competition for existence is what Spinoza has in mind, then the notion of power *is* obscure. A thing's striving is its actual essence (E3p7). Non-existents do not have actual essences, so non-divine substances could not strive for existence; to strive presupposes actuality. I think it is best to deny that Spinoza's power arguments involve anything like not-yet-existing substances which strive for existence. Absent a positive reason to think that Spinoza is here being incoherent, I will treat the obscurity option as a last resort.

Stipulation

Garrett interprets Spinoza's notion of power as stipulative. In a classic paper on E1p11, he writes: "This claim [that ability to exist is power] does not seem self-evident, but we may regard it as a stipulative definition of 'power'" (1979: 211). He then argues that Spinoza derives the claim that God is the infinitely powerful substance "[f]rom the stipulative definition of 'power'". The

[77] As we'll see, the dynamicist interpretation ultimately claims that God literally causes his own existence.

concept of power is stipulative *only if* Spinoza intends for his definition to be immune from objections due to its features *qua* definition (rather than due to its content). In Letter 9, he outlines a kind of definition that requires no defense:

> But if I have in my own mind formed the design of a temple that I want to build, and from its description I conclude that I will have to purchase such-and-such a site and so many thousands of stones and other materials, will any sane person tell me that I have reached a wrong conclusion because my definition may be incorrect? Or will anyone demand that I prove my definition? Such a person would simply be telling me that I had not conceived that which in fact I had conceived, or he would be requiring me to prove that I had conceived that which I had conceived, which is utter nonsense. S: 91-2

It is possible to reject a definition of this kind, but only if its content is inconceivable or incoherent. If the content is intelligible, then the definition cannot be false. The definition serves only to clarify one's use of a term. So Spinoza's definition of power is stipulative only if he intends merely to clarify what he means by 'power'.

However, the stipulative interpretation fails to cohere with the text. Spinoza's first claim about power states that "to be able not to exist is to lack power, and conversely, to be able to exist is to have power (*as is known through itself*)" (my emphasis). The parenthetical "*per se notum"* refers to a claim whose truth is understand exactly when its meaning is understood. It is a way that one flags a claim as self-evident. If Spinoza intends his concept of power to be stipulative, then it is not clear what the point of his parenthetical remark is. He seems to be highlighting the purported self-evidence of the claim and stipulative definitions are not candidates for self-evidence.[78]

Spinoza distinguishes stipulative definitions from what he calls "real" or "true" definitions. Real or true definitions can succeed or fail in their claims to self-evidence, but they are never stipulative:

[78] The claim may or may not actually *be* self-evident, but that is beside the point.

> There is a definition that serves to explicate a thing whose essence alone is in question and the subject of doubt, and there is the definition which is put forth simply for examination. The former, since it has a determinate object, must be a true [as opposed to a false] definition, while this need not be so in the latter case. S: 91

A definition put forth for examination is a stipulative definition. But Spinoza seems to want his readers to accept his definition of power rather than merely examine it. After all, it is the crucial premise in two arguments for God's existence. So it is likely that Spinoza wants his reader to accept the definition not because he stipulated it, but because it captures some important truth about existence and substances.[79]

II. The Causal Interpretation

According to the causal interpretation, power is a fundamentally causal concept. Laerke, for instance, argues that "all types of causal action should in principle be translatable into power relations [and] we should then expect to be able to move quite freely between the causal and dynamic aspects of Spinoza's ontology, from his reflections on causation to his reflections on power" (2011: 458-9). Similarly, Bennett, in an earlier work, refers to power as a "paradigmatically causal notion" (1984: 74). Causal interpretations fall into two, incompatible categories: the conceptualist and the dynamicist interpretations. Both construe power as a causal concept, but each interprets causation itself in a very different manner. According to the conceptualist interpretation, causation is ultimately grounded in conception or intelligibility. To be a cause just is to make something intelligible. On the dynamicist interpretation, causal relations co-vary with conceptual relations, but causation itself is more fundamental than conception. Conception is grounded in something like the dynamic force of efficient causation.

[79] Additionally, it would be odd if the definition of power were stipulative given that the formal definitions of Part One don't seem stipulative. See A. Garrett (2003: ch. 6) for an extended argument that the definitions of the *Ethics* are real rather than stipulative.

Though the dynamicist and conceptualist disagree about which relation is most fundamental in Spinoza's metaphysics, they agree that the causal and conceptual relations are co-extensive. Every causal relation mirrors a conceptual relation and every conceptual relation mirrors a causal relation. This co-extension can be established fairly easily. First, in E1p6, Spinoza argues that

> if a substance could be produced by something else, the knowledge of it would have to depend on the knowledge of its cause (by 1a4). And so (by 1d3 [substances are self-conceived]) it would not be a substance.

Knowledge allows involves an idea or concept (E2d3, E2a3). So knowledge requires conception and if something causes another thing, then the former is conceived through the latter.[80] Second, everything is caused by that through which it is conceived.[81] This can be culled from E1p25 and its demonstration, where Spinoza states that:

> God is the efficient cause, not only of the existence of things, but also of their essence.
>
> Dem.: If you deny this, then God is not the cause of the essence of things; and so (by 1a4) the essence of things can be conceived without God. But (by 1p15) this is absurd. Therefore God is also the cause of the essence of things, q.e.d.

So x causes y if and only if y is conceived through x. The conceptualist and dynamicist interpretations both accept this co-variance and differ in which relation they believe to be more fundamental.

[80] Knowledge is a mental phenomenon, so perhaps it is illicit to use E1a4 to talk about physical causal relations. An alternative way to establish that causation always entails conception would involve citing E1p2 and E1p3. See Newlands (2012) for an argument to the effect that conception is not a mental relation.

[81] The co-extensiveness of causation and conception is uncontroversial within the secondary literature. D. Garrett (2003, 136), Della Rocca (1996, 11), Laerke (2011: 448), and Melamed (2012, 367) all explicitly defend it, for example.

According to the conceptualist interpretation, causation is ultimately grounded in conception or intelligibility.[82] For example, Della Rocca claims that "the causation of one thing by another is nothing but one thing making the other intelligible" (2008: 2). Newlands argues that for Spinoza "metaphysics is ultimately the project of explaining everything by discerning and articulating conceptual connections" (2010: 472) and that "Spinoza believes causal relations are, more fundamentally, explanatory relations" (475). Similarly, Lin states that "the explanation of why one thing is causally related to another is that it is part of the concept of the former that it is so related to the latter [and] there can be no further question about why one thing causes another after it has been established that the concept of the former implies that it causes the latter" (2007: 294-5). Bennett likewise argues that "a cause relates to an effect as a premise does to the conclusion which follows from it" and that Spinoza merely "uses the language of causality in discussing logico-mathematical topics" (1984: 30). According to Della Rocca et al, causation is ultimately just about explanation and a description of a Spinozistic universe would lose no information if it were to replace all mention of causation with uniquely conceptual terms.

The dynamicist interpretation construes causation—and power with it—as lying somehow deeper in Spinoza's ontology than conceptual relations.[83] Laerke, for instance, claims that "self-conception is ontologically grounded in, and reducible to, self-causation, just like any other conceptual relation is grounded in, and reducible to, a causal one" (2011: 448). Causation is fundamentally a dynamic shoving or a pushing efficient cause "which necessarily posits the existence of a thing, and does not take it away" (E2d5exp; Laerke 460). This kind of efficient causation, though it co-varies with an intelligible relation, is in itself likely primitive (462). One

[82] The main proponents of the conceptualist interpretation include Della Rocca (2003, 2008), Lin (2007), Newlands (2010), Bennett (1984), and, plausibly, Melamed (2012).

[83] Advocates of the dynamicist account include Laerke (2011, 2013), Viljanen (2011), and Matheron (1991, 1999).

potentially helpful analogy lies in Descartes' doctrine of the creation of the eternal truths. According to Descartes, God is the efficient cause of modal truths (CSMK III, 25). He acts as a kind of pre-modal pusher that generates the entirety of modal space. Similarly, the dynamicist claims that causation is akin to a non-conceptual shove that grounds conception.

One key difference between the conceptualist and dynamicist interpretations lies in their treatment of God's self-causation. According to the conceptualist, God's self-causation just is his conceptual self-grounding. For example, Della Rocca claims that from "Spinoza's equation of causation and conceivability, it follows that a substance's existence is simply a function of its concept" (2008: 50). Newlands argues in a similar manner that self-causation "is better expressed by an appeal to a *conceptual* relation: an object is the cause of its own existence in virtue of a *conceptual* involvement relation between its essence and existence" (2010: 476, emphasis original) and that "substance is in itself, which means that substance is conceptually independent and that its concept involves only itself" (480). Laerke (2013) sums up the conceptualist position well when he writes that

> [w]hen the Scholastics maintained that God is the being existing from itself, or by its essence alone, they meant that God is not causally efficacious with regard to God himself. If God exists in virtue of His essence, this does not mean that He is self-caused in the sense that He *produces* himself or is an effect of Himself, but simply that He cannot be *conceived* as non-existing. 65, emphasis original

God is self-caused in the sense that, given his nature, there is simply no reason for him not to exist. His self-causation is just his conceptual independence.

On the dynamicist interpretation, however, God's self-causation or power to exist is a literal act. Viljanen, for instance, writes:

> Briefly put, then, *to be in itself is to have power to exist*, or to exist in virtue of one's power alone….whatever the full import of this, it can be taken to suggest that any substance should be seen as a fundamentally power-laden entity that has causal

> efficacy to bring about its own existence….Spinoza's God is, in essence, a power—the ultimate dynamic factor behind all existence. 2011: 70-1, emphasis original

Similarly, Laerke argues that "Spinoza's self-caused being cannot be reduced to anything like an Aristotelian uncaused being or Scholastic *ens a se* (which…is an efficiently uncaused being)" (2013: 70). As Matheron puts it, God's self-causation is "the causal power of its essence already actualized" (1991: 31). God literally causes his own existence.

I believe that the conceptualist and dynamicist interpretations both have significant flaws. In the next two sections I will outline their respective shortcomings. In section V, I will argue that their shortcomings are due to a failure to distinguish between the content of God's power and its exercise. The conceptualist focuses exclusively on the content of power, whereas the dynamicist interpretation privileges the exercise of that power. An adequate account of God's power requires somehow synthesizing both aspects.

III. A Dilemma for the Dynamicist Interpretation

The second claim about power states that the more real something is, the more power it has to exist. Shortly before the argument, Spinoza claims that "the more reality or being each thing has, the more attributes belong to it" (E1p9). It follows that the more attributes a substance has, the more power it has to exist. God is defined as the substance with infinite attributes, so he is the substance with the most power to exist. His power to exist is infinite. According to the dynamicist interpretation, the connection between a substance's attributes and its power to exist should be cashed out in efficient causal terms: the more attributes a substance has, the more self-caused it is. God is the most *powerful* substance because he is the most *self-caused* substance, i.e. his self-causation is complete. A merely extended substance is less powerful—and therefore less able to exist—because it is less self-caused.

There is an important question about the explanatory relationship between God's self-causation and his possession of infinite attributes. Does God have infinite attributes because he is completely self-caused? Or is God completely self-caused because he has infinite attributes? Spinoza's commitment to the PSR suggests that there must be some answer to the question of why infinite power and infinite attributes are co-extensive. But neither option is palatable for the dynamicist—no matter the order of explanation, degrees of power cannot be reduced to degrees of self-causation. And so God's infinite power cannot be reduced to complete self-causation.

First, suppose that God's complete self-causation explains his possession of all the attributes. His causal strength, so to speak, explains why he has every attribute. But this order of explanation overlooks the fact that not only substances are self-caused, but attributes too. Attributes are self-conceived because they represent the essence of substance, which is also self-conceived (E1p10). It follows from the co-extension of causation and conception that attributes also completely self-caused (E1d1). Because even a single attribute is completely self-caused, a substance with just one attribute would also be completely self-caused. For example, even a merely extended substance, if it existed, would cause its own existence. If complete self-causation explains God's possession of infinite attributes, it follows that a merely extended substance would have all the attributes and thereby be infinitely powerful. But a merely extended substance cannot be infinitely powerful—by definition it lacks some of the other attributes. So, if the dynamicist interpretation explains God's having infinite attributes in terms of God's complete self-causation, then it generates a contradiction: a merely extended substance both has and does not have infinite attributes.

Suppose instead that God is infinitely powerful because he has infinite attributes. Many commentators prefer this order of explanation. Della Rocca, though he is not a dynamicist, argues

that substances exist self-sufficiently only because of their possession of attributes (2002: 25). Similarly, on Gueroult's interpretation, God has more power than any particular attribute because God is a super-substance composed of all the attributes (1968: 51-52).[84] But it is not clear that the dynamist can take this route. What she needs is for multiple attributes to contribute together something *self-causal* which they couldn't contribute in isolation. In other words, the dynamist needs self-causation to increase with the addition of attributes. For example, a substance with one attribute would have the causal power of N, whereas a substance with two attributes would have the causal power of 2N. Surely, things often cause more in concert than they can in isolation. But individual attributes are already completely self-caused and *complete* self-causation is not additive. One cannot simply stack completely self-caused things and expect to get more self-causation. Of course, there is a coherent sense in which Spinoza allows for degrees of self-causation, namely at the level of finite modes. A finite mode x is more self-caused than a finite mode y to the extent that x's states depend on external things less than y's states (E3d2). But no finite mode is ever completely self-caused in the sense that a substance is (E1p23). So degrees of self-causation are incoherent when the self-causation in question is complete self-causation.

The dynamicist's error arguably lies in the inference from the possession of more self-caused x's to being more self-caused. As a general rule, this inference is invalid. Consider the following example. Smith and Jones are both human and they both have various human parts. Furthermore, Smith is bigger than Jones and his greater size is due to his great number of human parts. But nobody would want to thereby conclude that Smith is *more human* than Jones. They are human to the same degree. Likewise, merely because God has more self-caused attributes than

[84] Though Gueroult's "super-substance" interpretation is widely rejected, I do not think that undermines the order of explanation he gives here. See Smith (2014) for a defense of Gueroult's interpretation.

other substances would, it doesn't follow that God is more self-caused. Perhaps advocates of the dynamicist position would prefer to construe any talk of degrees of self-causation as elliptical for the possession of different numbers of self-caused attributes. But in doing so, they would be giving up on explaining *why* God's greater power privileges him over other substances because they could no longer explain it in terms of God's greater self-causation. It would be like if two people were arguing over a given seat at a concert and one tried to prove his case by holding up two copies of a ticket while the other holds up only one.

IV. Arguments against the Conceptualist

Self-conception and self-causation are co-extensive. In E1d1 Spinoza defines 'cause of itself' as 'that whose essence involves existence, or [*sive*] that whose nature cannot be conceived except as existing.' The second attempt at a definition is important for its negative characterization of self-causation: a thing is self-caused if and only if it 'cannot be conceived except as existing'.[85] Recall that the conceptualist privileges the negation formulation as more fundamental. To be self-caused or to exist necessarily is for existence to be a function of a thing's concept or for there to be no reason why the thing couldn't exist. There's a reason why I couldn't exist—perhaps my parents never meet or I get in an accident tomorrow. But there doesn't seem to be any reason why, say, extension might not exist. It's not a self-contradictory concept, so it can't keep itself from existing. But nothing else can prevent its existence because doing so would require the existence of extension—only extension can causally interact with extension (E1p2, E1p3).

If the dilemma from the previous section is truly problematic for the dynamicist, then it is seems that it is also problematic for the conceptualist. First, God's infinite attributes cannot be reduced to his complete self-conception because even a one-attribute substance, if it exists, would

[85] Per causam sui intelligo id, cuius essentia involvit existentiam, sive id, cuius natura non potest concipi nisi existens.

be completely self-conceived. But a one-attribute substances obviously does not possess infinite attributes. Second, it's difficult to understand how complete self-conception could come in degrees and so it's difficult to understand how stacking attributes explains God's complete self-conception. Consider again a merely extended substance. If it *is* a substance, then it cannot be conceived except as existing. So if it *is* a substance, then its self-conception is not undermined by its lacking some of the attributes. In order for the conceptualist to accommodate degrees of self-conception, some substance would have to be *even more* unable to be conceived except as existing. But complete self-causation is a limit concept, like being completely flat. If something is completely flat, then it cannot be flatter to a greater extent.[86]

I think that the conceptualist can ultimately avoid this dilemma due to an ambiguity in the phrase "conceived as not existing." On what I will call the extensional interpretation, the dilemma applies even to the conceptualist. But on the intensional interpretation, she can explain how non-divine substances are not fully self-conceived and thereby avoid the dilemma.[87] But the conceptualist interpretation nevertheless faces independent problems not faced by the dynamicist. I will offer three such arguments with the aim of demonstrating that God's power must consist of more than just his conceivability or intelligibility.

First Argument

The conceptualist account lacks the resources to distinguish between active and passive finite modes. Spinoza defines the distinction in Part Three of the *Ethics*:

> I say that we act when something happens, in us or outside us, of which we are the adequate cause, that is (by D1), when something in us or outside us follows from our own nature, which can clearly and distinctly be understood through it alone. On

[86] The conceptualist cannot resort to the fact that God *actually* is a substance, whereas merely extended substances are ultimately only purported substances. God's greater power serves as a premise in an argument for God's existence. If Spinoza defines God's greater power in terms of his actual existence, then he is blatantly begging the question.

[87] See the first section of Chapter Four for an explanation of the distinction.

> the other hand, I say that we are acted on when something happens in us, or something follows from our nature, of which we are only a partial cause. E3d2

The distinction is vital to Spinoza's system because virtue requires that a person become more active and less passive.

> By virtue and power I understand the same thing, that is (by 3p7), virtue, insofar as it is related to man, is the very essence or nature of man, insofar as he has the power of bringing about certain things, which can be understood through the laws of his nature alone. E4d8

We become virtuous by becoming more active, i.e. by becoming the adequate causes of our actions. Something cannot be both active and passive, at least not in the same way at the same time to the same degree. Either a thing produces an effect from its own nature or it doesn't. Without this distinction between activity and passivity, Spinoza's entire ethical system would collapse because it would no longer be capable of distinguishing between the virtuous and those lacking virtue.

So suppose that conceptualism is true and that causation is equivalent to conceptual explanation. Now consider some arbitrary finite mode in the order of nature, A, which is the cause of another mode, B. Necessitarianism is true, so A could not have failed to cause B and B could not have been caused by anything but A. Now extend this arbitrary point in the order of nature into the past and future, so that some other finite mode Z causes A which causes B which causes C, and so forth. From the infinite past there is a chain of finite modes running up through C and beyond into the infinite future. Furthermore, the causal arrow points from the past to the future rather than from the future to the past. Spinoza describes this chain in E1p28 when he says that "every singular thing…can neither exist nor be determined to produce an effect unless it is determined to exist and produce an effect by another cause, which is also finite and has a determinate existence… and so on, to infinity."

The order of nature is like one infinitely long series of conditionals, running from the past to the future. A finite cause suffices for its effect in the future much in the same way that a true antecedent of a conditional entails its consequent. But the order of nature is more than a series of conditionals. It is in fact a series of bi-conditionals. E1a4 states that "knowledge of an effect depends on and involves knowledge of its cause." So, if a person knows that C, then she knows that B, i.e. C's finite cause. And if she knows that B, then she knows that A, and so on. The future makes the past intelligible in the same way that the past makes the future intelligible. Furthermore, if causation and conception are identical relations, then the causal arrow runs both from the past to the future and from the future to the past. For example, if I have compete knowledge of the economic crisis in Greece, then I also have complete knowledge of the conditions which caused it. I can make the pre-crisis conditions intelligible by looking at their effects. The concept of the pre-crisis conditions and the concept of the crisis contain each other. By the identity of causation and explanation, the economic crisis caused the pre-crisis conditions and the conditions caused the crisis.[88]

If the explanatory arrow runs equally between cause and effect, then the conceptualist account of causation undermines the distinction between activity and passivity. For any action, one can move freely between the "active" and "passive" modes. For instance, with full knowledge of my fear, one can infer what it is that brought it about; and from full knowledge of those things that brought about my fear one can infer my fear itself. My fear and the thing feared make each other intelligible. So if causation is equivalent to explanation, then my fear and the things feared are adequate causes of each other. As a result, both are active because they are adequate causes

[88] This inability to distinguish causation from explanation or prediction presents a significant obstacle to simple forms of the deductive-nomological model of explanation in the philosophy of science.

and both are also passive, because they are both made intelligible by things outside them. Conceptualism therefore lacks the resources to distinguish between the active and passive.[89]

The Second Argument

E3p6 states that singular things are "things that express, in a certain and determinate way, God's power, by which he is and acts." The striving of finite individuals is just a particular, more limited version of God's striving. So one should expect that the striving of finite modes mirrors God's power in important ways. According to the conceptualist, God's power is his ability to explain. So the striving of finite modes should consist in their making things intelligible.

One particularly important sphere of striving involves the behavior of bodies during and after a collision. The behavior of a given body at a given time is a result of (i) its past behavior, (ii) the behavior of other bodies, and (iii) laws of motion, e.g. laws of inertia, laws of conservation, laws of impact. Consider an example. Body A is moving in a straight line at time t and will continue to move in a straight line at time t_2 if it does not collide with another body. Its continual movement in this straight line is explained by its past motion in a straight line together with the laws of inertial and rectilinear motion. Body A's motion in a straight line at t_2 serves as a conclusion in an argument whose premises together explain it or make it intelligible.

(1) Body A moves in a straight line at time t.

(2) If a body is in motion, then it will continue in motion unless determined to rest by another body.

(3) If a body is moving in a straight line, then it will continue to move in a straight line unless determined to a new direction by another body.

(4) At t_2, no other bodies determine body A to rest or to a new direction.

(5) Therefore, body A continues to move in a straight line at t_2.

[89] A different, but related, argument appears in Melamed (2012: 372-3).

Together (1)-(4) entail body A's motion at t_2 and thereby serve to make its determinate motion intelligible. So far, so good.

But it's an open question whether the striving of bodies in Spinoza can be captured solely by conditional claims about how the body moves under certain conditions. In other words, does a body's striving consist just in the truth of conditionals like (2) and (3) or are those conditionals instead *explained* by a body's striving? Della Rocca calls the former, merely hypothetical kind of striving a "stripped-down notion of striving" according to which

> the fact that a thing strives is nothing more than the truth of a certain hypothetical claim: for a thing to strive to do x is for its current state to be such that if it is not prevented from doing x by external causes, then it will do x. Thus Descartes [who endorses the stripped-down notion] says that by "strives" he means merely that the globules "are positioned and pushed into motion in such a way that they will in fact travel in that direction, unless they are prevented by some other cause." For Descartes, striving consists simply in the truth of such a conditional claim. 2008: 146

This stripped-down notion of striving seems to leave out an important piece of information. Leibniz, in a letter to de Volder, explains the omission well:

> I admit that each and every thing remains in its state until there is a reason for change; this is a principle of metaphysical necessity. But it is one thing to retain a state until something changes it, which even something intrinsically indifferent to both states does, and quite another thing, much more significant, for a thing not to be indifferent, but to have a force and, as it were, an inclination to retain its state, and so resist changing. 1989: 172

Leibniz's point is that the striving of bodies cannot be reduced to a mere conditional claim because mere conditionals ignore the phenomenon of resistance. Consider a case in which body A does not continue unencumbered in a straight line, but collides with another body, B, at t_2. It follows from (3) that body A will be determined in a new direction by body B. (For the sake of simplicity, assume that the two bodies have the same quantity of motion and that the collision is oblique.) The laws of motion and the behavior of other bodies together make intelligible the determinate motion

of body A at t_2 in the sense that it successfully predicts its motion on the basis of the laws of collision and the motions of A and B at t. But this conditional account seems to ignore the way in which body A *resists* body B upon collision. Body A does not merely change its direction when it collides with body B. Rather, it resists changing direction and does so only because its striving to continue in a straight line is *overcome* by the striving of body B. To use Garber's analogy: even if it's true that a child will continue playing with her toys unless asked to stop, she will nonetheless still resist when she's told to go to bed (1994: 47-8).[90]

Two questions arise. First, does Spinoza have anything like this notion of resistance in his ontology? Second, if he does, can the conceptualist account of power capture it? I will argue that the answers are 'yes' and 'no', respectively. Della Rocca, the most persistently explicit advocate of conceptualism, recognizes that Spinoza ought to say *something* in response to Leibniz's charge:

> Leibniz thinks that bodies actively resist change… Just feel the pressure against your hand as you try to stop the motion of a billiard ball. The point, for Leibniz, is that Descartes' merely conditional notion of striving cannot account for this seemingly obvious fact. The challenge then is to show how, on a merely conditional account of striving, there can be an exercise of force, of causal power, even in a case where the striving is unsuccessful. 150

Della Rocca then argues that Spinoza can make sense of causal power on a stripped-down notion of striving precisely because he reduces causation to conception:

> Let's take a case in which a rock strikes a window and yet the window doesn't break… In such a case, the rock stops moving, but it resists doing so, it resists the window, as it were. But what causal power is, on Spinoza's terms, exercised by the rock?... [T]here is here a conceptual connection between the rock's motion and the rock's continuing to move unless other things prevent it, or between the rock's motion and the rock's breaking the window unless other things prevent it. This is a conceptual connection between the rock's motion and what may be called a conditional state of affairs… And if, as Spinoza holds, causation just is conceptual connection then we have in this case of unsuccessful striving a genuine causal connection between the rock's moving and, not the window's breaking, but the state

[90] Garber, *pace* Della Rocca, thinks that Cartesian physics can accommodate resistance.

> of affairs whereby the window will break unless something prevents the rock from breaking it. 151

Della Rocca here admits that the resistance of bodies during collision consists in nothing more than the hypothetical claim that the body's behavior would differ under different circumstances. He just denies that this result is problematic because he denies that is anything is force or "oomph" in bodies that isn't just a conditional about the concepts of the bodies involved.

But I think that Spinoza seems to endorse a notion of resistance that goes beyond the mere truth of hypothetical claims. Consider the phenomenon as it occurs in the mental realm. E4p1 states that "nothing positive which a false idea has is removed by the presence of the true insofar as it is true." The only thing that is removed by a true idea is the default authority the false idea had before the appearance of a true idea. In the scholium, Spinoza harkens back to an example from E2p35s in which the image of the sun persists even in the presence of a true idea of the sun.[91] The image represents the sun as being 200 feet away and the mind accepted it as the truth before there was a true idea of the sun which represents the sun as being 93 million miles away. The content of the image does not disappear once a true idea appears. The image continues to actively assert its content despite the fact that the mind no longer recognizes the content of the image as authoritative. If the conceptualist is right, then the image should have ceased to assert its content. It would instead have merely been disposed to re-assert that content once the true idea disappeared. Furthermore, Spinoza is explicit that a true idea overrules an image not in virtue of its status as *true,* but because the true idea is itself an affect with power: "an affect cannot be restrained or taken away except by an affect opposite to, and stronger than, the affect to be restrained" (E4p7). If the conceptualist picture were right, then the truth of the idea would be sufficient to overrule the image. It would

[91] I discussed this passage in Chapter One in the context of the phenomenology of sensation.

overrule it the same way that the truth of [P] overrules the truth of [Q and ~P]. [Q and ~P] does not "resist" [P]. But on Spinoza's picture, the image still *tries* to determine behavior despite being overruled by a true idea. In fact, it is often successful in its resistance: "a desire which arises from a true knowledge of good and evil can be extinguished or restrained by many other desires which arise from affects by which we are tormented" (E4p15). If the image's content were subdued, as the conceptualist maintains, then this scenario would be impossible.

So there is a kind of active resistance to true ideas on the part of images. Parallelism entails that there is something going on in the physical realm which mirrors the resistance of images occurring in the mental realm. So bodies do not merely wait for their chance to exert influence but actively attempt to exert influence even when their attempts are overcome by other bodies. Body A's tendency to continue in a straight line does not become merely hypothetical when it collides with body B. Its tendency persists. It's just that its attempt is too weak and it is therefore overruled by the force present in body B. The conceptualist account of power cannot account for this phenomenon.

The Third Argument

The third argument is found in Laerke (2011: 457). The power of finite individuals mirrors the power of God. They are nothing but more specific versions of God's own power.[92] The features of finite modes in virtue of which they count as powerful are found in God in an infinite form. An account of God's power should be able to explain this relationship between God's power and the power of finite modes. Della Rocca recognizes this point:

> The notion of striving reveals another similarity between us and God: our striving is not different in kind from what might be called God's striving… Just as we will preserve ourselves unless other things interfere, so too will God preserve himself

[92] In his (2013), Laerke defends what he calls a 'same sense clause': "a principle of causal univocity according to which all kinds of causation ultimately have the 'same sense'" (58).

> unless other things interfere. The only difference is that with regard to God there are no other things and so his striving for self-preservation is necessarily unimpeded. Of course, the term "strive" may seem inappropriate when speaking of God because it might suggest some kind of struggle against which, of course, God is not subject to. But this is a mere terminological point. The crucial metaphysical point remains: the truth of the kinds of conceptually grounded conditional claims that constitutes striving and indeed causation for finite things is in place for God as well. 152-3

But it's not obvious that the conceptualist has the resources to explain how the power of finite modes mirrors God's power. In this context, Laerke writes:

> [I]f self-causation could be reduced to a conceptual relation in the way that [the conceptualist] strategy suggests, this would imply that the connotations of efficient causation are ultimately evacuated from the fundamental understanding of God's necessary existence and that self-causation reduces to something like formal causation. Unless, however, some important conceptual component involving causal efficacy or productivity is then added to this understanding of *causa sui,* I find it difficult to conceive how such a formal-conceptual cause can generate anything meriting to be called "power" or how it can provide an ontological basis for the fact that things "act" in the way that Spinoza envisages. 457

Spinoza, like most early moderns, wants efficient causation to serve as model for causal relations generally. At the very least, finite modes act as efficient causes in their production of effects rather than as formal, material, of final causes (E1p28, E2d5).[93] The conceptualist denies that God is an efficient cause of himself. God's "self-causation" is not literal, but consists in his conceptual sufficiency. As conceptually sufficient, he does not need a cause—in virtue of his concept, he just is. By removing any trace of literal self-causation from God's essence, the conceptualist thereby faces the burden of explaining how finite efficient causes mirrors God's lack of an efficient cause.

V. Desiderata of a Theory of Power

The dynamicist and conceptualist interpretations each have significant shortcomings. On one hand, the dynamicist interpretation fails to explain the relationship between God's self-

[93] Cf. Viljanen (2011) on formal causation.

causation and his possession of infinite attributes. Mere complete self-causation fails to explain infinite attributes because substances with fewer than all the attributes would still be completely self-caused. Similarly, stacking self-caused attributes doesn't make a substance any more self-caused than it would be if it had just one attribute. On the other hand, the conceptualist interpretation fails to capture the dynamic aspects of Spinoza's world. First, it is unable to adequately distinguish between the activity and passivity of modes. Second, it fails to capture the way in which finite modes actively resist change. Third, it severs the explanatory link between power as it exists in God and power as it exists in finite modes. It does so by making efficient causation a definitive feature of finite modes but not of God, at least not of his self-causation. Though it is a tall task, an adequate account of Spinoza's concept of power ought to avoid all these pitfalls.

There are therefore two desiderata of an adequate theory of power. First, it must explain the relationship between God's power and his attributes. Second, it must capture Spinoza's dynamism. Ultimately, I think the conceptualist and dynamicist interpretations each satisfy one and only one of these desiderata. Of course, it would be *ad hoc* to merely combine the two interpretations without explaining how they relate to one another. As it stands, they are incompatible with one another. For example, the dynamicist claims that God's self-causation is a literal act, but the conceptualist denies this. If the two accounts can survive combination, then it is because they aim to characterize distinct features of God's power. I will end the chapter by arguing that the conceptualist and dynamicist are concerned with different aspects of God's power: its content and exercise, respectively. I will argue that they failed to notice this because of misunderstanding of Spinoza's denial of absolute faculties.

The denial of general or absolute faculties is one of Spinoza's most important claims about power. For example, E2p48s begins:

> [T]here is in the mind no absolute faculty of understanding, desiring, loving, and the like. From this it follows that these and similar faculties are either complete fictions or nothing but metaphysical beings or universals, which we are used to forming from particulars. So intellect and will are to this or that idea, or to this or that volition as "stone-ness" is to this or that stone, or man to Peter or Paul.

Spinoza's view is opposed to Descartes's, according to which mental substances have a general faculty of willing. On the Cartesian account, in the absence of a clear and distinct perception, one can equally well exercise her will and assent to the idea or refrain and suspend belief (AT VIIIA 6/CSM I 194). For example, when I consider whether Chattanooga is the capitol of Tennessee, I can either accept that it is in fact the capitol or refuse to accept it. As a result, there are abilities of willing that are not exercised, e.g., though I could have written a different sentence, I did not exercise that power. But for Spinoza, "in the mind there is no absolute faculty of willing and not willing, but only singular volitions, namely, this or that affirmation, and this or that negation" (E2p49d). But the denial of faculties, though it often appears in this context of the denial of libertarian free will,[94] extends much further. For Descartes, in addition to a faculty of willing, there is also a general faculty of intellection (AT VIIIA 359/CSM I 304). Not every mental substance thinks all the ideas that it has the power to think, given its status as a mind. My father has the power to think about Descartes' *Meditations*, but he has not exercised that power (yet). Similarly, bodies have general passive powers within Descartes' ontology. My copy of the *Ethics*, for instance, has the power to be burned. But that power may go unexercised. Spinoza rejects all these

[94] For example, the E2p48s passage is intended as an explanation to the denial of free will. Also, E1p17 argues that God does not create on the basis of a free choice but does everything in his power.

kinds of general faculties. The only powers a thing has are those it exercises. If my copy of the *Ethics* is never burned, then it lacks the power to be burned.

But a denial of general faculties doesn't undermine the distinction between the content of a power and its exercise. The distinction may ultimately just be a conceptual distinction, but it is a distinction nonetheless. E1p35, for instance, argues that "whatever we conceive to be in God's power, necessarily exists." If the content of God's power and its exercise were conceptually identical, then E1p35 would be redundant. The distinction is arguably what undergirds Spinoza's distinction between formal and actual essences. An actual essence is nothing but a thing's striving, which is nothing but a particular determination of God's power (E3p7). But formal essences serve as the archetypes or exemplars of actual essences. Formal essences are distinguished from actual essences in at least two ways. First, formal essences can exist even if the actual essence does not. Second, formal modes, because they are contained in God's attributes, are eternal. But actual essences exist in time (E3p8d). E2p8 reveals both these differences when it states that

> The ideas of singular things, or of modes, that do not exist must be comprehend in God's infinite idea in the same way that formal essences of the singular things, or modes, are contained in God's attributes. And when singular things are said to exist…they are also said to have duration [and] their ideas also involve the existence through which they are said to have duration.

As a result, it formal and actual essences seem to be at least conceptually distinct. An actual essence is a particular instance of God's power; a formal essence is an archetype of that power. So there seems to be a distinction between a power and its actualization. God's essence is the same as his existence and so God's power is, in some sense, its actualization. But we can nonetheless separate the power and its exercise conceptually.

The dynamicist and conceptualist interpretations fail to note this distinction and focus on distinct features of God's power. The conceptualist focuses on the content of God's power,

whereas the dynamicist focuses on its exercise. This difference in focus explains the successes of each interpretation, as well as their respective shortcomings. Consider again the conceptualist account. Its strength lies in its ability to explain the connection between God's infinite power and his infinite attributes. Power, according to the conceptualist, is intelligibility, or the ability to make things intelligible. God has infinite power because he can make intelligible things under any attribute. God can equally explain the dimensions of bodies and the intellection of eternal truths. The conceptualist interpretation can explain this relationship between God's power and his attributes because it is an attempt to character the *content* of God's power, viz. what *sorts* of things God can do. But because of this focus, the conceptualist has difficulty explaining Spinoza's dynamism. It struggles to explain the distinction between activity and passivity, the resistance of bodies, and how actual essences mirror God's power. Activity, resistance, and actual essences all importantly involve the actualization of powers. For example, the resistance of a body is the body's failed *attempt* to exercise its influence. Similarly, actual essences fail to mirror God's power because actual essences are particular exercises of power, whereas the conceptualist picture of power focuses not on its exercise, but on its content. So it clear why the conceptualist account is ill-equipped to handle these cases.

Unsurprisingly, the dynamicist can easily explain the dynamic features of Spinoza's world. First, it distinguishes between activity and passivity in the same way that one distinguishes between a thing which shoves and a thing shoved. There is an exertion on the part of the actor which is absent in the passive thing. Second, bodies exercise resistance during a collision because bodies are always exercising their power and resistance is just the exercise of a body's power. Third, the striving of finite modes mirrors God's self-causation because both are instances of efficient causation. The dynamicist account can handle these cases because it focuses not on the

content of God's power but on its exercise. But it is precisely for this reason that the dynamicist struggles to explain how God's self-causation grounds his infinite attributes. God's self-causation, when considered independently of his content, amounts to something like a bare shove. It is a powerful shove, no doubt, capable of causing a thing's own existence. But because it is pre-conceptual it lacks the content to explain why, for instance, God has thought, extension, and all the other attributes. Consider an analogy. Johnny got A's in history, math, and science. If someone asked how he got such good grades, it would be insufficient to answer that he exerted himself. His exertion explains his good grades only if there is some content to his exertion, e.g. he tried really hard *to finish his homework before playing with friends and to study before his tests*. But a contentless exertion would explain nothing. Similarly, God's mere force is insufficient to explain the content of his power.

In the next chapter I will argue that the dynamicist and conceptual accounts focus solely on God's extensional and intensional power, respectively. God's extensional power refers to his self-caused existence considered independently of its content. His intensional power refers to his ability to be conceived in different ways. Intensional power is insufficient on its own to explain God's actual existence. And extensional power is insufficient to prove God's possession of all the attributes. In is only by distinguishing the two kinds of power that we can understand the fourth argument of E1p11 for the existence of God.

Bibliography

Bennett, Jonathan. *A Study of Spinoza's* Ethics. Indianapolis: Hackett, 1984.

---. *Learning from Six Philosophers*, Volume 1. New York: Oxford University Press, 2001.

Donagan, Alan. *Spinoza*. Chicago: University of Chicago Press, 1988.

Della Rocca, Michael. *Representationalism and the Mind-Body Problem in Spinoza*. New York: Oxford University Press, 1996.

---. "Spinoza's Substance Monism." In Olli Koistinen and John Biro (eds.), *Spinoza: Metaphysical Themes*. New York: Oxford University Press, 2002.

---. "Rationalism Run Amok: Representationalism and the Reality of Emotions in Spinoza." In Charles Huenemann (ed.), *Interpreting Spinoza: Critical Essays*. Cambridge: Cambridge University Press, 2008.

---. *Spinoza*. New York: Routledge, 2008.

Descartes, R. *The Philosophical Writings of Descartes.* Translated by John Cottingham, Robert Stoothoff and Dougald Murdoch. Cambridge Cambridgeshire; New York: Cambridge University Press, 1984.

Garber, Daniel. "Descartes and Spinoza on Persistence and Conatus." *Studia Spinozana* 10 (1994): 43-67.

Garrett, Aaron. *Meaning in Spinoza's Method*. Cambridge: Cambridge University Press, 2003.

Garrett, Don. "Spinoza's Conatus Argument." In Olli Koistinen and John Biro (eds.), *Spinoza: Metaphysical Themes*. New York: Oxford University Press, 2003.

---. "Spinoza's 'Ontological' Argument." *The Philosophical Review*, Vol. 88, No. 2,Apr., 1979. 198-223.

Gueroult, Martial. *Spinoza I – Dieu.* Hildesheim: G. Olms, 1968.

Laerke, Mogens. "Spinoza and the Cosmological Argument According to Letter 12." *British Journal for the History of Philosophy* 21 (2013): 57-77.

---. “Spinoza’s Cosmological Argument in the *Ethics*.” *The Journal of the History of Philosophy* 49 (2011): 439-463.

Lin, Martin. “Spinoza’s Arguments for the Existence of God.” *Philosophy and Phenomenological Research*
Vol. LXXV No. 2, September 2007. 269-297.

Leibniz, G.W. *Philosophical Essays*. Trans. by Roger Ariew and Daniel Garber. Indianapolis: Hackett, 1989.

Matheron, Alexandre. “Essence, Existence, and Power in *Ethics* I: The Foundations of Proposition 16.” In *God and Nature: Spinoza’s Metaphysics.* Ed. by Yirmiyahu Yovel. Leiden: E.J. Brill, 1991. 23-34.

---. L’Année 1663 et l’identité spinoziste de l’être et de la puissance: hypothèse sur un chéminement.” In *La Recta Ratio. Criticiste et spinoziste? Hommage en l’honneur de Bernard Rousset*. Paris: Presses universitaires de Paris-Sorbonne, 1999. 171-190.

Melamed, Yitzhak. “Spinoza on Inherence, Causation, and Conception.” *Journal of the History of Philosophy* 50 (2012): 365-386.

---. “Spinoza’s Deification of Existence.” *Oxford Studies in Early Modern Philosophy*. New York: Oxford University Press, 2012.

Newlands, Samuel. “Another Kind of Spinozistic Monism.” *Noûs* 44:3, 2010. 469-502.

---. “Thinking, Conceiving, and Idealism in Spinoza.” *Archiv für Geschichte der Philosophie* 94 (2012): 31-52.

Smith, A.D. “Spinoza, Gueroult, and Substance.” *Philosophy and Phenomenological Research* 88 (2014): 655-688.

Spinoza. *The Collected Works of Spinoza,* volume I. Translated by Edwin Curley. Princeton: Princeton University Press, 1985.

Spinoza. *The Letters*. Translated by Samuel Shirley. Indianapolis: Hackett, 1995.

Viljanen, Valtteri. *Spinoza’s Geometry of Power*. New York: Cambridge University Press, 2011.

Chapter 4: Perfection in Spinoza's Argument for Monism

An understanding of Spinoza's final argument for God's existence requires an adequate grasp of Spinoza's concept of power. It is in virtue of his greater power that God exists and not some other substance or collection of substances. In the previous chapter I argued that the going accounts of God's power—specifically the conceptualist and dynamicist accounts—have significant shortcomings which likely preclude an adequate understanding of Spinoza's argument.[95] In this chapter I will offer my positive interpretation of the argument. More specifically, I will argue that it relies on two key claims about perfection and that understanding God's greater power requires understanding the ways in which God is more perfect than other substances.

According to many philosophers in the Abrahamic tradition, God's perfection constitutes a central—if not *the* central—feature of his nature. God is, after all, often defined as the most perfect being. Furthermore, God's perfection serves as an explanatorily powerful tool. It is used by theists to explain, among other things, the existence of God[96], of natural laws[97], of moral evil[98], of biological diversity[99], and even of flaws in human anatomy.[100] Many of these explanations require accepting traditional theological doctrines—for instance, that God is omnibenevolent and

[95] Perhaps Spinoza's argument is just not very good and one of the standard interpretations adequately captures this. But I will leave this option as a last resort.

[96] Aquinas (ST I.q4.a1).

[97] Leibniz (*Discourse* §5).

[98] Ibid.

[99] Ibid., M §58.

[100] Descartes (AT VII 88/CSM II 61).

cares about the existence of sin; that God is transcendent; or that things have an intrinsic purpose or *telos*. Spinoza, of course, has no room for such doctrines. According to Spinoza's conception of God, God did not create the world; he has no personality; he does not care about human beings; he cannot do other than he actually does; he is extended, in addition to thinking; he neither rewards nor punishes in the afterlife (because there is no afterlife); he does not act for ends; he is identical to nature.[101] Spinoza's conception of God is unorthodox in so many ways that it would seem that he has no use for anything like God's perfection. God may be a lot of things—self-subsistent, necessarily existing, eternal, infinite—but he is not *perfect*.[102] I think this view is mistaken. I will argue that Spinoza, despite rejecting much of the traditional conception, relies on a conception of God as the most perfect being. It is in virtue of his greater perfection that God exists rather than other substances. Furthermore, I will argue that there is reason to think that God's perfection is *not* a normatively neutral concept, as some suppose. Instead, it plausibly serves as the archetype for human virtue.

A brief preview is in order. In Section I, I briefly rehearse the desiderata of a theory of power which I outlined in the previous chapter. I will then draw a distinction between two ways of understanding God's power, i.e. as extensional power to exist and as intensional power to exist. I will argue that this distinction explains a key premise in Spinoza's final argument more than either the conceptualist or the dynamicist interpretation is able to. In Section II, I will argue that Spinoza's argument contains as an implicit premise a Principle of Perfection. According to this principle, the world contains as much perfection as possible. I will argue that Spinoza commits

[101] Spinoza resented that his contemporaries often took him to be an atheist (Ep43), though the term had a much broader meaning in the 17th century than it does now. He continues to make this impression on many today. See, for instance, Nadler (2008: 68).

[102] Spinoza explicitly rejects the *definition* of God as the most perfect being (Ep60; S: 290).

himself to such a principle, in addition to explicitly endorsing it in his correspondence. In Section III, I will argue that the final argument is sound only if God is the most perfect being. His perfection consists in his power to produce infinite variety from a simple, unified essence. I will also outline two ways in which God's perfection stands as a model of human perfection. I will end in Section IV by showing how my interpretation of the final argument for God's existence provides Spinoza with the basics of response to one of Tschirnhaus' most important objections. I will return to that objection in much more detail in Chapters 5 and 6.

I. The Power to Exist

As a reminder, Spinoza's fourth argument for God's existence rests on two peculiar claims about existence and its connection to power. First, that '[t]o be able not to exist is to lack power [*impotentia*], and conversely, to be able to exist is to have power [*potentia*].' A substance is more powerful the more *able* it is to exist. Second, that 'since being able to exist is power, it follows that the more reality [*plus realitatis*] belongs to the nature of a thing, the more powers [*plus virium*] it has, of itself, to exist'. The more real a substance is, the more able it is to exist. What these claims mean is not entirely obvious, as we saw in the previous chapter. But Spinoza pairs them with two implicit premises in order to derive the conclusion that God is the substance with the most power to exist. First, in E1p9 he argues that '[t]he more reality or being each thing has, the more attributes belong to it'. Second, in E1d6 he defines God as the substance with infinite attributes. Therefore, God is the substance with the most power to exist because he's the most real; and he's the most real because he has the most attributes.

But there is a problem: why does it follow from the fact that God is most powerful that he in fact exists? Spinoza's claim about power appears to be a claim about what God *can* do—he can exist—but it doesn't follow straightforwardly from God's ability to exist that he *does* exist. By

analogy, suppose I am the fastest person in my family in that my fastest mile time is faster than the fastest time of every other member of my family. Nevertheless, I might still lose any given race we hold. I would still be the fastest—according to the criterion just given—even if I pulled up short in the next race we hold. So Spinoza must justify the inference from something's having the greatest power to exist to its actual existence. In my case, I might justify a prediction that I'll win the next race by citing past performance and the laws of probability. But Spinoza obviously cannot use such a justification for God's existence (and he would be loath to reason so empirically anyway). He offers his own reason in support of the inference, namely that if God didn't exist, then a less powerful substance would be more powerful than an infinitely powerful one, God.[103] With this in mind, we can tentatively re-construct Spinoza's fourth argument for God's existence as follows.

(1) A substance's power to exist is proportional to its attributes (the second claim about power).

(2) God is the substance with infinite attributes (E1d6).

(3) Therefore, God has the most power to exist (from (1) and (2)).

(4) Suppose another substance exists, and not God (assumption for *reductio*).

(5) Then a less powerful substance would be more powerful than God (from (4)).

(6) But (5) is absurd (from (3)).

(7) Therefore, reject (4).

(8) Therefore, God exists.

[103] Calling this Spinoza's reason is somewhat misleading because he never mentions the conditional in the context of the fourth argument of E1p11s. But he does explicitly state in the third argument that 'if what now necessarily exists are only finite beings, then finite beings are more powerful than an absolutely infinite Being [God].' Spinoza thinks that the fourth argument is an *a priori* version of the third, so we can assume that the inference in the fourth argument is the same as in the third.

I don't think this reconstruction is particularly controversial.[104] It does raise a number of questions, however. For example, how does (5) follow from (4)? One could run a parody argument using the earlier example:

Assumption: I'm the fastest person in my family, i.e. I can run the fastest mile.

(4) Suppose that another, slower family member beats me in a race.

(5) Then the slower family member would be faster than I am.

But (5) doesn't follow from (4), because I might have lost the race for all sorts of reasons. A loss by itself doesn't undermine my status as the fastest member of my family. My best mile would still beat the second-best mile in the family, even if I happen to lose a race now and then. In fact, I could lose every race but one and still count as the fastest in virtue of my mile time in that one race.

I will defend the inference from (4) to (5) in Section II. For now, my concern lies with (1). It claims that a substance's power to exist is proportional to the number of attributes that the substance possesses. The conceptualist and the dynamicist agree that God's power is a causal concept and that (1) can be stated in purely causal terms. The conceptualist explains the connection between attributes and power as a connection between attributes and self-conception. The more attributes a thing has, the more self-conceived it is. The dynamicist opts instead to explain the connection in terms of a literal act of self-causation. The more attributes a thing has, the more it acts to cause its own existence. In the previous chapter I outlined two desiderata of a theory of power. First, it must explain the dynamical nature of Spinoza's universe. Second, it must explain why an increase in attributes makes a substance more powerful. The conceptualist and dynamicist each fail to explain one of the desiderata. On one hand, the conceptualist struggles to explain (i)

[104] Lin's (2007) reconstruction is similar.

the distinction between activity and passivity, (ii) the way in which finite modes *resist* other finite modes, and (iii) how the efficient causation which occurs that the level of finite modes is supposed to mirror the self-causation of God (which, according to the conceptualist, is not a kind of efficient causation). On the other hand, the dynamicist fails to explain why an increase in attributes leads to an increase in self-causation. Every attribute is already completely self-caused. And it is unclear how stacking attributes, as it were, leads to greater complete self-causation.

Fortunately, there is another way to interpret (1). I want to distinguish two kinds of necessary existence: *intensional* and *extensional*. As a starting point, consider the second part of E1d1, the definition of self-causation: a thing is self-caused 'whose nature cannot be conceived except as existing.'[105] As it stands, the phrase "conceived except as existing" is ambiguous.[106] We can disambiguate it in two different ways, the first corresponding to extensional necessary existence and the second to intensional necessary existence:

> *Extensional necessary existence*: a substance S cannot be conceived as not existing if and only if S exists.
>
> *Intensional necessary existence*: purported substance S cannot be conceived as not existing if and only if (if it exists, then every possible primitive property captures S's essence).

Extensional necessary existence is the ordinary notion of necessary existence. One can say that a substance exists necessarily, in the extensional sense, without saying anything about that substance or its properties (except that it is a substance).[107] Its extensional necessary existence just is its substantial existence, whether that is fundamentally a self-conceived, uncaused existence or a literally self-caused existence.

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[105] E1a7 also reads: "If a thing can be conceived as not existing, then its essence does not involve existence".

[106] The Latin reads: *cuius natura non potest concipi nisi existens*.

[107] One might prefer to cash it out in terms of existence in every possible world, but I'd prefer to avoid that locution when talking about Spinoza.

Intensional necessary existence, however, requires characterizing the substance in question—e.g. as thinking, as extended—and the concept is only as good as the notion of a primitive property. As I use the term, a property is primitive if and only if it is both intrinsic and unanalyzable.[108] For those working with a substance-mode ontology, the primitive properties are all and only the attributes.[109] Consider Descartes' definition of a principal attribute: 'each substance has one principal property which constitutes its nature and essence, and to which all its other properties are referred' (AT VIIIA 25/CSM I 210). The first part of the definition satisfies the intrinsicality requirement, because a substance must be capable of being conceived as an independent thing (AT VIII A 25/CSM I 210; AT VII 226/CSM II 159).[110] This would be impossible if one had to relate it to something else. The second part of the definition satisfies the unanalyzability requirement. All other properties of a substance, such as its modes, are referred to the principal attribute to which they belong. But the principal attribute is not referred back to these modes. Applying the idea to Spinoza, we can say that a substance which has the attributes of thought and extension instantiates two primitives properties because (i) both thought and extension constitute the essence of a substance which is conceived through itself (E1d3, E2p1-p2) and (ii) both thought and extension are irreducible, i.e. neither is understood in terms of anything but itself (E1p10). A substance is intensionally more necessary to the extent that it approximates the power to instantiate every primitive property.

Some examples should help to illustrate the idea. An extended substance is extensionally necessary, because extension exists and there must be a substance that extension is in. But a *merely* extended substance, such as a Cartesian body, is not *intensionally* necessary. There are properties

[108] See Chignell (2012: 640) for a similar characterization.

[109] Bennett calls the attributes 'basic ways of being' (1984: 61).

[110] See Rodriguez-Pereyra (2008) for a detailed discussion of Descartes' independence conception of substance.

which a Cartesian body cannot instantiate. For example, it cannot be desirous of food or contemplative. These are properties of thought and thought is a primitive property which a Cartesian body cannot instantiate. It cannot have ideas, desires, etc. Returning to E1d1, we can say that an extended substance *can* be conceived as not existing in the intensional sense, because conceiving of thoughtful activity requires no attention to extended substances.[111] But extended substance *cannot* be conceived as not existing in the extensional sense because extension, and therefore extended substance, exists. Spinoza's God, however, can be conceived as extended, as thinking, and so on for every attribute and so he is intensionally necessary. There is no corner of reality in which God can be conceived as not existing because there is no primitive property which fails to be a part of his essence.

I propose that we construe the power to exist in (1) as *intensional*, rather than extensional, necessary existence. Construing power in this way has two primary benefits. First, it is arguably a more plausible picture of degrees of existence than the picture offered by rival interpretations. It allows Spinoza to maintain that all substances, if they exist, exist necessarily to the same degree (in the extensional sense). But different purported substances have different degrees of power to exist because they have different degrees of intensional existence. In general, a one-attribute substance has degree n of intensional existence; a two-attribute substance has degree 2n, and so on.[112] By accommodating degrees of power, the distinction between kinds of necessary existence allows Spinoza to privilege God as the substance with the greatest power to exist. Only God, because he has all the attributes, has intensional necessary existence.

[111] I bracket the complication that it is the nature of human ideas to represent bodies (E2p13).

[112] As I'll argue in Section III, this formula is a bit too simple. But the point about degrees of power stands.

As a second benefit, the distinction between kinds of necessary existence strengthens the fourth argument for God's existence. When (1) is interpreted extensionally rather than intensionally, Spinoza risks begging the question against his opponent. Della Rocca illustrates this well. He points out a principle that Spinoza ostensibly relies on: 'If ts1 [a one-attribute thinking substance] exists self-sufficiently, it has the power to do so only because of the fact that it has the attribute of thought' (2002: 27, emphasis original). Call this principle 'S'. It is Della Rocca's stand-in for (1), the claim that a substance's power to exist is proportional to the number of attributes that the substance possesses. Della Rocca then argues:

> Spinoza aims to prove that God has more power to exist as a means to showing that God exists and ts1 does not. By showing this, Spinoza would rebut an opponent's charge that ts1 exists and God does not. In the course of arguing for the claim that God has more power, Spinoza asserts [S] without argument. However, Spinoza is not entitled to assume [S], since this is precisely the kind of claim that Spinoza's opponent can be seen as denying in making his claim that ts1 exists and God does not. The opponent takes seriously the possibility that ts1 has more power to exist than God. In doing this, the opponent is taking seriously the possibility that some difference between ts1 and God gives ts1 more power to exist than God, and thus that some feature that ts1 has and God lacks is at least part of the reason why ts1 has the power of self-sufficient existence. Since ts1 and God share thought, the opponent is, in effect, claiming that a feature besides thought is (part of) what gives ts1 power to exist. But this is precisely the denial of [S]. So we see that, in taking his position, the opponent was, in effect denying [S] all along. Thus Spinoza is, of course, not entitled to assume it, as he apparently does. 29

Spinoza's opponent here is denying that God has more power to exist than ts1, because she thinks that ts1 *in fact* exists. The implicit inference is that if ts1 exists and God doesn't, then ts1 has more power to exist than God does. But this inference is valid *only if* Spinoza's opponent assumes that power to exist refers to extensional existence. All substances, if they exist, have the same amount of extensional existence, i.e. they are all extensionally necessary. Spinoza's opponent just denies that God is among the substances that exist, and so he has no extensional existence. If (1) is interpreted extensionally, then Spinoza risks begging the question against his opponent. Both the

conceptualist and the dynamicist interpret power to exist as *extensional* necessary exist, so both interpretations risk making Spinoza beg the question.

However, if power to exist is interpreted as intensional, rather than extensional, existence, then Spinoza can avoid the charge fairly easily. Once we construe necessary existence as intensional, then (1) is equivalent to:

> If a substance S exists, then S's capacity to instantiate different primitive properties is proportional to the number of primitive properties which accurately capture the essence of the substance.

This is trivially true on Spinoza's substance-mode ontology, because the capacity to instantiate primitive properties just is to have those properties capture the essence of the substance. Now, God's *actual* existence doesn't follow straightforwardly from (1).[113] What Spinoza ultimately needs to do is to rule out the possibility that God does not exist extensionally despite his having the most intensional existence. But because of the trivial truth of (1), Spinoza can now shift the debate to another part of the argument. Neither the dynamicist nor the conceptualist interpretation allows for such progress because they both directly connect power to exist to God's actual existence.

II. The Principle of Perfection

If we interpret (1) so as to refer to intensional necessary existence, then this requires modifying the premises which are intended to follow from (1). The re-construction of the argument then becomes:

(1) A substance's intensional power to exist is proportional to the number of primitive properties it can instantiate.

(2) God is the substance with infinite attributes.

(3) Therefore, God can instantiate infinite primitive properties.

[113] Remember that intensional necessary existence is defined conditionally so as not to presuppose actual existence

(4) Suppose another substance exists, and not God.

(5) Then a less powerful substance would able to instantiate more primitive properties than God.

(6) But (5) is absurd.

(7) Therefore, reject (4).

(8) Therefore, God exists.

Unfortunately, once we make explicit the intensional reading of power, the argument becomes obviously invalid. The problem is (5). If we read (5) intensionally, as it is written above, then it doesn't follow from (4). (4) is a claim about extensional existence, not about intensional existence. (5) fails to follow from (4) in the same way in which my victory in the next family race fails to follow from my possessing the fastest mile time in the family. If we change (5) into a premise about extensional existence—that some non-divine substance actually exists but God doesn't—then (5) follows from (4). But now (5) no longer contradicts (3) and the argument is not a *reductio*. In neither case does (8) follow. Spinoza is still stuck with no way to infer the extensional, actual existence of God from his greater intensional existence.

There are at least three options for how to proceed. First, perhaps the distinction between intensional and extensional existence isn't what Spinoza has in mind. Second, maybe it is what Spinoza has in mind, but he just gives an equivocal argument. This wouldn't be the first time a great philosopher offered an equivocal argument, and Spinoza's track record is far from perfect.[114] Lastly, we could take the invalidity of the above reconstruction of the argument as evidence that it likely contains an implicit premise.

[114] Garrett (2002) comments on the conatus argument: 'the argument thus appears to be one of the most egregiously equivocal in all of early modern philosophy' (128).

I prefer the third option for a couple reasons. First, Spinoza seems to treat (1) as straightforward. He even says that it 'is known through itself' [*per se notum*]. But only the intensional interpretation is straightforward—it's trivially true within a substance-mode ontology.[115] Also, only the intensional interpretation of (1) has a clear connection to E1p9, which Spinoza implicitly uses. Of course, merely intending (1) to be understood intensionally doesn't entail that in E1p11 Spinoza has in mind the *distinction* between intensional and extensional existence. But Spinoza already knows that some substance or other necessarily exists (E1p7). The fourth argument is meant to show that that substance is God. If (1) is understood intensionally, then I find it difficult to see how Spinoza couldn't have had the distinction in mind as well. He knows that he has to rely on *something* other than God's actual existence in order to prove that the substance of E1p7 is God. The second reason to search for a missing premise lies in the fact that Spinoza's argument fails even without the distinction between intensional and extensional existence. Without the distinction, (1) is either incoherent or question-begging. This result is not *evidence* for interpreting Spinoza in light of the distinction. But if the argument is already a failure, what is there to lose? We are thus entitled to at least try to find an alternative way of understanding it.

The Missing Premise

I think there is an implicit premise which renders the argument valid. I will refer to it as the Principle of Perfection. As I use the term, the Principle of Perfection claims that the universe contains as much reality or perfection or power as possible.[116] Spinoza explicitly identifies the

[115] The dynamicist interpretation, by contrast, is forced to rely on the stacking of attributes in its interpretation of (1).

[116] The Principle of Perfection most famously appears, in different form, in Leibniz. For a detailed discussion of Leibniz's version of the principle, see Strickland (2006).

three concepts throughout the *Ethics*. After the final argument of E1p11s, he summarizes the proofs for God's existence by talking interchangeably about God's power and his perfection:

> [T]hings that come to be from external causes…owe all the perfection or reality they have to the power of the external cause; and therefore their existence arises only from the perfection of their external cause, and not from their own perfection. On the other hand, whatever perfection substance has is not owed to any external cause. So its existence must follow from its nature alone; hence its existence is nothing but its essence. Perfection, therefore, does not take away the existence of a thing, but on the contrary asserts it. But imperfection takes it away. So there is nothing of whose existence we can be more certain than we are of the existence of an absolutely infinite, or perfect, Being—that is, God. E1p11s

Additionally, Spinoza identifies reality and perfection in E2d6 when he claims that "by reality and perfection I understand the same thing." He reiterates their equivalence in the preface to Part Four: "insofar as we refer all individuals in nature…and find that some have more being, or reality, than others, we say that some are more perfect than others." So perfection, reality, and power form a single concept referred to by three different names.[117] A thing is perfect to the extent that it is real and it is real to the extent that it is powerful.

Obscure as it may sound, the Principle of Perfection is a fairly straightforward claim. It assumes that things can differ in the degree of perfection they have and it claims that the universe, as a whole, contains has much perfection as it could. In order to determine whether Spinoza holds it, it is necessary first to determine how a universe might have more or less perfection. The universe consists of nothing but substances and their modes (E1a1). Because our concern is the fourth argument for the existence of God, we can set aside modes and focus on the degrees of reality that exist between substances. Spinoza's most explicit explanation for a difference in reality is E1p9,

[117] The equation of perfection with reality, if not with power, is a common medieval theme and traces arguably as far back as Plato's *Timaeus* (28b). See MacDonald (1991: intro) for a good overview.

where he says that a thing is more real the more attributes it has.[118] An attribute allows a substance to instantiate a primitive property. So a thing is more real to the extent that it instantiates more primitive properties. The idea, rough as it is, seems intuitive enough. For example, thought and extension are two conceptually distinct aspects of reality. A thing is more real to the extent that it can instantiate both thought and extension, rather than just one or the other. Conversely, a thing is less real to the extent that there is a part of reality which doesn't include it.

The Principle of Perfection can be motivated by the PSR.[119] According to the PSR in its most general form, every fact has a sufficient explanation. There is a reason or cause for everything.[120] The PSR entails a Principle of Attribute Plenitude, which states that as many attributes exist as possible.[121] Attributes are self-conceived and, as a result, they exist necessarily (extensionally). Furthermore, because they are self-conceived, the existence of any one attribute will never conflict with the existence of any other attribute; nothing about one attribute could tell for or against the existence of any other attribute. If one of them failed to exist, then it would be for no reason. Therefore, every possible attribute exists and Attribute Plenitude is true. We can derive the Principle of Perfection from Attribute Plentitude.

(1) The world has as many attributes as possible (Attribute Plenitude).

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[118] Descartes construes degrees of reality in terms of degrees of dependence (e.g. AT VII 40-2/ CSM II 28-9). Finite substances are less real than God because we are causally dependent on him, but modes are less real than finite substances because they depend on them ontologically.

[119] Similarly, Leibniz, who accepts the PSR, thinks that there must be a reason why God chooses to actualize the world that he does, namely that it is the best or most perfect world (M §53).

[120] In E1p11d Spinoza claims that 'For each thing there must be assigned a cause, or [*sive*] reason, both for its existence and for its non-existence.'

[121] For endorsements of this principle in Spinoza, see Donagan (1988: 77), Lovejoy (1936: Ch. 5), Della Rocca (2002: 26), and Newlands (2010: 67).

(2) The more attributes a substance has, the more real it is (E1p9).[122]

(3) Reality = Perfection (E2d6).

(4) Therefore, the more attributes a substance has, the more perfect it is (from (2) and (3)).

(5) Substances (and their modes) are all that exists (E1a1).

(6) Therefore, the more attributes a world has, the more perfect it is (from (4) and (5)).

(7) Therefore, the world is as perfect as possible (from (1) and (6)).

The PSR forms the foundation for the Principle of Perfection.

But Spinoza is not merely committed to the Principle of Perfection—he also endorses it explicitly in his correspondence with John Hudde. In Letter 35, he offers Hudde an argument intended to show that God exists, and not some other substance. This is precisely the point of the fourth argument of E1p11s, so there is good reason to think that the two arguments are really just versions of a single argument. God exists, Spinoza argues in his letter to Hudde, because it is the nature of perfections to exist:

> Everything that includes necessary existence can have in itself no imperfection [*imperfectio*], but must express pure perfection [*perfectio*]... since it can only be the result of its perfection that a Being should exist by its own sufficient and force, it follows that if we suppose a Being which does not express all the perfections exists by its own nature, we must also suppose that a Being which comprehends in itself all the perfection exists as well. For if that which is endowed with less power exists by its own sufficiency, how much more does that exist which is endowed with greater power… I assert that there can only be one Being whose existence pertains to its own nature, namely, that Being which possesses in itself all perfections, and which I shall call God. For if there be posited a Being to whose nature existence pertains, that Being must contain in itself no imperfection, but must express every perfection. S: 205

[122] E1p9 is stated in the reverse order: 'The more reality or being each thing has, the more attributes belong to it.' But I think we are entitled to read it as a biconditional. To deny so would be to deny that attributing more attributes to a substance gives it more reality. But in E1p11s Spinoza is trying to infer that there is more reality, and hence power, in God than in other substances. So it seems that the more attributes a substance has, the more real it is.

Setting aside for now the issue of how God contains more perfection than other substances, the passage indicates that Spinoza accepts the Principle of Perfection. Whatever exists, whether a single substance or a collection of substances, must express every possible perfection. Spinoza's principle is therefore quite strong. Leibniz's Principles of the Best, for instance, requires only that the actual world as a whole contain more perfection than any other world. God is allowed to leave out particular perfections if creating the best possible world requires doing so. But Spinoza requires also that every individual perfection exist. Nothing perfect is left out.

Returning to the question of the fourth argument's validity, the Principle of Perfection offers Spinoza a way to infer extensional necessary existence from greater intensional existence. As long as the most perfect universe contains God, then Spinoza can derive (8)—a claim about God's actual existence—from earlier premises about intensional existence. Here's how. (4) and (5) together constitute the conditional:

> (4/5): If a non-divine substance exists and God does not, then that substance is more powerful than God.

(4/5) is trivially true if 'power' is interpreted extensionally. That is, the non-divine substance is extensionally more powerful than God because God doesn't exist at all. The difficulty lies in interpreting 'power' intensionally while rendering (4/5) true, because on the intensional interpretation of (5), (5) doesn't follow from (4). In other words, God's failure to actually exist doesn't affect the fact that he is the most intensionally powerful substance.

Let's supplement (4/5) with the Principle of Perfection. (4) asks us to entertain the idea that the universe fails to contain God. In that case, the Principle of Perfection allows us to infer that such a universe is the most perfect possible. This requires reading 'suppose' in (4) as referring to the actual universe. In other words, Spinoza is asking us to suppose that a certain hypothesis is actually true as opposed merely possibly true. Is there any reason to think this is what he's asking?

In the third argument for God's existence, Spinoza uses a supposition about what is actually the case (namely, that we exist) in order to prove that God exists. So the third argument asks us to entertain a hypothetical case as actual and not merely as possible. Spinoza intends for the fourth argument to proceed from the same foundation as the third. That gives us reason to think that the fourth argument asks us to treat God's non-existence as actual as well. So, let us suppose that the world really doesn't contain God. But if the universe is as perfect as possible, then we are entitled to infer that God is not the most perfect substance, since he doesn't exist. For if he *were* the most perfect, then he would exist. Consider an analogy. Suppose that the tallest person I know will be at my birthday party. Now suppose that Jim won't be there. As long as I hold onto my original supposition, I'm entitled to infer that Jim is not the tallest person I know. For if Jim were the tallest person I know, he would have come to my party.

If we make the Principle of Perfection explicit, Spinoza can derive a contradiction from his *reductio* assumption. (3) states that God has the most intensional power to exist, but (4) entails that God in fact *isn't* the most intensionally powerful substance. So Spinoza must reject either (3) or (4). He rejects (4)—the *reductio* assumption—rather than (3) because he thinks that he is more entitled to the definition of God as the substance with all the attributes than he is to the possibility that the universe might not contain God. We can re-construct the argument with the Principle of Perfection made explicit.

(1) The more attributes a substance has, the more power it has to exist intensionally (from E1p9 and the correlation of power and reality).

(2) God is defined as the substance with infinite attributes (E1d6).

(3) Therefore, God has the most intensional power to exist (from (1) and (2)).

(3a) The world is as perfect or real as it could be (Principle of Perfection).

(4) Suppose a non-divine substance exists and not God (assumption for *reductio*).

(5) Then a non-divine substance is more intensionally powerful than God (from (2), (3a), and (4)).

(6) But (5) is absurd (contradicts (3)).

(7) Therefore, reject (4).

(8) Therefore, God exists.

Spinoza now has a valid argument.

III. God's Greater Perfection

The above argument is sound only if a universe with God contains more perfection than any other. But it is not obvious that God contributes some perfection that a collection of substances couldn't contribute as a group. After all, the modes and attributes that exist in former are the same that exist in the latter. In this context, Donagan (1988) offers Spinoza a challenge:

> [D]oes not a world in which every attribute constitutes a substance, but no substance is constituted by more than one, contain as much reality as one containing a single substance constituted by every attribute? 84

I will refer to this problem as *Donagan's Challenge*. I think Spinoza can meet it.

Spinoza is clear that the reality of a substance is directly tied to the number of attributes it has. For the sake of simplicity, I suggested in Section I that a substance with one attribute has degree of reality n, a substance with two attributes has degree of reality 2n, and so on. This formula entails that a universe with three attributes spread out over two distinct substances has as much reality as a universe with a single, three-attribute substance. But this isn't quite right. There are two different ways that an entire *universe*, rather than a substance, can be more real or perfect than another. First, a universe might be more real in virtue of having more attributes. For instance, one with just a thinking substance is less real on the whole than one with a thinking substance and an extended substance. The former universe contains less *first-order*, or attribute-based, perfection than the latter. But two universes which are on par in terms of their attributes might nonetheless

differ in the amount of reality. According to this second kind of difference, one is more perfect than another if the same number of attributes are contained in fewer substances. The former universe, in this case, contains more *higher-order* perfection than the latter because the same first-order perfections would be united in a single substance. I believe that Spinoza was conscious of the distinction between first-order and higher-order perfection and put it to use in a number of ways. Evidence for the distinction can be gleaned from at least three places: from Spinoza's final letter to John Hudde, from claims that Spinoza makes about specifically human perfection, and from E1p16.

Letter 36

In Letter 36, Spinoza claims that an imperfection 'signifies that a thing lacks something which nevertheless pertains to its nature' (S: 208). A thing is perfect to the extent that it has everything pertaining to its nature. This explains why attributes are perfect. Attributes are unmodified and it is only through modification that a thing comes to lack something.[123] My head, for example, is imperfect because it lacks the horn that, as extended, it could potentially have had. But Spinoza distinguishes between two kinds of perfection: perfection in one's own kind and "pure" or "absolute" perfection. On one hand, the attribute of extension lacks things which do not pertain to its nature, such as thoughtfulness. It is nonetheless perfect in its own kind because it is in no way modified or limited. Thought is something it lacks, but it was, so to speak, never intended to have it. On the other hand, a thing has pure perfection if everything which could belong to some nature or other belongs to it:

> [Extension] will never be said to be imperfect because it does not think, for nothing like this is demanded of its nature which consists solely in extension, that is, in a definite kind of being, in which respect alone it can be said to be determinate or indeterminate, imperfect or perfect. And since God's nature does not consist in one

[123] See the discussion of determination as negation in Chapter 6.

> definite kind of being, but in being which is absolutely indeterminate, his nature also demands all that which perfectly expresses being; otherwise his nature would be determinate and deficient. S: 208

Attributes are perfect in virtue of their possessing everything which pertains to *their* nature. God, unlike any particular attribute, is perfect in that everything which "expresses being" belongs to his essence or nature.[124] In other words, God's nature is perfect because all the attributes belong to it. So God has a higher-order perfection which other substances lack: the perfection of possessing all the perfections. This perfection is nothing but his greater intensional power.

Human Perfection

In Part Four of the *Ethics*, Spinoza equates power with virtue when he claims that "by virtue and power I understand the same thing, that is, virtue, insofar as it is related to man, is the very essence, or nature, of man, insofar as he has the power of bringing about certain things, which can be understood through the laws of his nature alone" (E4d8). At least for humans, our virtue consists in our power. Spinoza highlights two dimensions by which we can measure our power, both of which mirror a feature of God's power. First, as the definition states, we are more powerful to the extent that the effects we produce are produced by our nature alone, i.e. to the extent that we are more active (E3d3). Call this kind of power *power-in-origin*. There is also a second dimension of our power. In at least two different places in the *Ethics*, Spinoza claims that we are "more excellent" to the extent that we produce more effects. Call this second kind of power *power-in-effects.* The first passage occurs in E2p13s:

> [W]e cannot deny that ideas differ among themselves, as the objects themselves do, and that one is more excellent [*praestantiorem*] than the other, and contains more reality, just as the object of the one [idea] is more excellent than the object of the other [idea] and contains more reality….I say this in general, that in proportion as a body is more capable than others of doing many things at once, or being acted on

[124] Aquinas also holds this view, though he argues that "the perfections of all things must pre-exist in God in a more eminent way" (ST I.q4.a2).

> in many ways at once, so its mind is more capable than others of perceiving many things at once. And from these [truths] we can know the excellence of one mind over the others.

Spinoza here clearly intends power-in-effects to be different from power-in-origin. He mentions the capacity to do many things at once in the same sentence as the capacity to be "acted on in many ways at once." Something is powerful-in-origin to the extent that it is *not* acted on, but produces effects from its own nature. So power-in-effects is distinct from power-in-origin. A mind is more excellent than another—in the context of E2p13s—not only to the extent that it produces effects from its nature alone, but also to extent that it produces more effects *simpliciter*. Spinoza echoes this ideas of power-in-effects in E5p39 when he claims that "he who has a body capable of a great many things has a mind whose greatest part is eternal". In the Scholium, he adds that "because human bodies are capable of a great many things, there is no doubt but that they can be of such a nature that they are related to minds which have a great knowledge of themselves and of God." The two aspects of human power can be represented as causal inputs and causal outputs. The fewer inputs a person has, the more powerful-in-origin she is. However, she is more powerful-in-effects the more outputs she has. It is possible for A to be more powerful than B along one axis, but less powerful along the other. For example, some isolated hermit might be very good at limiting the effects that the passions have on him. But because he is isolated, he doesn't produce many effects. By contrast, a politician might be constantly pushed and pulled by the whims of her constituency, yet nonetheless produce a great many effects with the policies she implements. The hermit would be more powerful-in-origin, whereas the politician is more powerful-in-effects.

The dual-aspect power of humans mirrors God's power. All substances—if they exist—are equal in their power-of-origin. In other words, all of them are entirely active and depend on nothing outside of them for producing effects. But God's power-in-effects is greater than that of

any other substance. He can produce effects in every attribute, whereas other substances—if they exist—produce power only in a subset of the attributes. Furthermore, Spinoza explicitly ties a thing's power, whether a substance or a mode, to its perfection: "The more perfection each thing has, the more if acts and the less it is acted upon; and conversely, the more it acts, the more perfect it is" (E5p40). God's greater power-in-effects counts as a kind of perfection.

Let us return to Donagan's Challenge. Spinoza can claim that a universe with God is more perfect than a universe without God despite the fact that the same effects are being produced in each universe. The former is more perfect precisely because it is more powerful. An analogy might help. Suppose we want a world with the greatest examples of human excellence. The following two worlds are candidates. In the first world, there is a world class sprinter, an award-winning poet, a gourmet chef, a filmmaker, and a scientist. In the second world, there is likewise a sprinter, poet, chef, etc. But in the second world, it is one person who is all of these things while in the first world a separate person possesses each of the skills in question and no single person possesses more than one of them. Plausibly, the second world is a better example of human excellence. The same poems are being written in the second as in the first; the same meals cooked; the same sprints ran. But the second world seems to contain more examples of human excellence, because it contains the additional example of a human who is excellent at more than one thing. Similarly, Spinoza seems entitled to calling "pure" perfection a perfection. God is more perfect than a collection of substances because he is doing the same with less, i.e. producing the same exact effects not from many sources, but from a single one.

Before I transition to a discussion of E1p16, I want to note a potentially interesting result of this section. It's an open question what Spinoza takes the ultimate status of normative concepts to be. That is, it is unclear whether he intends virtue, perfection, blessedness, and so on to be states

that we *ought* to achieve, or whether they are, in the end, normatively empty.[125] In the Preface to Part Four of the *Ethics*, Spinoza aims to explain a common misuse of 'perfection':

> Perfection and imperfection, therefore, are only modes of thinking, that is, notions we are accustomed to feign because we compare individuals of the same species or genus to one another. This is why I said about [E2d6] that by reality and perfection I understand the same thing. For we are accustomed to refer all individuals in Nature to one genus, which is called the most general, that is, to the notion of being, which pertains absolutely to all individuals in Nature. So insofar as we refer all individuals in Nature to this genus, compare them to one another, and find that some have more being, or reality, than others, we say that some are more perfect than others. And insofar as we attribute to something to then which involves negation, like a limit, an end, a lack of power, and so on, we call them imperfect, because they do not affect our mind as much as those we call perfect, and not because something is lacking in them which is theirs, or because Nature has sinned. G II 207-8.

A thing's perfection or imperfection is not some intrinsic feature it has. Instead, it refers to the fact that we compare the thing in question with other things which we judge to be more or less ideal as a model. For example, an old bicycle is imperfect because we compare it to a brand new one and judge that the old one is lacking a feature the new one has, e.g. a straight wheel. Its imperfection is a merely relative property. Spinoza goes on in the Preface to make essentially the same argument about good and evil—they are not intrinsic features of things, but comparisons we make between objects of the same kind: "as far as good and evil are concerned, they also indicate nothing positive in things, considered in themselves, nor are they anything other than modes or thinking, or notion we form because we compare things to one another."

He nonetheless says that he will retain the concept of perfection in order to create a model (*exemplar*) of specifically human perfection (G II/208). This is why he continues to describe human power in terms of the normatively-loaded concepts of virtue and perfection (E4d8, E5p40).

[125] For an overview of the problem, see Curley (1988: 119-24) and Allison (1987: 140-4). For a more detailed—and more recent—discussion, see LeBuffe (2010: chs. 8-11).

Obviously this is not the place to try to settle the debate about Spinoza's metaethical views. I do want to note, however, that if virtue turns out to constitute a truly normative concept, then God is its exemplar because God stands as the archetype of power. Humans, as well as modes generally, are more powerful to the extent that they approximate or emulate God's power, both his power-in-origin and his power-in-effects. Of course, God's virtue is nothing like the moral perfection traditionally attributed to God. For example, Spinoza's God still doesn't care about anything and doesn't act for ends. Furthermore, God's perfection differs in important ways from human perfection. God has no will or intellect (E1p31), whereas human perfection is bound up, in part, with our capacity for true ideas. Nonetheless, God still stands as the standard for virtue and his status as the most powerful and perfect substance earns him the status as the most virtuous.

E1p16

E1p16 states that "from the necessity of the divine nature there must follow infinitely many things in infinitely many modes." It is important for at least two reasons. First, it provides more evidence for the notion of higher-order perfection. Spinoza argues that

> [t]his proposition must be plain to anyone, provided he attends to the fact that the intellect infers from the given definition of any thing a number of properties that really do follow necessarily from it…and that it infers more properties the more the definition of the thing expresses reality, that is, the more reality the essence of the thing involves. But since the divine nature has absolutely infinite attributes (by E1d6), each of which also expresses an essence infinite in its own kind, from its necessity there must follow infinitely many things in infinite modes.

That a variety of effects can be inferred from a thing's definition is explained by the perfection of the thing—the more variety inferred from a thing, the more perfect or real it is. We already know that a thing's perfection is just its power. So it is in virtue of God's power that he can produce diverse effects. But E1p16 involves two levels of variety: variety in things and variety in kinds of things. A thing's perfection is tied not only to the effects it can produce, but to the *kinds* of affects

that it can produce. Since God has more attributes than any other potential substance, he can produce more kinds of effects than any other substance. As a result, he has more higher-order perfection.

The second reason why E1p16 is important is that prompts an important objection from Ehrenfried Walther von Tschirnhaus. In a letter dating from June 1676, near the end of Spinoza's life, Tschirnhaus writes:

> In mathematics I have always observed that from any thing considered in itself—that is, from the definition of any thing—we are able to deduce at least one property; but if we wish to deduce more properties, we have to relate the thing defined to other things. It is only then, from the combination of the definitions of these things, that new properties emerge. Ep82

It's easy to comprehend how multiple things could follow from something composite. For example, a variety of destructive effects follow from a hurricane. The diversity of effects is explained by the diversity in the cause. However, when the thing in question lacks parts, that kind of explanation is not available.[126] God (and his attributes) is indivisible, so the onus is on Spinoza to explain how a diversity of effects follows from the divine nature.

Given the two kinds of infinity involved in E1p16, Tschirnhaus' challenge could be asking two separate questions. First, why is there a diversity of things? Second, why is there a diversity of *kinds* of things? I will spend the final two chapters examining Spinoza's response to the first question. Here I would just like to note that he already has an answer to the second question. Spinoza claims in E1p34 that God's essence is power. What kind of power it is—intensional or extension—depends on which question we're asking. God's intensional power corresponds to the content of his power, whereas his extensional power corresponds to its exercise. These are just two

[126] Leibniz is well aware of this problem. In the *Monadology* he argues that the only way to have a multiplicity in a simple substance is to have a multiplicity in representation (§13-14).

ways of looking at a single power. Which kind of power we have in mind depends on which question about diversity we're trying to answer. Arguably, the power that produces a variety of *kinds* of things is God's *intensional* power to exist. It is God's infinite attributes which allow him to produces infinite kinds of things and it is God's greater attributes which constitute his greater intensional power. Because God's power is infinite, he produces an infinite variety in the kinds of things there are. So Spinoza has an answer to why there is a diversity of kinds of things: because it is God's nature to instantiate every kind of thing.

To summarize this section, a universe with God is more real or perfect than a universe of distinct substances because it is only in the former that everything flows from a single essence, God's power. Spinoza is most explicit about this in his final letter to Hudde, but it can also be gleaned from his remarks about human power or virtue and from his response to Tschirnhaus' complaint about E1p16. As a result, interpreting Spinoza as relying on a Principle of Perfection not only renders his fourth argument for the existence of God valid, it also moves it one step closer to being sound.

IV. Two Competing Interpretations

I am not the first to read Spinoza as implicitly relying on claims which a traditional theist would agree with. Carriero (1994) argues that Spinoza's argument for monism—the argument stretching from E1p1 to E1p14—relies heavily on the twin doctrines of divine perfection and divine simplicity. Similarly, Garrett (1991) argues that Spinoza's argument for necessitarianism assumes that alternative series of modes fail to exist because they are less perfect. I want to close by arguing for the merits of my interpretation over both Carriero's and Garrett's.

Garrett's Argument

Garrett argues that, in order to establish necessitarianism, Spinoza must demonstrate that the actual series of finite modes contains the most perfection possible. The motivation comes from E1p33s1, in which Spinoza writes that 'it clearly follows that things have been produced by God with the highest perfection, since they have followed necessarily from a given most perfect nature.' Alternative series of finite modes—such as the one where Hubert Humphrey wins the 1968 presidential election or where Michael Jordan retires only once—contain less perfection than the causal series which actually exists. Garrett's argument is based on three uncontroversial interpretive claims (197):

- Everything exists unless prevented from doing so (E1p11d).
- A substance's power to exist varies with its reality and perfection (E1p11s, E2d6).
- Everything that exists expresses some degree of perfection or reality (E1p16).

If the series of finite modes expressed anything less than the most perfection possible, then it would entail the falsity of at least one of the three claims just stated. In other words, it would entail either (i) that the most perfect series of finite modes fails to exist for brute reasons, (ii) that God isn't in fact the most perfect substance possible, or (iii) that a substance's perfection isn't expressed in its modes.

The success of Garrett's argument therefore depends on the claim that God's perfection is greater than any other substance's perfection. He justifies this claim by citing the correlations of attributes with power (E1p11s), attributes with reality (E1p9), and reality with perfection (E2d6). God, having the most attributes, also has the most perfection. As it stands, these claims entail only that God is more perfect than any other, *individual* substance; they do not entail that God is more perfect than a collection of substances, each with a single attribute. So one advantage of my interpretation over Garrett's lies in its ability to explain how God is more perfect than all other

substances not only individually, but also taken as a group. In other words, my interpretation coheres with Spinoza's E1p33s1 claim about perfection while also meeting Donagan's Challenge. Garrett's interpretation does only the former.[127]

Carriero's Argument

Garrett's argument merely has a more narrow scope than mine. But my interpretation is inconsistent with Carriero's. He argues that Spinoza's argument for monism involves two steps, which rely on the doctrines of divine perfection and divine simplicity, respectively.[128] In the first step, 'Spinoza undertakes to show that there is a single being, God, which possesses all perfection that exists necessarily *per se*' (629). God, as the most perfect being, acts as a magnet for all perfections. Therefore, properties such as 'eternity, simplicity, infinity, and indivisibility…are the sort of thing…that can be attributed to an absolutely perfect being, God' (ibid.). Each of these properties constitutes 'in short, a "pure perfection"'. In the second step, Spinoza sets out to prove that not only does God have all the perfections, but no perfection is had by any being but God. Carriero argues that the second step relies heavily on the indivisibility or simplicity of God. Each perfection 'must present the divine essence fully, without leaving out some part of it for the other attributes to latch on to…each attribute must present or express the same individual nature presented by each of the other attributes' (633)

There are two distinct problems with Carriero's interpretation. First, he characterizes *any* divine property, broadly construed, as falling under the general heading of perfections, pure perfections in particular. But perfections form a proper subset of God's properties. They are those things which lack nothing 'which nevertheless pertains to its nature' (S: 208). The property of

[127] Of course, meeting Donagan's Challenge is not Garrett's intention.

[128] Schmidt (2009) contains a nice discussion of divine simplicity and the substance-attribute relation.

indivisibility is therefore neither a perfection nor an imperfection.[129] Furthermore, Carriero fails to distinguish between perfection in one's own kind and pure or absolute perfection. The former perfection is the kind of perfection had by attributes. They are the fundamental properties and they lack nothing pertaining to their nature because they are not limited by anything else of the same nature (as modes are). A thing possesses a pure perfection, however, when it lacks nothing whatsoever, i.e. when it has everything *simpliciter*. The distinction between kinds of perfection mirrors the distinction between kinds of infinity in the definition of God:

> I say [that God is] absolutely infinite, not infinite in its kind; for if something is only infinite in its own kind, we can deny infinite attributes of it [NS: (i.e., we can conceive infinite attributes which do not pertain to its nature)]; but if something is absolutely infinite, whatever expresses essence and involves no negation pertains to its essence. E1d6

Spinoza here denies that one can straightforwardly infer absolute infinity from infinity in one's one kind. Similarly, he wants to block the inference from perfection in one's own kind to pure perfection. By conflating the two kinds of perfection, Carriero treats the inference as valid.

The second weakness in Carriero's argument pertains to Spinoza's reliance on the doctrine of divine simplicity in his argument for monism. This second weakness pertains not to the truth of Carriero's interpretation, but to its strength. Let me distinguish between two theses:

> (A) The nature of the substance-attribute relation is such that all attributes *can* exist in a single substance.
>
> (B) The nature of the substance-attribute relation is such that all attributes *must* exist in a single substance.

Divine simplicity commits Spinoza to both (A) and (B). The most likely explanation for (B) is that the attributes are identical both to substance and to each other. (A), however, requires no such

[129] I do not deny that perfect things are indivisible. But it does not follow that every property that a perfect being possesses is a perfection.

explanation. I think Spinoza accepts both theses. But (B) is the stronger thesis and Spinoza doesn't need it in order to prove God's existence. In order to prove that God exists rather than some other substance, Spinoza needs only the doctrine of divine perfection, the No Shared Attributes Thesis (1p5), and (A). My interpretation therefore has the advantages of accomplishing the same thing as Carriero's, but with logically weaker premises.

5. Conclusion

I've argued that Spinoza's argument for monism relies on a Principle of Perfection, as well as a traditional conception of God as the most perfect being. God's perfection consists in his power which is maximized along two dimensions: he causes his own existence and he produces infinite effects. My interpretation has three primary benefits. First, it allows for a straightforward understanding of the ostensibly obscure notion of degrees of power to exist. Second, it plausible provides a framework in which to interpret Spinoza's E1p16 claim that a thing's perfection is proportional to the number of properties deducible from its essence. Third, it allows Spinoza to meet Donagan's Challenge head-on and offer a reason for why God exists and not some other collection of substances. Spinoza is by no means out of the woods. Most importantly, he must do more to establish that a substance can have more than one attribute. But my interpretation enables a return to this central premise.

Bibliography

Allison, Henry E. *Benedict de Spinoza: An Introduction*. Revised Edition. New Haven: Yale University Press: 1987.

Bennett, Jonathan. *A Study of Spinoza's* Ethics. Indianapolis: Hackett, 1984.

Carriero, John. "On the Theological Roots of Spinoza's Argument for Monism." *Faith and Philosophy* 11 (1994): 626-644.

Chignell, Andrew. "Kant, Real Possibility, and the Threat of Spinoza." *Mind* 121 (2012): 635-675.

Curley, Edmund. *Behind the Geometrical Method*. Princeton, NJ: Princeton University Press, 1988.

Donagan, Alan. *Spinoza*. Chicago: University of Chicago Press, 1988.

Della Rocca, Michael. *Representationalism and the Mind-Body Problem in Spinoza*. New York: Oxford University Press, 1996.

---. 'Spinoza's Substance Monism.' In Olli Koistinen and John Biro (eds.), *Spinoza: Metaphysical Themes*. New York: Oxford University Press, 2002.

---. *Spinoza*. New York: Routledge, 2008.

Descartes, Rene. *The Philosophical Writings of Descartes*.3 volumes.Translated by John Cottingham, Robert Stoothoff and Dugald Murdoch. Cambridge: Cambridge University Press, 1985.

Garrett, Don. 'Spinoza's *Conatus* Argument.' In Olli Koistinen and John Biro (eds.), *Spinoza: Metaphysical Themes*. New York: Oxford University Press, 2002.

---. 'Spinoza's Necessitarianism.' In Y. Yovel (ed.), *God and Nature: Spinoza's Metaphysics*. Leiden: E.J. Brill, 1991.

---. 'Spinoza's "Ontological" Argument.' *The Philosophical Review*, Vol. 88, 1979. 198-223.

Laerke, Mogens. 'Spinoza's Cosmological Argument in the *Ethics*.' *Journal of the History of Philosophy* 49 (2011): 439-62.

LeBuffe, Michael. *From Bondage to Freedom: Spinoza on Human Excellence*. Oxford: Oxford University Press, 2010.

Lin, Martin. 'Spinoza's Arguments for the Existence of God.' *Philosophy and Phenomenological Research* Vol. LXXV No. 2, September 2007. 269-297.

Leibniz, Gottfried. *Monadology and Other Philosophical Essays.* Ed. and trans. P. and A.M. Schrecker. Indianapolis: Bobbs-Merrill, 1965.

Lovejoy, Arthur. *The Great Chain of Being*. Cambridge: Harvard University Press, 1948 [1936].

MacDonald, Scott (ed.). *Being and Goodness*. Ithaca: Cornell University Press, 1991.

Mason, Richard. "Spinoza on Modality." *The Philosophical Quarterly*, Vol. 36, No. 144 (Jul., 1986), pp. 313-342.

Matheron, Alexandre. "Essense, Existence, and Power in *Ethics* I." In Y. Yovel (ed.), *God and Nature: Spinoza's Metaphysics*. Leiden: E.J. Brill, 1991.

Melamed, Yitzhak. 'Spinoza's Metaphysics of Substance: The Substance-Mode Relation as a Relation of Inherence and Predication.' *Philosophy and Phenomenological Research* (78:1) January 2009, 17-82.

Miller, Jon. 'Spinoza's Possibilities.' *The Review of Metaphysics* 54 (2001):779 – 814.

Nadler, Steven. '"Whatever is, is in God": Substance and Things in Spinoza's Metaphysics.' *Interpreting Spinoza*, edited by Charles Huenemann. Cambridge: Cambridge University Press, 2008. 53-70.

Newlands, Samuel. 'The Harmony of Spinoza and Leibniz.' *Philosophy and Phenomenological Research* LXXXI (2010): 64-104.

Rodriguez-Pereyra, Gonzalo. "Descartes's Substance Dualism and His Independence Conception of Substance." *Journal of the History of Philosophy* 46 (2008): 69-90.

Schmidt, Andreas. 'Substance Monism and Identity Theory in Spinoza.' *Cambridge Companion to Spinoza's Ethics*. Edited by Olli Koistinen. Cambridge: Cambridge University Press, 2009. 79-98.

Spinoza. *The Collected Works of Spinoza*, volume I. Translated by Edwin Curley. Princeton: Princeton University Press, 1985.

---. *The Letters*. Translated by Samuel Shirley. Indianapolis: Hackett, 1995.

Strickland, Lloyd. *Leibniz Reinterpreted*. London: Continuum Publishing, 2006.

Viljanen, Valterri. *Spinoza's Geometry of Power*. Cambridge: Cambridge University Press, 2011.

Chapter 5: The Problem of Diversity

I argued in Chapter Four that Spinoza's final E1p11 argument for God's existence is grounded in the idea that God's power to produce effects from a single essence renders him more powerful than any other substance or collection of substances. It is this greater power which allows Spinoza to privilege God's existence, something he was unable to do prior to E1p11s. I left the precise nature of God's productive activity open because it was not central to the success of my argument. I aim in these final two chapters to examine it in more detail, as well as its broader consequences for Spinoza's system.

One of the earliest and most persistent criticisms of Spinoza's monism charges that it cannot explain the existence of variety. Our world is not a uniform or homogenous entity. There are tables, elephants, crossword puzzles, high-fives, stop signs, emotions, and much else besides. In fact, the variety is infinite in its extent: "from the necessity of the divine nature there must follow infinitely many things in infinitely many modes" (E1p16). But not long before E1p16, Spinoza also claims that there is ultimately, or at the level of substance, only God. As a result, there is an apparent tension in Spinoza's ontology. On one hand, there is just the one thing, God. And yet, on the other hand, there seems to also be a multitude of other things. Of course, the multitude I am referring to are the modes and they must be understood through God. But there is *some* sense in which these things, whether considered individually or as a group, are not identical to God. After all, God and his modes have different essences. For example, Spinoza claims that "the essence of man does not involve necessary existence" (E2a1), but that it is "absurd" that God's "essence does not involve existence" (E1p11d). Similarly, the entire system of modes follows from God's and must be understood through him, but God neither follows from nor must be understood through

his modes. So God and his modes have distinct essences. An essence refers to the properties which make a thing what it is. If x and y have different essences, then x and y are different things. Modes therefore seem to have an existence of their own, albeit one that is dependent on God in many ways.[130] The challenge for Spinoza is one of explaining how this diversity of modes follows from a single, homogenous substance. Call this the *problem of diversity*.[131]

This tension has led to some rather drastic interpretations. On one hand, some deny that Spinoza is an existence monist and that there is ultimately only one thing.[132] He endorses, at most, what is nowadays called *priority monism*—all sorts of things exist, but one of them is more important than everything else. On the other hand, some commentators go so far as to deny that modes are real. According to this *acosmist* interpretation, the system of modes is not real, but is instead the result of conceiving God through the imagination.[133] For example, Hegel writes that "so strictly is there only God, that there is no world at all…the finite has no genuine actuality" (1984: 432). Similarly, Salomon Maimon claims that within Spinoza's system, "unity is real, but diversity is merely ideal" (1984: 217).[134] Most commentators, however, seek an answer to the

[130] Part of the difficulty of understanding the relationship of substances to modes lies in the difficulty of counting within a substance-mode ontology. For a discussion of this difficulty in Descartes, see Hoffman (2002). For a more general discussion, see Crane (2012) and Olson (2012).

[131] The problem of diversity appears in at least two of Spinoza's medieval Jewish predecessors: Maimonides (1963: 317) and Crescas (I. 2.3). See Wolfson (1929: 225-9) for a discussion of the problem in Crescas specifically, as well as a translation. Slightly different versions of the problem appear in Leibniz (M §13-14), Aquinas (1997: 144), and Descartes (AT VIIIA 61: CSM I 240). See Ott (2009: ch. 7) for a discussion of the problem in Descartes.

[132] Macherey is the foremost advocate of the anti-monist interpretation. See his (1979) and (1993). Van Bunge also seems to endorse it in his (2012: 32).

[133] Schmitz (1980) offers a nice overview of early acosmist interpretations of Spinoza by, for instance, Hegel, Maimon, and Jacobi. See also Melamed (2010) and (2012b) for discussion of the same issues.

[134] Both Hegel and Maimon are quoted in Nadler (2012: 230).

problem of diversity which does not jeopardize Spinoza's commitment either to the reality of the modes or to monism.

I think that such an answer is available. My general strategy in defending this claim is to approach the problem indirectly. I will argue that the problem of diversity is identical—for Spinoza at least—to two other problems in the early modern period, viz. the problem of grounding possibilia in God and the problem of explaining the existence of motion. By solving just one of these problems, Spinoza can escape a powerful objection to monism. In the first section, I will outline all three problems in detail and explain how they are identical. In sections II, I will argue that a popular solution to the grounding problem fails because it misconstrues Spinoza's account of motion. Similarly, I will argue in the final section that specific criticisms of Spinoza's ability to explain motion fail because they misunderstand the way in which God grounds motion as a possible mode of substance.

I. Three Problems

The problem of diversity is one of three problems facing Spinoza. But there is no single problem of diversity that appears across the texts of Spinoza's critics. Rather, there are at least two related problems, both of which deserve to be called problems of diversity. Tschirnhaus presses Spinoza with the first version of the problem. In letter 82, written near the end of Spinoza's life, Tschirnhaus writes:

> In mathematics I have always observed that from any thing considered in itself—that is, from the definition of any thing—we are able to deduce at least one property; but if we wish to deduce more properties, we have to relate the thing defined to other things. It is only then, from the combination of the definitions of these things, that new properties emerge. S: 353

He has in mind Spinoza's claim in E1p16d that "the intellect infers from a given definition of anything a number of properties that really do follow necessarily from it…and that it infers more

properties the more the definition of the thing expresses reality."[135] Tschirnhaus isn't bothered so much by the idea of degrees of reality, which is prevalent in the early modern period, but by Spinoza's insistence that multiple properties can follow from *one* thing. God is unique and indivisible and so there is no room for any diversity in his nature (E1p13, E1p15s). So Spinoza must think that it's possible for diversity to follow from a non-diverse thing. This is what perplexes Tschirnhaus. How can Spinoza make this claim? After all, he holds as an axiom the claim that from a given cause, a determinate effect follows (E1a3). If God is a single cause, it seems to follow that he could produce only a single effect. In order to produce any diversity, he would to need to interact with some second thing or, as Tschirnhaus puts it, "we have to relate the thing defined to other things."

A second, narrower version of the problem appears in Samuel Clarke's *A Demonstration of the Being and Attributes of God*. Unlike Tschirnhaus, Clarke is not bothered by the idea that God can produce numerical diversity. He accepts that God can create, in a single act, numerically distinct, and yet qualitatively indistinguishable, regions of space.[136] What Clarke rejects is the idea that qualitatively distinct properties could follow from an absolutely necessary being:

> Now this necessity being absolute in itself, and not depending on any outward cause, it is evident that it must be everywhere as well as always, unalterably the same. For a necessity, which is not everywhere the same, is plainly a consequential necessity only, depending on some external cause, and not an absolute one in its own nature. 34

To illustrate Clarke's point, suppose that God produces a world that includes two qualitatively different dogs, one a poodle and the other a boxer. By the principle of "same case, same effect," it seems to follows that the world could contain a poodle and a boxer only if they have distinct causes.

[135] The claim appears in other works as well, for example in the TdIE (C: 44-5).

[136] Yenter (2014: 262).

Spinoza can accommodate the *existences* of the poodle and boxer, because existing poodles and boxers have distinct causes in virtue of occupying different places of the order of nature (E1p28d). Poodles evolved from one source, boxers from a slightly different one. But the only reason the order of nature can contain poodles and boxers in the first place is because God is the cause of their blueprints or formal essences, i.e. he is "the efficient cause, not only of the existence of things, but also of their essence" (E1p25). The formal essences of the poodle and the boxer therefore have the exact same cause, namely God. So Spinoza needs to explain why the world, which has just one cause, nonetheless contains qualitatively distinct dogs. Hence, the problem of diversity.[137]

Considered outside the context of Spinoza's metaphysical commitments, Clarke's version of the problem is logically weaker than Tschirnhaus' version. Clarke, though not Tschirnhaus, can grant that numerically distinct, but qualitatively identical, things can follow from an absolutely necessary being, e.g. numerically distinct regions of space. Once Spinoza's commitments are made explicit, however, the two problems of diversity collapse into one. Spinoza endorses the Identity of Indiscernibles, a principle which states if x and y are qualitatively indistinguishable, then x and y are identical (E1p4, E1p11d). The Identity of Indiscernibles undermines any distinction between Clarke's and Tschirnhaus' versions of the problem. Within Spinoza's metaphysics, if x and y are numerically distinct, then they are also qualitatively distinct. So, there really is just a single problem of diversity for Spinoza: how do qualitatively distinct things follows from a unique and simple being? Nadler (2012) illustrates the problem well:

> [H]ow can Spinoza descend deductively, via the *mos geometricus*, from Nature's infinite, eternal, and necessary starting points…to the conclusion that there are

[137] Hegel accuses Spinoza of baldly asserting the derivation of diversity rather than showing *how* it unfolds: "These last three moments [substance, attribute, mode] Spinoza ought not merely to have established in this way as conception, he ought to have deduced them" (*Lectures on the History of Philosopy* 3:260, cited in Melamed 2010: 82).

> finite modes, either as formal essences of singular things or as actually existing (and changing) singular things in nature? …There seems, *prima facie*, to be an unbridgeable logical gap here. If an attribute is a singular, infinite, and eternal nature, then presumably whatever follows from it necessarily must also be singular, infinite, and eternal. 228-9

We can make headway toward deciphering Spinoza's answer to these questions by establishing the connection between the problem of diversity and two other problems which most early moderns face: the problems of the grounding of possibilia and the origin of motion.

Diversity and Possibility

If a proposition *p* is possibly true, then it seems there must be something in virtue of which is *p* possibly true. Similarly, if some entity *e* is possibly existent, then plausibly there is something in virtue of which *e* is possibly existent. The problem of the grounding of possibility revolves around determining what grounds these facts and how. It is a problem that garners a lot of attention from theistically-inclined philosophers in the early modern period. There is a general desire in the period to avoid attributing full-blown independence to anything which is less than fully divine. For example, in a letter explaining his motivations behind the doctrine of the creation of eternal truths, Descartes writes:

> The mathematical truths which you call eternal have been laid down by God and depend on him entirely no less than the rest of his creatures. Indeed to say that these truths are independent of God is to talk of him as if he were Jupiter or Saturn and to subject him to the Styx and the Fates. AT I 145/CSMK 23

Though most early moderns reject the particular account that Descartes offers, they nonetheless share his motivation to avoid making anything other than God truly independent. As a result, many opt to ground possibilia in God. By having God—rather than, say, a Platonic third realm—

explain possibilia, the theist can further achieve her goal of making God the only fully-independent being there is.[138]

Spinoza shares this concern to make everything dependent on God. But at first glance, the grounding of possibility does not seem like the special problem for him that it does for other early moderns. Necessitarianism encloses the possible within the actual. So an explanation of actuality thereby seems to double as an explanation of possibility. Nevertheless, the problem of grounding for Spinoza shares many of the same features as the version of the problem which faces non-necessitarians. For this reason, it is still deserves our attention.

The problem asks for an explanation of possibilia. The kind of explanation it seeks, however, is a specific case of a more general form of explanation, namely one which explains how some specific property is grounded in something which lacks that property. This form of explanation is shared by all solutions to the grounding of possibility, necessitarian or otherwise. The form of explanation appears, for instance, in two famous solutions, namely those of Leibniz and the pre-critical Kant. Leibniz and Kant both base their arguments for the existence of God on the fact that he is needed in order to ground mere possibilia. Their arguments rely on two key claims: first, that there are merely possible existents or truths and second, that possibilities are grounded in something actual. Leibniz, for instance, writes that "if there is a reality in essences or in possibilities or indeed in the eternal truths, this reality is based upon something existent and actual" (M §44). Similarly, Kant argues that the dual claim "that there is some possibility and yet absolutely nothing actual contradicts itself" (69). Leibniz opts to ground possibilities in the intentional content of God's thoughts:

[138] As examples, see Leibniz (M §43), Descartes (CSMK: 343), and Malebranche (1997: 160). Easton (2009) discusses similar accounts in Desgabets, Régis, and Le Grand.

> He is the source of whatever there is real in the possible. This is because the Understanding of God is in the region of eternal truths or of the ideas upon which they depend, and because without him there would be nothing real in the possibilities of things, and not only would nothing be existent, nothing would be even possible. §43

For Kant, however, possibilities are ultimately grounded in God's non-intentional spiritual properties (83).[139] Now assume that Leibniz and Kant allow for the mere possibility of a ten-pound apple. For Kant, the possible apple is grounded in God's actual spiritual properties. For Leibniz, it is grounded in God's actual thought about a possible world in which a ten-pound apple exists. But in each case, the properties of the possible apple extend beyond the actual properties of God. If they didn't, then a ten-pound apple would be *actual*. Of course, neither Kant nor Leibniz would find this problematic.[140] My point is just that the grounding of mere possibilities is a special case of a more general kind of explanation. So, even though Spinoza can avoid the special problem of having to explain the grounding of mere *possibility*, he cannot sidestep the need for the more general explanation. There are things in the world—namely, modes—which have properties that, strictly speaking, substance does not have. For example, will and intellect do not belong to substance *qua* substance (E1p31).

It is these things that qualify as possibilia within Spinoza's metaphysics. As a group, they constitute the infinite things in infinite modes mentioned in E1p16. These modes follow from God in whatever sense God grounds possibilia. But it is E1p16 which leads Tschirnhaus to raise the problem of diversity. So there is a direct connection between the problem of diversity and the grounding of possibility. Somewhat surprisingly, Spinoza makes no explicit mention of

[139] This is at least the standard interpretation. Kant himself is unclear. See Adams (2000).

[140] Kant distinguishes between God's grounding of possibility directly and as consequence. God grounds the apple as a consequence of grounding some other property directly (71). It is unclear whether extension is one of the properties he grounds directly. See Chignell (2012) for discussion.

possibilities in E1p16 or its demonstration.[141] But his remarks in E1p17s make clear that the infinite modes are in fact possibilia. The target in E1p17s is the view that God does not create everything which he has the power to create. God must keep some things in reserve, so to speak, because if he created everything possible, then he would no longer be omnipotent. If God created everything possible, then there would be nothing left which God *could* do and he would thereby lose his omnipotence.[142] Spinoza objects that if God kept some things in reserve, then he would undermine his omnipotence by worrying about his exhausting his omnipotence. So God creates everything possible. The infinite things in infinite modes mentioned in E1p16 make up the entire set of possibilia. The diversity of the world therefore follows from God in the same way that God grounds possibilia.

It is important to note that the problems of diversity and the grounding of possibility collapse for Spinoza, but not for others. Consider one prominent example: Leibniz. The actual world contains a lot of biological diversity. The *possibility* of this biological diversity is explained by the fact that God thinks it. God's thoughts also explain the possibility of every world, including worlds much more barren than our own. So God's thoughts do not explain our world's *actual* diversity. If it did, then every possible world would be actual. Instead, God creates our world, and its diversity, not because he thinks it, but because of its overall perfection. God's knowledge explains possibilia, but his goodness explains diversity.

[141] See Lin (2007: 285-8) for an explicit identification of the E1p16 modes with possibilia.

[142] "[T]hough they conceive God to actually understand in the highest degree, they still do not believe that he can bring it about that all the things he actually understands exist. For they think that in that way they would destroy God's power. If he had created all the things in his intellect (they say), then he would have been able to create nothing more, which they believe to be incompatible with God's omnipotence."

Diversity and Motion

The problem of the origin of motion is the problem of explaining why anything moves. For most early moderns, matter is passive and incapable of action. Left to its own devices, it wouldn't do anything. Descartes, for instance, writes to Henry More to express his agreement that "'if matter is left to itself and receives no impulse from anywhere' it will remain entirely still" (AT V 404/CSMK 381). So why isn't the physical world just a static blob? The standard early modern answer is that a spiritual substance gives it a push. Bodies move because they are shoved by things with minds. The most important of these minds is God's, who introduces motion into the world in the first place. As Descartes famously says: "as far as the general cause [of motion] is concerned, it seems clear to me that this is no other than God himself" (AT VIIIA 61/CSM I 240).

The existence of motion is directly related to the existence of diversity, at least the diversity of bodies. Earlier in the *Principles*, Descartes argues that "all the variety of matter, or the diversity of its forms, depends on motion" (AT VIIIA 52/CSM I 232). Without any differences in motion, there would be no difference or variety in extension. Motion, given its role in the individuation of bodies, is the basis of diversity in extension. Spinoza adopts this Cartesian account of individuation: "bodies are distinguished from one another in respect of motion and rest, quickness and slowness, and not in respect of substance" (E2lem1). The book to my left and the mug to my right are numerically different bodies, so there must be some qualitative distinction between them. The qualitative difference lies in their kinetic properties. For simple bodies, the chief difference lies in their different speeds (E2lem7s). For more complex bodies, the difference lies in their distinct patterns (*ratio*) of motion and rest (E2lem3def).

The cause of diversity is the same as the cause of motion. So the problem of motion is the same as the problem of diversity, at least in the physical realm.[143] But Spinoza faces a difficulty: he helps himself to the Cartesian account of bodily individuation, but he cannot help himself to the standard, Cartesian explanation of motion. The Cartesian account explains the existence of motion, and therefore the production of bodily diversity, by citing the activity of a spiritual agent, namely that of a transcendent God. But Spinoza's God is not transcendent. Furthermore, thought and extension cannot interact because they are different attributes and have nothing in common (E1p2, E1p3). So Spinoza is left with a Cartesian problem without a Cartesian solution. Tschirnhaus explicitly notes this in two of his letters. First, in Letter 59, he asks

> If time and opportunity permit, I humbly beg you to let me have the true definition of motion, together with its explanation. And since extension when conceived through itself is indivisible, immutable, etc., how can we deduce a priori the many and various forms it can assume, and consequently the existence of figure. S: 289

Spinoza never actually defines 'motion,' so Tschirnhaus cannot grasp *a priori* how motion produces diversity.[144] He restates his puzzlement in Letter 82:

> I should like you do to me the kindness of showing how, from Extension as conceived in your philosophy, the variety of things can be demonstrated *a priori*. For you mention Descartes's view, by which he maintains that he cannot deduce this variety from Extension in any other way than by supposing that this was an effect in motion started by God. Therefore, in my opinion, it is not from inert matter that he deduces the extension of bodies, unless you discount the supposition of God as a mover. For you have not shown how this must necessarily follow *a priori* from the essence of God, a point whose demonstration Descartes believed surpassed human understanding. S: 353

[143] See Nadler (2012) for a discussion of the relationship between the two problems.

[144] Tschirnhaus' request for an *a priori* deduction of all possible bodies mirrors Malebranche's charge that Descartes cannot deduce all possible modes of mind from the idea of thought. Malebranche, however, thinks that the deduction is possible in the case of extension (OCM 3.164/LO 633-4). The difference in confidence is likely explained by the fact that Malebranche is concerned with the *merely possible* derivation of bodily modes, whereas Tschirnhaus is concerned with the actual production, by matter itself, of all possible bodily modes. This further reflects the fact that the origin of motion and the grounding of possibility are distinct problems for other early moderns.

Since Spinoza cannot avail himself of the Cartesian explanation, what he must explain is how matter, broadly construed, can be its own cause of motion. If Spinoza can explain how matter is its own cause of motion, then he can solve the problem of diversity, as it pertains to extension. But presumably he thinks that the process in the attribute of thought is sufficiently analogous to the process in extension (E2p7). So by solving the problem of diversity in extension, Spinoza can solve the problem of diversity in thought for free.

II. How God Grounds Possibility

Most early moderns, Spinoza included, wish to ground possibilia in God. But for the theist there is a particular problem that comes with this project: some ostensible possibilities are of a nature that is plausibly incompatible with God's nature. Pain, sin, and infinitely divisible bodies, for example, all seem to be genuine possibilities. After all, they seem to *actually* exist. Everyone has experienced pain or seen someone do something immoral. Similarly, early modern mechanists generally agree—with the exception of the atomists—that bodies are infinitely divisible.[145] But according to the theist, God is a perfect being incapable of being pained, of sinning, or of being divided. So the theist faces a dilemma: she must either deny that sin, pain, and infinitely divisible bodies are genuine possibilities, or explain how some being which lacks these features could ground their possibility.

Theists have taken the dilemma by either horn. Leibniz, for example, denies that sin and pain are real entities.[146] As privations, they are no more real than a hole and so they fail to constitute genuine possibilities. Genuine possibilities involve content which is capable of being thought or expressed without negation.[147] Nothing is required to ground privations and so there is no need to

[145] See Garber (1992: 120-7).

[146] See Newlands (2014) for discussion.

[147] Chignell (2012: 640).

concede that God is capable of sinning or feeling pain. Similarly, Berkeley—and Leibniz in his more idealistic moods—denies that matter is a genuine possibility. If matter is not possible, then there is no worry about how an indivisible being could ground it.

But denying the possibility of matter might strike some as a rather high price to pay for explaining how possibilities are grounded in God. It is a price that Malebranche and Descartes, for instance, do not want to pay. Matter in motion forms the foundation of Cartesian physics—giving up on the possibility of matter would require abandoning Cartesian physics. But neither Descartes nor Malebranche wants to attribute any extension or divisibility to God either. So they opt for the other horn of the dilemma.[148] There is in God a feature which grounds the possibility of matter by containing extension "intelligibly," "perfectly," or "eminently". For example, Descartes admits that matter has some degree of perfection (AT VII 84/CSM II 58). Furthermore, all perfections are found formally or eminently in God (AT VII 165/CSM II 116). Similarly, Malebranche claims that God has *intelligible* extension as one of his ideas (LO: 626). Ideas are objects in God's mind, so it is God's intellect which grounds the possibility of extension. Unfortunately, the idea of intelligible extension, eminent matter, and other cognate notions strike many as obscure.[149] Spinoza himself expresses his doubts about this strategy in E1p15s:

> [T]hey remove corporeal or extended substance itself from the divine nature. And they maintain that it has been created by God. By what divine power could it be created? They are completely ignorant of that. And this shows clearly that they do not understand what they say.

[148] Both endorse the privation view of sin (AT VIIIA 14/CSM I 201; LO: 514-18), but Malebranche denies that pain is a privation: "pain is a real and true evil...thus not every evil is an evil just because it deprives us of good" (LO: 348, cited in Newlands forthcoming).

[149]In Nadler's words: "Ultimately, Malebranche has no satisfactory answers to any of these ontological questions regarding ideas" (1992: 150).

Intelligible extension and the like serve as placeholders for a feature of God meant to accomplish two tasks: (i) to be sufficiently similar to extension for it to ground the possibility of matter but (ii) sufficiently dissimilar so as not to undermine God's perfection. As mere placeholders, they fail to provide an account of how God grounds the possibility of extension. They merely highlight the fact that a theistic explanation is required while articulating two desiderata of such an explanation. As Spinoza points out, they are silent on the nature of the ground in question.

According to what I will call the *Standard Picture*, Spinoza offers a simple solution to the dilemma. God grounds the problematic possibilities in question—and all others—because God *actually exemplifies* all of them. Newlands, for instance, endorses the Standard Picture when he writes that "possibilities are grounded in God by being actually exemplified in the divine nature. [I]t is possible that something has the nature of thought because God actually has the nature of thought" (2013:162). Similarly, Chignell writes in the context of Kant that "the logic of the proof makes it necessary that some actual being exemplifies [extension], or at least its maximal counterpart—namely, *being infinitely extended*. This provides the first inkling that something like Spinozism falls out of the proof" (2012: 483, emphasis original). The Standard Picture enables Spinoza to go between the horns of the theist's dilemma. For any possible feature F, God has some actual F-ness.[150] If we apply the Standard Picture to the previous examples, Spinoza can claim that extension is possible because God is extended; that pain is possible because God is pained; and that sin is possible because God sins.[151] Since he is no theist, he need not worry himself with any of these results.

[150] Spinoza's contemporaries recognized this aspect of his view. Bayle, for example, writes: "This is the picture of the God of Spinoza; he has the power to change or modify himself into earth, moon, sea, tree, and so on" (336).

[151] Of course, Spinoza in an important sense does not believe that anyone sins. But the sort of things that are taken as sinful—murder, lies, theft—can be reduced to features that God actually has.

In addition to being able to handle problematic cases like extension and pain, the Standard Picture is both elegant and plausible. It is *elegant* because the grounding of possibilities is the same everywhere: if F is possible feature of reality, then it is because it is actually exemplified in God. Descartes and Malebranche, for example, cannot claim this on their accounts. While God grounds the possibility of both thought and extension, the nature of the grounding is different in each case. It is only in the case of thought that a possibility is grounded in God's actual exemplification of that feature. In addition to its elegance, Spinoza's account is also *plausible*. It is arguably easier to understand how a possible feature F is grounded in something actually F than it is to see how F is grounded in something actually not-F. Arguably, the former account is more in the spirit of actualism, the thesis that modal facts are grounded in what is actually the case.

Unfortunately, the Standard Picture is not so straightforward as an interpretation of Spinoza. Its success depends on what it means for God to actually exemplify the possibilities in question. There are roughly two ways to interpret actual exemplification. According to the first, and most natural, interpretation, God actually exemplifies F if and only if God *qua* substance actually has F as one of his properties. On this interpretation, the Standard Picture is simply false. Consider two cases: divisibility and motion. Spinoza is clear that God, *qua* substance, is indivisible. He writes in E1p15s that

> If someone should now ask why we are, by nature, so inclined to divide quantity, I shall answer that we conceive quantity in two ways: abstractly, or superficially, as we imagine it, or as substance, which is done by the intellect alone. So if we attend to quantity as it is in the imagination, which we do often and more easily, it will be found to be finite, divisible, and composed of parts; but if we attend to it as it is in the intellect, and conceive it insofar as it is a substance, which happens with great difficulty, then (as we have already sufficiently demonstrated) it will be found to be infinite, unique, and indivisible.
>
> This will be sufficiently plain to everyone who knows how to distinguish between the intellect and the imagination—particularly if it is also noted that matter is everywhere the same, and that parts are distinguished in it only insofar as we

> conceive matter to be affected in different ways, so that its parts are distinguished modally, but not really.

Substance is divisible only in the sense that its modes are divisible. But modes are Spinoza's possibilia. So the Standard Picture, when interpreted as literal exemplification, falsely predicts that God is divisible.

It makes a similar prediction in the case of motion. Motion and rest are infinite modes, so they are among the possibilia that God's divine nature grounds. The Standard Picture, interpreted as literal exemplification, grounds the possibility of motion in the fact that substance itself is moving or at rest. But Spinoza is clear that what is in motion are the modes of God. In E1p32c2, he argues that

> will and intellect are related to God's nature as motion and rest are, and as are absolutely all natural things, which (by P29) must be determined by God to exist and produce an effect in a certain way. For the will, like all other things, requires a cause, by which it is determined to exist and produce an effect in a certain way. And although from a given will or intellect infinitely many things may follow, God still cannot be said, on that account, to act from freedom of the will, any more than he can be said to act from freedom of motion and rest on account of those things that follow from motion and rest (for infinitely many things also follow from motion and rest). So will does not pertain to God's nature any more than do the other natural things, but is related to him in the same way as motion and rest, and all the other things which, as we have shown, follow from the necessity of the divine nature.

The will and intellect are modes because "whether finite or infinite, [they] must be referred to *Natura naturata*, not to *Natura naturans*" (E1p31). Since only substance and attributes qualify as *Natura naturans*, will and intellect do not pertain to God *qua* substance.[152] Spinoza compares the will and intellect to motion and rest in the above passage because they are "related to God's nature

[152] Spinoza accuses van Blyenbergh of committing a category mistake precisely by imagining that God has a will (Ep23).

as motion and rest are." It follows that motion also does not belong to God *qua* substance. God produces motion, but God himself is neither moving nor at rest. He is prior to both.[153]

According to the second interpretation of the Standard Picture, God actually exemplifies F if and only if God actually exemplifies some property P from which F can be derived. This second interpretation gets its support primarily from the fact that Newlands—a proponent of the Standard Picture—cashes out the grounding relation in terms of conceptual containment. God grounds possibilities in virtue of their being conceptually contained in the attributes (2013: 161). The kind of conceptual containment that Newlands has in mind is the kind mentioned in E1p8s2 when Spinoza says that the "essences [of non-existing things] are comprehended in another [i.e. the attributes] in such a way that they can be conceived through it."[154] This second interpretation of actual exemplification echoes Kant's distinction between direct grounding and grounding as a consequence.[155] On Kant's view, God doesn't ground every possibility directly, through literal exemplification. He grounds some possibilities indirectly or by consequence:

> Now this relation of possibility to some existence is two-fold. Either the possible is conceivable only insofar as it is itself actual, and then possibility is given as a determination in the actual; or it is possible because something else is actual; that is, its inner possibility is given as a consequence through another existence. 71

[153] The identification of motion and rest with intellect and will can be found other places in the *Ethics.* For instance, in E3p2, Spinoza compares the decisions that occur in the mind with the particular motions of the body. Also, in the Preface to Part Five he claims that "since there is no common measure between the will and motion, there no comparison between the power, or forces, of the mind and those of the body. Consequently, the forces of the body cannot in any way be determined by those of the mind."

[154] He also cites an earlier remark of Spinoza's in which he claims that "God's true perfection is that he gives all things their essence, from the least to the greatest; or, to put it better, he has everything perfect in himself" (G I/15-17; C 87). But this sounds strikingly like Descartes' claim that God contains matter eminently.

[155] Newlands explicitly compares Spinoza's account to Kant's (162). See Chignell (2012: 640-1) for a discussion of derivative possibilities.

Some possibilities, such as motion or divisibility, are possible because they can be derived from something actual. If the Standard Picture is interpreted in this manner, however, then it loses its initial explanatory power. We already know *that* possibilia are derived from God's nature. E1p16 states that clearly and it forms the very basis of the problem of diversity. What we want to know is specifically *how* possibilia are derived from God's nature. The Standard Picture offers a specific account of this derivation only when it is interpreted as literal exemplification. But the literal exemplification account is false. There are certain possibilities—namely motion and divisibility—which are not literally exemplified by God. So what Spinoza needs—a need he shares with Kant and Leibniz—is a way to explain how a thing that is not-F can ground the possibility of F. Without a positive account for how this occurs, the Standard Picture only repeats what we already knew.

III. God and the Cause of Motion

By the second half of the 17th century, the laws of motion had come to occupy an increasingly important place in scientific inquiry. An inability to explain either the content of these laws or the origin of motion itself counted as a significant mark against a theory. It is in this context that Clarke and Henry More criticize Spinoza. They argue that Spinoza lacks the resources to adequately explain the origin of motion and that it is only on the assumption that an immaterial God exists that one can explain why bodies move. After rehearsing their arguments, I will argue that Clarke and More fail to appreciate the way in which the origin of motion in Spinoza is directly tied to the grounding of possibilia.

More's Argument

More sets out to prove that "another substance than matter not only may be conceived but must even exist" (91).[156] His third argument to this effect is based on the existence of motion. It

[156] Citations refer to Jacob (1991).

takes as its primary target Spinoza's claim that physical, kinetic activity extends infinitely backwards in time (E1p28). According to Spinoza, all bodies are in either motion or rest and a "body in motion or at rest must be determined to motion or rest by another body, which other body has been determined to motion or rest by a third body, and that third again by a fourth, and so on to infinity" (E2lem3). So there is a communication of motion extending to the infinite past which is required in order to explain the determinate motions of present and future objects. More objects that

> it is manifest that that which at any time was not present was not even for a moment past, in the succession of the world. Whence it is plainly proved, since all the moments of its succession were at some time present, and many do not at any time follow at the same time as one, but single moments always follow one after the other, that it was at some time, since all things, at any rate apart from one, were in the process of becoming present. And thus perforce we will be led back to the head or principle of all successive durations, of whatever extent, and suppose it to be extended, and think and declare, what is equally contradictory, that there can be an infinite successive duration, and a figured infinite magnitude. When it plainly follows that this corporeal world, with all its motions and revolutions of changes, has not existed nor can exist from eternity, and matter cannot be by itself or at least moved by itself, and so it is necessary that some other substance exists before matter, which communicates motion to matter in some way. 96

Motion has to have come from *somewhere*. But matter cannot be its own cause of motion. Neither could motion have been the result of an infinity communication of motion from the infinite past. An infinite past series could never have reached the present (as it obviously has). So, matter needs some help from an external cause in order to get put in motion. This external cause is God.

Spinoza is unlikely to be very moved by this argument. There is an ambiguity in the term "matter" which More does not seem to notice and which undermines his argument. The term "matter" can refer to particular bodies or to the existence of body in general. One can capture the distinction by looking at their respective causes. Body in general exists because extension is an attribute of God and attributes, being conceived through themselves, necessarily exist (E1p10).

Particular bodies exist, however, because other bodies cause them to exist (E1p28). Corresponding to these two senses of "matter" are two questions about motion. First, why is there motion at all? Second, why does this or that body move as it does? More's argument clearly has in mind the particular sense of matter and the particular question about motion. It is particular bodies, after all, which form the links in the chain of motion extending to infinity and it is the particular motions of present bodies which go unexplained if the infinite past goes uncompleted. But because of this, More's argument seems to miss its target. Spinoza is free to grant that matter, in its particular sense, is not its own cause of motion. In fact, Spinoza *does* grant More this point, as E1p28 and E2lem3 make clear. When matter is conceived in the general sense, however, it is its own cause of motion. The existence of motion in general follows immediately from God's nature considered as extended because motion and rest are the immediate infinite modes of God (Ep64). Matter causes its own motion as material substance causes its infinite modes. The infinite modes are included among the modes of E1p16, so they are possibilia. More's argument fails precisely because he fails to consider that the way in which matter is its own cause of motion corresponds to the way in which Spinoza's substance grounds possibilia.

Clarke's Argument

Clarke argues against Spinoza in a similar manner to More. His argument is based on a trilemma: either (i) matter is its own cause of motion, (ii) motion is caused by a series of events leading back to eternity, or (iii) motion is caused by an eternal, transcendent God. Clarke argues against the first two positions. We are left with the third option by elimination. In the following passage, we can glean at least three arguments against (i) (marked A, B, and C for ease of reference) and one argument against (ii) (marked D):

> [A] If [motion] was of itself necessary and self-existent, then it follows that it must be a contradiction in terms to suppose any matter to be at rest. [B] And yet, at the

> same time, because the determination of this self-existent motion must be every way at once, the effect of it could be nothing else but a perpetual rest. [C] Besides . . . it must also imply a contradiction to suppose that there might possibly have been originally more or less motion in the universe than there actually was, which is so very absurd a consequence that Spinoza himself, though he expressly asserts all things to be necessary, yet seems ashamed here to speak out his opinion, or rather plainly contradicts himself in the question about the origin of motion. [D] But if it be said, lastly, that motion, without any necessity in its own nature and without any external necessary cause, has existed from eternity merely be an endless successive communication as Spinoza inconsistently enough seems to assert, this I have before shown in my proof of the second general proposition of this discourse to be a plain contradiction. 45

I will set aside Argument C, because Spinoza will simply deny that it's absurd to think that the world's exact quantity of motion is necessary. I want to focus instead on Arguments A, B, and D and show how they fail for the same reasons that More's argument fails.

In Argument A, Clarke claims that if matter were its own cause of motion, then it would be inexplicable how anything could be at rest. But some things are at rest. After all, my laptop is currently stationary and doesn't just slide across the table all by itself. Clarke here assumes—rightfully so—that if matter is its own cause of motion, then it is its own *necessary* cause of motion. But since some objects are at rest, it is false that matter *must* be its own cause of motion. In Argument B, Clarke claims that if matter were its own cause of motion, it would move in a determinate direction because there is no motion that doesn't involve a determinate direction. But if matter were the cause of its own motion and it moved in a determinate direction, then that direction would be arbitrary. All directions are equally good, it would seem. So, Clarke argues, matter tries to move in every direction and, as result, it moves in no direction and remains at rest. Matter, therefore, is not its own cause of motion.

Argument D is aimed not at the claim that matter is its own cause of motion, but at the claim that motion is the result of an infinite series of past events. Clarke cites his cosmological argument, where he rejects the possibility of an infinite chain of dependent beings. If there were

an infinite series of dependent beings not brought into being by an external cause, then the series would lack a cause.[157] It couldn't be its own cause, otherwise it would be independent rather than dependent. But given the PSR, the series needs a cause. So there could not be an infinite series of dependent beings which lacked an external cause. The origin of motion therefore doesn't lie in a series of finite events extending back to infinity. Clarke concludes that the only other possibility is that an eternal, transcendent God exists who causes bodies to move.

Despite its merits, Clarke's critique repeats More's earlier failure to distinguish the existence of motion in general from the existence of particular determinations of motion. Consider Arguments A and B. In A, bodies at rest act as counterexamples to the view that matter is its own cause of motion. The bodies at rest that Clarke has in mind are finite, particular bodies such as my laptop. But Spinoza can explain the existence of bodies at rest because finite bodies are not their own causes of motion.[158] In B, Clarke argues that any determinate direction of motion would violate the PSR. But once we recognize that finite bodies are not their own causes of motion, the argument fails. Finite bodies move in certain determinate directions and not others precisely because *other* finite bodies make them move in those directions. Their motion is not arbitrary, but is instead the result of a collision with another finite body. Both of Clarke's arguments against the view that matter is its own cause of motion have the wrong target in mind. Additionally, Clarke's Argument D confuses particular motion with general motion. The argument works only if Clarke interprets the infinite chain as functioning to explain why there is any motion at all. But Spinoza's

[157] Spinoza—likely influenced by Crescas—allows for an infinite series of dependent beings, so long as it is caused to exist by God. See Crescas (I 2.3) and Spinoza's Letter 12. Melamed (forthcoming) offers a nice overview of both texts.

[158] In fact, even if finite bodies were their own causes of motion, a body might be at rest for the reason that stronger bodies in the plenum were keeping it at rest.

infinite chain instead functions to explain only why particular, finite bodies move as they do. The explanation for why there is any motion at all lies in the nature of substance, because motion and rest follow immediately from substance as infinite modes.

In summary, both More and Clarke assume that there are only three possible sources of motion: (i) an external, transcendent God, (ii) finite bodies themselves, (iii) an infinite sequence of finite bodies continually communicating motion to other bodies. If (i)-(iii) are intended to explain the existence of particular motion, then Spinoza accepts (iii) as the true explanation. But if they are intended to explain the general existence of motion, then Spinoza rejects all three explanations. But in this case, (i)-(iii) are not exhaustive options. Rather, as pointed out above, motion could have its cause in an immanent God who is not distinct from matter. What More and Clarke ignore then, is that the way to understand how an immanent God causes motion is to understand how an immanent God grounds his own modes. In other words, they overlook the grounding of possibility as a potential heuristic for understanding how God produces motion.

IV. Conclusion

I argued for three main claims in this chapter. First, that for Spinoza the problem of diversity is identical to the problems of the origin of motion and the grounding of possibility. Second, that the Standard Picture fails as a solution to the grounding of possibility because it fails to appreciate how God produces motion without himself being in motion. Third, that criticisms of Spinoza's ability to explain the origin of motion fail to recognize that God causes motion in the same way that he grounds possibilia. In other words, the Standard Picture, More, and Clarke all fail to take seriously that the three problems mentioned above are in fact a single problem. In the next chapter I will present my positive solution to that problem.

Bibliography

Adams, Robert. "God, Possibility, and Kant." *Faith and Philosophy* 17 (2000): 425-40.

Aquinas, Thomas. *Basic Writings*. Vol. One. Ed. by Anton. C. Pegis. New York: Random House, 1997.

Bayle, Pierre. *Historical and Critical Dictionary: Selections*. Translated by Richard H. Popkin, Indianapolis: Hackett, 1991.

Bennett, Jonathan. *A Study of Spinoza's Ethics*. Indianapolis: Hackett Publishing, 1984.

Chignell, Andrew. "Kant, Real Possibility, and the Threat of Spinoza." *Mind* 121 (2012): 635-75.

Clarke, Samuel. *A Demonstration of the Being and Attributes of God and Other Writings*. Ed. by Ezio Vailati. New York: Cambridge University Press, 1738 [1998].

Crane, Tim. "Existence and Quantification Reconsidered." In *Contemporary Aristotelian Metaphysics*, ed. Tuomas E. Tahko. New York: Cambridge University Press, 2012: 44-65.

Crescas, Hasdai. *Lumière de l'Éternel: Or Hachem*. E. Smilevitch (trans.), Paris: Hermann (Ruben Editions), 2010.

Della Rocca, Michael. *Representation and the Mind-Body Problem in Spinoza*. New York: Oxford University Press, 1996.

---. *Spinoza*. New York: Routledge, 2008.

Descartes, Rene. *The Philosophical Writings of Descartes*. Three volumes. Translated by John Cottingham, Robert Stoothoff and Dugald Murdoch. Cambridge: Cambridge University Press, 1985.

Easton, Patricia. "What is at Stake in the Cartesian Debates on the Eternal Truths?" *Philosophy Compass* 4 (2009): 348–62.

Garber, Daniel. *Descartes' Metaphysical Physics*. Chicago: University of Chicago Press, 1992.

Hegel, G.W.F. *Lectures on the Philosophy of Religion*. Vol. 1, ed. Peter C. Hodgson. Berkeley, CA: University of California Press, 1984.

Hoffman, Paul. "The Unity of Descartes's Man." *The Philosophical Review* 95 (1986): 339-70.

Jacob, Alexander. *Henry More's Refutation of Spinoza*. New York: Olms, 1999.

Kant, Immanuel. *The One Possible Basis for a Demonstration of the Existence of God*. Trans. Gordon Treash. Lincoln, NE: University of Nebraska Press, 1994.

Lin, Martin. “Spinoza’s Arguments for the Existence of God.” *Philosophy and Phenomenological Research* 75 (2007): 269–97.

Macherey, Pierre. *Hegel or Spinoza.* Translated by Susan M. Ruddick. Minneapolis: University of Minnesota Press, 2011.

---. “Spinoza est-il moniste?” in *Spinoza: puissance et ontologie*, ed. Myriam Revault D’Allonnes. Paris: Editions Kime, 1993. 39-53.

Maimon, Salomon. *Salomon Maimons Lebesgeschichte*. Ed. Zwi Batscha. Frankfurt: Insel, 1984.

Maimonides, Moses. *The Guide of the Perplexed*. Schlomo Pines (trans.). Chicago: Chicago University Press, 1963.

Malebranche. *Oeuvres Complètes de Malebranche*. Edited by A. Robinet. Paris: J. Vrin, 1958-84.

---. *The Search after Truth.* Translated and edited by Thomas S. Lennon and Paul J. Olscamp. Cambridge: Cambridge University Press, 1997.

---. *Dialogues on Metaphysics and Religion*. Trans. by David Scott. Ed. by Nicholas Jolley. Cambridge: Cambridge University Press, 1997.

Melamed, Yitzhak. *Spinoza’s Metaphysics: Substance and Thought*. Oxford: Oxford University Press, 2013.

---. “‘Omnis determinatio est negatio’ – Determination, Negation and Self-Negation in Spinoza, Kant, and Hegel” in Eckart Förster and Yitzhak Melamed (eds.), *Spinoza and German Idealism*. Cambridge: Cambridge University Press, 2012: 175-96.

---. “Why is Spinoza not an Eleatic Monist (Or Why Diversity Exists)” in Philip Goff (ed.), *Spinoza on Monism.* London: Palgrave, 2012: 206-22.

---. “Acosmism or Weak Individuals? Hegel, Spinoza, and the Reality of the Finite.” *Journal of the History of Philosophy* 48 (2010): 77-92.

---. “Hasdai Crescas and Spinoza on Actual Infinity and the Infinity of God’s Attributes.” In Steven Nadler (ed.), *Spinoza and Jewish Philosophy*. Cambridge: Cambridge University Press, forthcoming: 204-15.

Nadler, Steven. *Spinoza’s* Ethics: *An Introduction*. New York: Cambridge University Press, 2006.

---. *Malebranche and Ideas*. New York: Oxford University Press, 1992.

---. “Spinoza’s Monism and the Reality of the Finite.” Philip Goff, ed., *Spinoza on Monism*. London: MacMillan-Palgrave, 2012: 223-43.

Newlands, Samuel. "Leibniz and the Ground of Possibility." *The Philosophical Review*, Vol. 122 (2013): 155-187.

---. "Leibniz on Privations, Limitations, and the Metaphysics of Evil." *The Journal of the History of Philosophy* 52 (2014): 281-308.

---. "Evils, Privations, and the Early Moderns," in *Evil: A Philosophical History*, eds. Andrew Chignell and Scott MacDonald. New York: Oxford University Press, forthcoming.

Olson, Eric T. "Identity, Quantification, and Number." In *Contemporary Aristotelian Metaphysics*, ed. Tuomas E. Tahko. New York: Cambridge University Press, 2012: 66-82.

Schmitz, Kenneth. "Hegel's Assessment of Spinoza," in *The Philosophy of Baruch Spinoza*. Ed. by Richard Kennington. Washington, D.C.: Catholic University of America Press, 1980: 229-43.

Spinoza. *The Collected Works of Spinoza*, volume I. Translated by Edwin Curley. Princeton: Princeton University Press, 1985.

Spinoza. *The Letters*. Translated by Samuel Shirley. Indianapolis: Hackett, 1995.

Wolfson, H.A. *Crescas' Critique of Aristotle*. Cambridge: Cambridge University Press, 1929.

Van Bunge, Wiep. *Spinoza Past and Present: Essays on Spinoza, Spinozism, and Spinoza Scholarship*. Leiden: Brill, 2012.

Yetter, Timothy. "Clarke against Spinoza on the Manifest Diversity of the World." *British Journal for the History of Philosophy* 22 (2014): 260-80.

Chapter 6: Spinoza's Solution to the Problem of Diversity

The problem of diversity is identical to the problems of the origin of motion and the grounding of possibility. But merely noting that there is actually only a single problem says little about how Spinoza would solve it. We still don't know (i) how God grounds possibilia which he himself doesn't instantiate, (ii) how matter is its own cause of motion, or (iii) how a single, unified being producing any diversity. In this context, More's argument against Spinoza is not a complete failure. It reveals Spinoza's general reluctance to explain *how* motion follows from God's nature. As Schliesser (2012) puts it:

> What is at stake here is the origin of matter and, in particular, the origin of matter's motion. In Spinoza, their origin follows from the divine nature; God serves as the sufficient reason. But Spinoza is frustratingly silent on the details, and this leaves "God" acting like an empty placeholder rather than a specific cause for the origin of an infinite succession of motion. We can recognize this point even if we are not very impressed by either More's blanket denial that the material universe can be eternal or More's conclusion that there must be "some other substance [that] exists before matter" that is the original source of motion. 441

It seems that in the absence of any explanation from Spinoza, one is entitled to return to the default position which says that motion is caused by a transcendent, spiritual God. After all, we plausibly have a better grasp of how a transcendent God causes motion than how an immanent God, such as Spinoza's, does.[159] So the burden appears to be squarely on Spinoza to explain how God causes motion (and how he grounds possibilia, etc.).

[159] Consider Descartes' God. On one interpretation, he causes motion by re-creating objects each instant in new locations. The cause of motion is analogous to the simulation of motion in a film. According to a second interpretation, God causes motion in much the way that human do—through a shove of something distinct from himself. We have a primitive understanding of how our minds can cause bodies to move (AT III 365/CSM III 218). In order to understand

I propose that the solution lies in Spinoza's rather peculiar claim that God's essence is power. I will argue in the first section that God's essence is nothing but activity itself—he is the striving force present in all things. In the second section, I will apply this interpretation to the problem of the origin of motion. Matter moves itself because motion is the primary expression of power in the realm of physical things. If matter were inert, it wouldn't be a mode of God. In the third section, I will apply the power-based interpretation to the problem of the grounding of possibility. Things are possible to the extent that they are expressions of power or derived from expressions of power. This paragraph, your visual field, the laws of physics—everything bottoms out in striving, dynamical properties. In section IV, I will defend Spinoza against the charge that his view of power requires abandoning the mechanist project. More specifically, I will argue that he should be characterized as a "loose" rather than "strict" mechanist. Finally, I will argue in section V that my interpretation provides a solution to the problem of diversity. As pure activity, God is uncountable and the problem of diversity never gets off the ground.

I. God and Power

My primary argument for the power-interpretation appeals to its capacity to solve the interpretive puzzles outlines in the previous chapter. But I will also present two, more direct arguments. The first argument is straightforward: Spinoza says so himself. The second argument relies on an oft-overlooked argument in E2p1s for why thought is an attribute.

E1p34

In E1p34 Spinoza argues that "God's power is his essence itself." There are two kinds of essences within Spinoza's metaphysics, actual essences and formal essences. Actual essences

how God creates motion, we need only consider a more perfect version of our own experience. In either case, the way God causes motion seems fairly comprehensible. See Garber (1992: 275-8).

constitute a thing's striving or conatus (E3p7). Spinoza never defines formal essences, but they are roughly the exemplars of actual essences, i.e. the models according to which actual essences are produced.[160] E1p34 clearly refers to God's actual essence. In his proof of the conatus doctrine in E3p6, Spinoza cites E1p34 when he writes that "singular things are modes by which God's attributes are expressed in a certain and determinate way, that is, things that express, in a certain and determinate way, God's power, by which he is and acts." A finite mode's conatus is God's conatus made determinate. Since a thing's conatus is its actual essence, God's essence just is his striving or his power.[161] Spinoza's general definition of essences in E2d2 defines them as necessary and sufficient conditions for a thing's existence and conception[162]:

> I say that to the essence of any thing belongs that which, being given, the thing is necessarily posited and which, being taken away, the thing is necessarily taken away; or that without which the thing can neither be nor be conceived, and which can neither be nor be conceived without the thing.

So E1p34 informs the reader how God must be conceived. To conceive of God is to conceive of activity or striving. As Spinoza writes in E2p3s, "we have shown in IP34 that God's power is nothing except God's infinite essence [and] so it is as impossible to conceive that God does not act as that he does not exist."

What does it mean to say that God's essence is activity? The clearest indication comes at E1p36, which states that everything that exists produces effects and does so precisely because it is an expression of God's power. So God's activity is somehow bound up with the production of

[160] See Ward (2011) to this effect.

[161] See Lin (2006) and Viljanen (2011: chs. 4-5) for the relationship between E1p34 and E3p6.

[162] Commentators generally agree that the E2d2 definition applies to actual, rather than formal, essences. See Martin (2008) for a survey of arguments to that effect. Here is one argument. In E2p8 Spinoza explains how the mind conceives of the formal essences of non-existent modes. This would be a straightforward contradiction if E2d2 referred to formal essences

effects. If God's essence is activity, what are his effects? Spinoza answers in the demonstration: "God's power, by which he and all things are and act, is his essence [*potentia Dei, qua ipse et omnia sunt et agunt, est ipsa ipsius essentia*]" (E1p34d).[163] The effects of God's power are, so to speak, himself and the system of modes. God's power allows him to produce both himself and the modes. This claim stands in dire need of interpretation.[164]

E1p34d suggests that the power by which God produces himself and his modes are one and the same power. There are at least two ways to read this. According to the first, there is one power which is actualized for two ontologically distinct purposes: once for God's existence and a second time for the modes. Consider an analogy. The power of my legs is utilized to walk me from my house to my office. But it is also utilized to walk me from my office to the store. Construed broadly, this power is one and the same. It's just my legs' power. But that single power has distinct effects; sometimes it gets me to work, and other times it gets me to the store. This first reading claims that God's power explains the existence of substance, as well as the existence of a *distinct* system of modes.

According to the second reading, there is only a single effect of God's power, viz. his modes. God *qua* substance just is power or activity. There is no separate *thing* outside the system of modes. Rather, substance refers to the power which underlies everything and which makes it and its striving possible. Laerke endorses this second reading when he writes that

> self-causation (i.e. God causing himself) and immanent causation (i.e. God causing all things) are in some way just the same causation… [and] …when God causes

[163] The power by which God *exists* refers to the power mentioned in E1p11s: "[t]o be able to not to exist is to lack power, and conversely, to be able to exist is to have power." The power by which God *acts* refers to the power of E1p16.

[164] Melamed (2012c: 97) suggests that the main point of E1p34 is to convey that God's actions flow immediately from his essence and do not involve any intermediate deliberation. But given the uses of E1p34, Spinoza seems to be making an important ontological claim about God's innermost being.

> Himself and when He causes all things, these two causal actions are not only the *same kind* of causal action, but *one and the same* causal action, considered from two difference perspectives. 2013: 68, 71, emphasis original[165]

As it stands, E1p34 is neutral between the two readings.[166] It claims that God's essence is power, but it fails to say much more. I think the second reading is more conducive to the idea that God is an immanent rather than transcendent being, as well as to the idea that substance is nature considered as active, i.e. *Natura naturans*. But these are rather vague claims and I don't intend to defend them. Fortunately, there are other reasons that support the second reading, one of which is that Spinoza talks about the attributes themselves as powers.

Attributes and Powers

If substance itself is just power, then attributes are conceptually-distinct ways of conceiving that power. Thought, for instance, conceives it as the power to think. If attributes themselves weren't powers, then it would be unclear how they would constitute the essence of God. In E1p16, Spinoza argues that properties are inferred from God's definition or essence. The properties in question are God's modes, including the infinite modes (E1p29d). In the proof of E1p16, Spinoza adds that "since the divine nature has absolutely infinite attributes (by D6), each of which also expresses an essence infinite in its own kind, from its necessity there must follow infinitely many things in infinite modes." Infinite things follow from each of the attributes and together the attributes produce a world that is infinitely infinite, i.e. infinite in the things that exist and infinite in the kinds of things that exist. Each attribute constitutes a segment of God's overall power.

This notion that attributes are powers is most explicit in one of Spinoza's arguments for why thought qualifies as an attribute. E2p1s offers two arguments for why thought is an

[165] Viljanen (2011) also interprets God as the power behind existing things, but his model of power is formal causation.

[166] Those who accept the conceptualist interpretation from Chapter Three likely accept this first reading. Substance is uncaused, whereas modes are caused. It follows that they cannot be the same effect of God's power.

attribute.[167] According to the first, singular thoughts are modes and modes must be conceived through attributes. Therefore, thought is an attribute. As others have pointed out, however, Spinoza seems to beg the question here because he offers no argument for why singular thoughts are modes of God.[168] He instead relies on his reader's intuition that thoughts are modes rather than, say, fictional entities. The second argument, though less straightforward, seems to avoid these pitfalls. In it, Spinoza argues that:

> This proposition [that thought is an attribute] is also evident from the fact that we can conceive an infinite thinking being. For the more things a thinking being can think, the more reality, or [*sive*] perfection, we conceive it to contain. Therefore, a being which can think infinite many things in infinitely many ways is necessarily infinite in its power of thinking. So since we can conceive an infinite being by attending to thought alone, thought (by 1D4 and D6) is necessarily one of God's attributes, as we maintained. E2p1s

The argument can be put in premise-conclusion form:

(1) If we can conceive of an infinite being on the basis of C, then C is an attribute.

(2) We can conceive of an infinite *thinking* being.

(3) Therefore, thought is an attribute.

The motivation behind (1) is the idea that infinity is a sign of substance. The attributes are infinite in their own kinds because there is only one attribute of each kind. Because attributes are perceived as the essence of substance (E1d4), infinity is a sign of substance. Next, Spinoza claims in (2) that from the mere concept of thought, we can construct the idea of an infinite thinking being. We do so by conceiving of a being which thinks infinite thoughts. There are an infinity of potential thought contents. For instance, one could think about the number one, the number two, and so on. Furthermore, we can conceive that all of these thoughts belong to a single mind. Even if human

[167] He applies the same arguments to extension in E2p2d, but leaves the exercise up to the reader.

[168] For example, see Della Rocca (1996: 15) and Curley (1988: 65-6).

minds are far too limited to think of all the natural numbers, there doesn't seem to be anything incoherent about one mind which thinks all the natural numbers. Therefore, we can conceive of an infinite thinking being on the basis of thought alone. From (1) it follows that thought is an attribute.[169]

The conclusion that thought is an attribute is intended to follow directly from the existence of an infinite power of thought. But whether the attribute of thought is *just* the power of thought depends on how one construes the infinite thinking being of E2p1s. In other words, which part of Spinoza's ontology does it fall into? Is it just substance considered as thinking or is it something that substance *produces* as one of its modes? The same question can be asked of the infinite extended being implicit in E2p2. Is extended substance just one big, infinitely extended thing or does God produce an infinite body as one of his modes? If either of these infinite beings is substance, then the nature of substance would seem to extend beyond its power. For example, it would have regions of space as properties. Since space is paradigmatically inert, this would undermine the claim that substance is just activity.[170]

Interestingly, there is nothing in the second argument of E2p1 which requires that we interpret the infinite beings as substance. In fact, there are positive reasons to interpret them as modes instead. Spinoza's later uses of E2p1, for instance, suggest that the infinite thinking being

[169] The argument works the same way for extension, though one is forced to speculate about the details. We can think of an extended being with arbitrary dimensions x, y, and z. But there is no reason why that is the largest extended being we conceive of. We can also conceive of a being with dimensions x+1, y+1, and z+1. But there is no reason why *this* being is the largest one we can think of. So for any magnitude n, we can think of a larger being. Therefore, we can think of an infinitely extended being on the basis of the concept of extension. Extension is therefore an attribute.

[170] Viljanen (2007) argues that space is not inert. He is either flatly wrong—recall Letter 82—or he means something more controversial.

is the *infinite idea of God*, which is a mode.[171] The first such use is in E2p3, which states that "in God there is necessarily an idea, both of his essence and of everything that necessarily follows from his essence." The demonstration proceeds:

> For God (by P1) can think infinitely many things in infinitely many modes, or [*sive*] (what is the same, by 1P16) can form the idea of his essence and of all the things which necessarily follow from it. But whatever is in God's power necessarily exists (by 1p35); therefore, there is necessarily such an idea, and (by 1p15) it is only in God, q.e.d.

The relationship between God and the infinite things which he thinks is the same as the relationship between God and those things which follow from his essence. The things which follow from God's essence are modes. The idea of all these things is also a mode. It is "in" God, as Spinoza points out and only modes are in God (E1p15). The second use of E2p1 occurs in E2p4d, in which Spinoza identifies this same infinite idea of God with God's infinite intellect. In E2p11s he adds that "it follows that the human mind is part of the infinite intellect of God." If the infinite thinking being of E2p1s were substance, then human minds would form a *part* of substance. But Spinoza goes to great lengths to stress that substance is indivisible and has no parts (E1p13, E1p15s). The only things with parts are modes. Therefore, the infinite intellect is a mode or product of God.[172] Since the infinite intellect is the infinite thinking being, it follows that the latter is also a mode of God.

So the infinite thinking being is a mode of God and not substance itself. There are similar reasons to think that the infinite extended being is also a mode. In the Physical Digression, Spinoza lays out a program for how to distinguish individual bodies from one another. At the bottom are

[171] E2p2 is never cited.

[172] Spinoza anticipates the infinite intellect's status as a product of God in the KV, where he writes that "[a]s for the intellect in the thinking thing, this too is a Son, product or immediate creature of God, also created by him from all eternity, and remaining immutable to all eternity" (G I 19-21/C 92).

the "simplest bodies," which are distinguished from one another simply by how fast or slowly they move.[173] Their pattern of motion and rest is just a single velocity. However, distinct bodies can be lumped together to compose another, larger body:

> [W]e see how a composite individual can be affected in many ways, and still preserve its nature. So far we have conceived an individual which is composed only of bodies which are distinguished from one another by motion and rest, speed and slowness, that is, which is composed of the simplest bodies. But we should now conceive of another, composed of a number of individuals of a different nature, we shall find that it can be affected in a great many ways, and still preserve its nature. E2lem7s

As long as these composite bodies maintain their pattern of motion and rest, they count as a single body rather than a mere mishmash of distinct bodies. This process of lumping together bodies to compose new bodies can continue forever. Eventually the process leads to a giant body that is just the entire physical universe: "if we proceed this way to infinity, we shall easily conceive that the whole of nature is one individual, whose parts, that is, all bodies, vary in infinite ways, without any change of the whole individual." This giant body is infinite because there is no body greater than it. It is the world we see before us, stretching from the Rotunda infinitely in every direction. But the infinite body is still a *mode*, for two reasons. First, it has parts and only modes have parts. Second, it has a ratio of motion and rest among its parts and motion and rest apply only to modes of extension. In fact, Spinoza's wording—"one individual, whose parts, that is, all bodies, vary in infinite ways, without any change of the whole individual"—suggests that this giant body is the mediate infinite mode of extension, i.e. "the face of the entire universe [*facies totius Universi*],

[173] It is unclear whether Spinoza thinks that these simplest bodies are simple relative to other bodies or whether they function has bodily atoms.

although varying in infinite ways, [the world] always remains the same" (Ep64). So the infinite extended thing is not God, but the entire collection of extended modes which God produces.[174]

To sum up this section, the infinite thinking and extended beings of E2p1s and E2p2 are God's modes. Specifically, they are his mediate infinite modes. It is by conceiving of *them* through thought and extension that one concludes that thought and extension are attributes. Attributes are the powers of God to produce these infinite beings. This power-based interpretation might strike one as odd, especially to those who are used to an ontology based in things rather than powers. It seems to violate the Cartesian maxim that "nothing has no properties" (AT VIIIA 25/CSM I 210). That is, if there are powers which are somehow prior to *things*, then they would seem to be free-floating properties. I aim in the following sections to defend the merits of the power-interpretation on the basis of its problem-solving potential. But I briefly want to make the view more palatable on independent grounds.

First, Spinoza never once uses *inhaerēre* in the *Ethics*. This suggests, given the prevalence of the term in the period, that he wants the relationship of modes to substance to be something other than inherence. So if our object-based intuitions rely on a notion of inherence, then that counts as a reason not to attribute an object-based ontology to Spinoza.[175] Second, Spinoza can

[174] Woolhouse (1993) expresses this view well when he writes that "behind the persistent misidentification of Spinoza's extended substance with…the extended corporeal world lies a failure to see that Descartes's and Spinoza's extended substances are realities of radically different sorts….The reality of Spinoza's extended substance is not that of an existent instantiation of extension; it is a reality which underwrites the possibility of actual instantiations of extension, or actual extended things" (46-7). Schmaltz (1999) defends a similar view according to which extended substance is a quasi-Aristotelian form lying behind particular extended things. See Cover (2003) for a direct rebuttal of Woolhouse's interpretation.

[175] Surprisingly, many of the most-cited articles on Spinoza's substance-mode relation cash it out in terms of inherence. See Carriero (1995) and Melamed (2009). To be fair, both Carriero and Melamed are reacting to Curley's (1969) view of the in-relation as mere transient causation. Even if Spinoza's relation is not one of strict inherence, it is closer to inherence than to mere causation.

still be read as endorsing the maxim that "nothing has no properties," so long as we construe this to mean that no determinate power can be understood through itself.[176] Rather, every determinate power must be understood through God's power. Third, I am not the only person to interpret Spinoza as denying a traditional object-based ontology. Carriero (2011), for instance, reads him as rejecting any distinction between a thing and its striving:

> What seems behind the view that Spinoza finds objectionable is the two-tiered (Aristotelian) conception of an individual [according to which there is a distinction between the existence of a power and its exercise]. At a prior level is the thing itself, which serves as a sort of substratum for the striving; at the posterior level there is the striving, which is viewed as in the service of the subject or substratum. If we recognize that there is only a "verbal" distinction between the thing and the striving, we won't be tempted to see the striving as being for the being of the subject, a subject which, after all, the striving *is*. 86

There is no "thing" which grounds or explains the exercise of powers. Rather, things, people included, are constituted by the exercise of powers. What distinguishes people from rocks or mice is just the particular powers which are exercised. As Carriero later puts it, "we *are* those motive tendencies and strivings" (87, emphasis original).

II. Power and the Origin of Motion

Spinoza's opponents all agree that motion requires action or activity. Matter, as they conceive it, is inert and so incapable of action. As such, the origin of motion must lie in something external to matter, namely some spiritual cause. Only a spiritual being can move matter because only a spiritual being has agency. Spinoza of course agrees that motion requires some sort of activity. It is precisely for this reason that he admits in his final letter to Tschirnhaus that "Descartes is wrong to define matter through Extension; it must necessarily be explicated through an attribute which expresses eternal and infinite essence" (S: 355). If Spinoza were to retain the Cartesian

[176] The closest Spinoza ever comes to endorsing the maxim is E1a1 and E1a2. He explicitly mentions it in the DPP, but I don't think that counts as good evidence that he endorses it (G I 183/29; C 264).

definition of matter as geometry made real, then he would have to admit the existence of a cause of motion that is external to matter because purely geometrical objects are incapable of moving themselves. But Spinoza is unwilling to admit such a cause because there is nothing existing outside of matter which could function as its mover. As a result, matter must be defined as an *active* entity capable of initiating its own motion.

When Spinoza claims that the definition of matter must express "eternal and infinite essence," he clearly has in mind God's essence. God's essence is power, so the definition of matter must express God's power. Spinoza fails to provide Tschirnhaus with any specifics and he admits that he has not yet "had the opportunity to arrange in due order anything on this subject" (ibid.). But his aims and commitments are clear enough for us to reconstruct an explanation. That explanation starts with E1p36, in which Spinoza argues that

> nothing exists from whose nature some effect does not follow [because] whatever exists expresses in a certain and determinate way the power of God, which is the cause of all things…[s]o (by E1p16) from [everything] some effect must follow.

Matter exists and so some effect(s) or other must follow from its existence. Furthermore, each attribute possesses its own distinct means of exerting causal influence. Under the attribute of thought, it is the volition or intellect. Ideas—which are both volitions and representations simultaneously—have a certain physical power to produce effects.[177] Under the attribute of extension, the causal mechanism is motion. Extended things exert influence by crashing into other extended things. In the Physical Digression of Part Two, Spinoza claims that "a body which moves or [*sive*] is at rest must be determined to motion or rest by another body, which has also been determined to motion or rest by another, and that again by another, and so on, to infinity" (E2lem3).

[177] See E2p49, E2p13d, and the "General Definition of the Affects" in Part Three of the *Ethics*. Della Rocca (2003) contains a clear overview of how ideas count as powers.

This infinite series of kinetic activity mirrors the infinite causal series of finite modes mentioned in E1p28. This suggests that extended bodies can cause things only through motion. Spinoza adds in the proof of E2lem3 that

> Bodies (by D1) are singular things which (by L1) are distinguished from one another by reason of motion and rest; and so (by 1P28), each must be determined necessarily to motion or rest by another singular thing, namely (by P6), by another body, which (by A1') either moves or is at rest. *But this body also (by the same reasoning) could not move or be at rest if it had not been determined by another to motion or rest*. My emphasis

It is by moving at faster or slower speeds that bodies can produce other bodies or have effects on already existing bodies. So, there is motion because the world expresses God's power to produce effects and it is only through motion that extension can express that power.

This account is helpful for answering the two questions about motion from the previous chapter. First, why is there any motion at all? There is motion in general because matter is an expression of God's power and so it must have effects. If there weren't motion, then it couldn't produce any effects and so wouldn't count as an expression of God. Second, why do finite bodies move in the particular ways that they do? Finite bodies, such as my laptop, fail to move themselves. Rather, they are governed by inertial laws: "it follows that a body in motion moves until it is determined by another body to rest and that a body at rest also remains at rest until it is determined to motion by another" (E2lem3c).[178] So Spinoza can concede that finite bodies do not—and cannot—move themselves. But he need not concede the more general point that matter is inert. Rather, by defining matter as an expression of God's power, Spinoza can account for the origin of motion within his own metaphysical system. Clarke et al are free to reject that system. They no

[178] Cf. Regis' distinction between determinate and formal motion. God produces formal motion—motion in general—but finite bodies produce determinations of that motion. See Ott (2009: 116-9).

doubt do reject it. But they cannot claim that Spinoza lacks an explanation for the existence of motion.

III. God and Possibility

The going interpretation of Spinoza's solution to the problem of the grounding of possibility is the Standard Picture. On its most natural interpretation, the Standard Picture grounds possibilia in God's literal exemplification of the possibilia in question. I rejected the Standard Picture in Chapter Five because it entails that substance is both divisible and moving. Divisibility and motion apply to modes of God and do not pertain to substance as such. So what is required is an explanation for how God can grounded the possibility of certain features of modes without literally exemplifying those features. On my account, God grounds possibilia by actually exemplifying the property which all possibilia have in common, namely power. Possibilities are God's modes "by which God's attributes are expressed in a certain and determinate way" (E1p25c). God's attributes are conceptually-distinct powers, so modes are God's power expressed in determinate ways. Under the attribute of extension, that power is expressed through motion. Under the attribute of thought, it is expressed through the intellect or will.

In general, God's power is well equipped to ground dynamic properties, such as motion and volition. But intrinsic properties pose a special problem. It sounds odd to talk about power grounding the possibility of classically inert properties such as shapes, space, or colors.[179] In fact, the inertness of geometry is precisely why Spinoza rejects the Cartesian conception of matter. Shapes, space, and colors might, under the right circumstances, be capable of producing effects.

[179] Another potentially problematic case is that of mathematical truths. But Spinoza treats much of math—e.g. anything related to number—as ultimately imaginary (Ep 12, S: 103-4). It therefore needs no grounding. See the final section for an overview of Spinoza's view of number and Melamed (2000) of his view of math more generally.

In these cases, they would be power*ful*. But they do not seem to be, at bottom, *powers*.[180] So my account must either explain how God grounds these seemingly intrinsic properties—especially since the world seems rife with them—or it must deny that they are positive possibilities in need of grounding. I will argue that shape and color are derived from a competition of distinct powers and that space is derived from motion and rest.

Space

Bennett (1984) argues that space is a more fundamental feature of extension than motion. Motion is conceivable only as something that occurs in space but we can conceive of space with no motion (106). So motion depends on space, but space does not depend on motion. If Bennett is right, then God grounds the possibility of motion only by first grounding something which is *not* an expression of power, namely inert space. So I must explain how motion is, for Spinoza, somehow more fundamental than space.

Spinoza identifies motion and rest with the immediate infinite mode of extension (Ep64).[181] The infinite modes together form a special subset of the system of modes and fall into two categories: the immediate and the mediate. The immediate infinite modes are those which "must follow from the absolute nature of some attribute of God" (E1p22d). The mediate infinite modes follow from an immediate mode or from another mediate mode. Since motion and rest are the *immediate* infinite modes of extension, they follow from the absolute nature of God, considered as extended. One popular view interprets this to mean that the immediate infinite mode is *pervasive* throughout the attribute—no matter when or how the attribute is realized, it has the feature

[180] The distinction mirrors the current debate between the "pure powers" and "powerful qualities" view on dispositions. See, for instance, Jacobs (2011) and Bird (2007).

[181] Under the attribute of thought, Spinoza identifies the immediate infinite mode with the "absolutely infinite intellect."

identified with the immediate mode.[182] Given this, there only are two places to locate space within Spinoza's ontology. We could locate it "before" motion and rest as extended substance itself (this is Bennett's preference) or "after" motion and rest as a *mediate* infinite mode of extension. I think we should opt for the latter.

For plenum theorists like Spinoza, space is never empty. Rather, it is filled to the brim with bodies—or better, it just is bodies. Space itself is an infinitely extended body. But as I tried to show in section I, the infinite extended body is not substance, but one of the infinite modes. Its mental counterpart is the infinite idea of God. Since both the mental and physical infinite things have parts, they cannot be substance. So it is more likely that space is a mediate infinite mode of extension. Mediate infinite modes follow from immediate modes, so space follows from motion and rest. In saying this, I don't mean to suggest that motion and rest could exist without space. I'm not sure what it would mean for there to be motion which didn't occur *in space*.[183] So motion and rest are prior to substance in some other sense. Space, as a mediate infinite mode, fails to follow directly from God's nature because space is inert, whereas God's nature is power. If space followed directly from God's nature, then something inert would follow directly from something active. Instead, motion and rest follow from God because they resemble God's nature. Space follows from motion only in the sense that motion cannot operate on its own but needs to occur in space (and time).[184] The possibility of space is therefore derived from the possibility of motion and God's power grounds space indirectly.

[182] See, for instance, Schmaltz (1997) and Bennett (1984: 106-10).

[183] The same thing could be said about substance and modes—it's hard to conceive of a substance that isn't modified. Spinoza even claims not to be able to conceive of a substance that is not completely modified, i.e. modified in all the ways it could be (E1p17s). But it doesn't follow that modes are prior to substance.

[184] Klever (1988) offers a similar interpretation, according to which motion is indistinguishable from space (171).

Shape and Color

In a letter to Jarig Jelles (Letter 50), Spinoza seems to deny that figure or shape is, at bottom, positive:

> With regard to the statement that figure is a negation and not anything positive, it is obvious that matter in its totality, considered without limitation, can have no figure, and that figure applies only to finite and determinate bodies. For he who says that he apprehends a figure, thereby means to indicate simply this, that he apprehends a determinate thing and the manner of its determination. This determination therefore does not pertain to the thing in regard to its being; on the contrary, it is its non-being. So since figure is nothing but determination, and determination is negation, figure can be nothing other than negation, as has been said. S: 260

Matter, "in its totality," lacks shape. Spinoza is likely referring to the infinite body which is the totality of all bodies. Shape cannot pertain to matter in its totality because shapes require precise, delimited boundaries. As a result, it is impossible to conceive of an infinite shape. For example, there could be no such thing as a square of infinite size. A square's lines have to come to an end at some point, in order to form the angles of the square. But an infinite line does not come to an end. So there can be no infinite square. This can be generalized to all shapes. Since matter in its totality is infinite, it cannot have any shape.

But the claim that shape itself is something negative constitutes a much bolder thesis and it needs some unpacking. In Letter 36, Spinoza construes modes as determinate states of determinable attributes. A determinable is a property of some generality which is capable of becoming more specific in a number of different ways. For example, a square and a circle are both determinations of the determinable extension. A thought about a square and a thought about a circle are both determinations of the determinable thought. Determinations, of which shapes are specific instances, are a kind a negation.[185] In virtue of being specific, a determination excludes

[185] See Melamed (2012a) for the relationship between Spinoza's and Hegel's views on determination as negation.

other forms that a determinable can take. For example, a square excludes a circle and a square whose sides are 25 meters in length excludes all other squares, as well as all other shapes. So it is only in virtue of negation or exclusion that determinations are what they are.

Taken in the abstract, this explanation of determination as negation sounds trivial. It resembles Moore's claim that everything is what it is and nothing else. But the explanation becomes much more informative when it is applied to the concrete entities of Spinoza's system. According to the conatus doctrine, things strive, as much as they're able, to persevere in their being (E3p6). In E3p12, Spinoza seems to suggest that each thing not only strives to persevere, but that it strives to *increase* its power: "the Mind, as far as it can, strives to imagine those things that increase or aid the Body's power of acting." Inasmuch as a thing is able, it takes up as much causal space as it can, influencing as much as it can and it continually seeks to take up more causal space than it already does.[186] But these striving individuals are finite. As finite, there is always a more powerful individual which can limit them (or a collection of individuals which can limit them in concert). As an illustration, consider again the square whose sides measure 25 meters. The reason its sides stop at 25 meters is because it is not powerful enough to extend further. Its power is limited by the bodies around it and so it is forced to occupy the space that it does. Within Spinoza's plenum physics, everything exerts its power as much as it can, until it bumps up against something that it cannot move. It is only in virtue of being constrained by other bodies that a body comes to have a shape at all. The borders of the shape mark the points at which its power is limited. It is in this sense that its shape or figure is a negation. Its shape is a failed attempt to exert more causal influence than it is able to.

[186] Della Rocca (2008) interprets this passage in a teleological manner: things strive to increase their power as a means to persevere (155). Carriero (2011) attempts to interpret it in a more way more obviously consistent with Spinoza's apparent mechanism.

A similar story can be told for color. Spinoza doesn't have much to say about color specifically, but he makes some instructive remarks about sensations in Eapp1:

> [I]f the motion the nerves receive from objects is conducive to health, the objects by which it is caused are called beautiful; those which cause a contrary motion are called ugly. Those which move the sense through the nose, they call pleasant-smelling or stinking; through the tongue, sweet or bitter, tasty or tasteless; through touch, hard or soft, rough or smooth, and the like; and finally, those which move the ears are said to produce noise, sound, or harmony.

Sensations in general mark the boundaries of our body with the world (E2p17s). Sensations reflect the nature of our body as well as the nature of the bodies it touches (E2p16), so a specific kind of sensations marks the *kind* of boundary that divides our body and the external world. A difference in sensation entails a difference in the kinds of external bodies that our own body touches. Those sensations that we regard as pleasant mark the boundaries with bodies that are conducive to our health. Those sensations that we regard as unpleasant mark the boundaries with bodies that can harm us. So color—though itself an intrinsic property—can be derived from the awareness of a boundary between our body and the external world. Boundaries are merely the places where competing powers are limited. So, by parallelism, awareness of these boundaries constitutes a form of negation.

The earlier dilemma for my account was this: either I must explain how intrinsic properties are derivable from dynamic properties (e.g. motion) or I must deny that intrinsic properties are possible. The dilemma is a secularized version of the theist's dilemma from the previous chapter. I opted for the former horn: God's power grounds the possibility of intrinsic properties because intrinsic properties, such as shape, space, and color, are the results of powers. Shape and color result from competing powers, whereas space follows from motion. So God's power grounds intrinsic properties indirectly, by first grounding motion and intellect/volition, which are the direct expressions of power under extension and thought, respectively.

IV. Spinoza and Mechanism

The power-interpretation construes power as the bottom-floor of Spinoza's ontology. Things other than powers exist—space, for instance—but everything can ultimately be conceived through God's power. If this picture is right, then Spinoza's ontology appears to invert that of early modern mechanists, for whom the primary ontological entities—at least in the physical realm—are things and their local, intrinsic properties. [187] Roughly, powers are admitted into this ontology only if they can be derived from the intrinsic properties of objects. By making power fundamental, Spinoza appears to violate the mechanist project.[188] Before I return to the problem of diversity itself, I want to outline a number of reasons to think that the power-interpretation is consistent with mechanism, at least with mechanism of a particular sort.

Janiak (2011: 51-2) offers a helpful distinction between two kinds of early modern mechanism. According to strict mechanism, bodies are characterized solely by their intrinsic primary qualities—such as their shape, size, speed, and (perhaps) impenetrability or solidity. Furthermore, all causal action is local. A body's power to affect another body must ultimately be reduced to the local interaction of primary qualities. Any talk of force is merely an instrument for the purposes of scientific calculation. Boyle is perhaps the best example of a strict mechanist. According to loose mechanism, all action is local, but in addition to the primary qualities listed, bodies also possess forces. Leibniz and Newton are the most famous of the loose mechanists. For Leibniz, science needs forces for the purpose of explaining both conservation and bodily

[187] For some early moderns, non-mechanistic explanations are permitted for mental phenomena. Descartes, for instance, appears to identify thinking substance with the *formal* cause of thought. See LoLordo (2005: 396-8) and Ott (2009: 63).

[188] See Manning (2012) and Peterson (2014) for overviews of Spinoza's physical theory, including its relationship to early modern mechanism.

impetus.[189] For Newton, forces are required to explain the workings of gravity.[190] If everything is an expression of God's power, then it is very unlikely that Spinoza is a strict mechanist. We saw one illustration of this in Chapter Three: the tendency of bodies and ideas to persist in their states is not reducible to a mere disposition towards a certain kind of behavior. Rather, the disposition to persist is *explained* by the active striving of bodies and ideas. This active striving is not a primary quality such as shape, size, or speed.

Nonetheless, there are reasons to think that Spinoza should still be classified as a mechanist. First, he agrees with the standard mechanist rejection of action at a distance. The mind can represent bodies at a distance only through a representation of those bodies that affect the human body directly (E2p26). So all action is local action. Second, he aims to ground the capabilities of composite bodies in the motion of their parts. In E2p13, he notes that different composite bodies have different capabilities or powers. He then claims that in order to explain these differences, it is "necessary to premise a few things concerning the nature of bodies." What immediate follows is the Physical Digression, in which Spinoza lays out his account of motion and individuation. This strongly suggests that the powers of composite bodies are grounded in the motions of the bodies that compose them. Third, Spinoza does not posit distinct kinds of powers for different actions. The power of my chainsaw to cut and my stove to burn are rooted in the same thing, namely the motions of their parts. So worries about particular kinds of powers getting assigned to different objects—e.g. the dormitive virtue to opium—are unfounded. Finally, there is no point at which an investigation of bodies finds a power in isolation. For example, motion is always accompanied by space and the existence of motion explains the existence of space, but

[189] See Leibniz (1989: 313, 319) and Iltis (1971).

[190] See Janiak (2008: chs. 3-4) for discussion.

there is never a point at which there is only kinetic power and no spatial properties. Power is the lowest level of reality only in the sense that it most closely approximates God's essence—there is never a level of physical reality where only power resides.[191]

V. God and Diversity

We are finally in a position to address Spinoza's solution to the problem of diversity. Yetter presents Clarke's version of the problem in the form of an inconsistent triad (2014: 273):

(1) Everything that exists either is or necessarily follows from the one necessarily existing being.

(2) The PSR is true.

(3) The world contains real diversity.

Monism and necessitarianism together seem to commit Spinoza to (1). The PSR seems to be one of Spinoza's deepest held commitments, so he very likely would accept (2). Furthermore, (2) very arguably entails (1).[192] Lastly, (3) seems obviously true. Our world seems to contain all sorts of different things and Spinoza admits as much in E1p16. So it is not obvious which claim Spinoza would reject. Clarke himself rejects (1). So too do anti-monist and anti-necessitarian interpretations of Spinoza. The acosmist interpretation, such as the one adopted by Hegel, rejects (3). I will argue that Spinoza rejects (1) as it is currently stated, but not because he rejects

[191] There is likely some incoherence here due to Spinoza's reliance on a plenum physics. In order to distinguish bodies one from another, there must be some difference in their motions. But motion, as the expression of power under extension, seems to be the bottom-level of Spinoza's physical world. So he seems to lack the resources to distinguish different instances of motion from one another. If he did it on the basis of pointing out the different things in which the different motions reside, then his account would be circular. In this respect, Spinoza faces a problem similar to that of Cartesian physics. For Descartes, in order to individuate bodies, one must pick out their different kinetic properties. But in order to pick out their different kinetic properties, one must be able to pick out the bodies in which these properties inhere. See Leibniz (1989: 163) and Garber (1992: 180).

[192] See Lin (2012, 2007) and van Inwagen (1993: 104-7).

necessitarianism or monism. Rather, he rejects (1) because it ascribes number to substance. God is uncountable and so number does not pertain to his nature. Once (1) is re-stated so as not to mention number, (1)-(3) are no longer inconsistent.

The rest of the chapter will proceed as follows. First, I will outline Spinoza's general account of number, including its epistemic merits and demerits. Second, I will examine two competing accounts of the application of number to substance, one by Gueroult (1968) and the other by Laerke (2012). Third, I will argue that the latter account is plausible only if on the interpretation of God's essence as power. Lastly, I will explicitly explain how a diversity of things could follow from a non-diverse thing.

The Role of Numbers

Spinoza's general attitude towards numbers is one of suspicion: our ultimate conception of the world should not depend on numbers. However, they nonetheless serve an important, if limited, use. In Letter 12—the famous Letter on the Infinite—Spinoza describes them as "aids to the imagination [*auxilia imaginationis*]" (S: 104). We cannot conceive of substance imaginatively, but modes can be conceived both through the intellect and through the imagination. Conceiving of modes through the imagination leads to the formation of number concepts and these concepts then can be used to further aid an imaginative conception of the world. The process unfolds as follows. First, we form images of things which are stored in memory. Second, after enough time, we form too many images and are unable to distinguish them all. What results is an indefinite image. For example, after seeing enough cats, I lose my ability to distinguish them and the clump of images becomes an indefinite image of a cat. Third, the indefinite image gets assigned a name and comes to function as a universal:

> Those notions they call *Universal*, like Man, Horse, Dog, and the like, have arisen from similar causes, namely, because so many images (e.g. of men) are formed at

> one time in the human body that they surpass the power of imagining—not entirely, of course, but still to the point where the mind can imagine neither slight different of the singular…nor their determinate number, and imagines distinctly only what they all agree in, insofar as they affect the body. E1p40s

Something falls under the universal Cat if and only if it affects by body in the ways that cats A, B, C, and so on affect my body, e.g. they're soft, they meow, they scratch sometimes, etc. Spinoza doesn't explicitly explain how the universal Number gets formed, but a reconstruction is straightforward enough.[193] We form universals in general by getting overwhelmed by images and then coining a term to refer to what they have in common as a group. But groups themselves have things in common. For example, the group composed of the Brady children and the group composed of the sides of a die have this in common: they both have six members. We form general concepts by abstracting away the differences between members of a group and we form specifically number concepts when we abstract away the differences between groups.[194]

Number concepts act as aids to the imagination in the same way that universals in general do. They allow us to separate things into groups on the basis of what those things have in common. Once so grouped, we can compare and contrast the members of different groups and thereby gain knowledge of the members of the group. Number helps to "explain a thing by determining it through a comparison to another" (G I/234, 12-3/ C 300). For example, we can learn about the U.S. economy by comparing its numerical properties to those of other economies. But numbers are ultimately deficient as a means of conceptualizing modes. When we group modes for the purposes of counting, "we detach [them]…from their true order within substance, while it is only through this order that modes can be correctly conceived" (Melamed 2000: 10). It is only through

[193] This reconstruction is found in Melamed (2000: 12-3).

[194] Spinoza seems to adopt this explanation when he says in Letter 50, discussed below, that God is uncountable because we can form no universal idea of him.

conceiving a thing's particular cause that we can truly have knowledge of it (E1a4). Spinoza sums up his general attitude towards number near the end of Letter 12:

> Measure, Time, and Number are nothing other than modes of thinking, or rather, modes of imagining. It is therefore no surprising that all who have attempted to understand the working of Nature by such concepts…have tied themselves into such extraordinary knots that in the end they have been unable to extricate themselves except by breaking through everything and penetrating the grossest absurdities. S: 104

So numbers are a helpful, but ultimately flawed, way of thinking about modes.

God and Number

The more important issue for our purposes is whether number—even just the number one—can be ascribed to God. There are strong reasons to think that it can, as well as strong reasons to think that it can't. On the negative side, if number concepts are directly tied to the imagination and if nobody can conceive God through the imagination, then it seems to follow that number does not apply to God. Furthermore, Spinoza, in numerous places, very explicitly denies that we can count God. For example, in the CM, he writes that

> to unity is opposed multiplicity, which… adds nothing to things and is nothing but a mode of thinking… God can be called one insofar as we separate him from other beings. But insofar as we conceive that there cannot be more than one of the same nature, he is called unique. Indeed, if we wished to examine the matter more accurately, we could perhaps show that God is only very improperly called one and unique. G I/246/4-12; C 312

Spinoza elaborates on these claims in his letter to Jelles (Letter 50). There he argues that

> we do not conceive things under the category of numbers unless they are included in a common class. For example, he who holds in his hand a penny and a dollar will not think of the number two unless he can apply a common name to this penny and dollar, that is, pieces of money or coins. For then he can say that he has two pieces of money or two coins, because he calls both the penny and the dollar a piece of money or a coin. Hence it is clear that a thing cannot be called one or single unless another thing has been conceived which, as I have said, agrees with it. Now since the existence of God is his very essence, and since we can form no universal idea of his essence, it is certain that he who calls God one or single has no true idea of God, or is speaking of him very improperly. S: 259-60.

However, on the positive side, monism seems to be the view that there is just *one* substance. In the demonstration of E1p14, Spinoza explicitly contrasts monism with the view that there are *two* substances. So, more needs to be said in support of either case.

Gueroult (1968) argues for the positive interpretation—numbers really do apply to God. He distinguishes between two concepts of number and argues (i) that one concept doesn't apply to God and the other does and (ii) that Spinoza uses exclusively the former in texts like Letter 50 and the CM passage just quoted. The first concept of number is the imaginative concept. Number, in this sense, does not apply to God.[195] The second concept of number is an ontological concept. It is rooted, Gueroult argues, not in the imagination, but in the cognizing of a thing's definition (518). In E1p8s, for example, Spinoza argues "that the true definition of each thing neither involves nor expresses anything except the nature of the thing defined…from which it follows that no definition involves or expresses any certain number of individuals." If there are a number of things of the same nature, the explanation for their multiplicity will not come from the definition of the things in question. To use Spinoza's own example: if there are 20 humans, then no analysis of the nature of a human gives us information for why there are 20 rather than, say, 19 humans. In order to explain why there are 20, we must look to an external cause of their existence.[196] Gueroult thinks that the imaginative and ontological concepts of number are in fact distinct concepts because the "common notions" of E2p40s are absent in the E1p8s argument, though they are present in Letter 50. When Spinoza denies that God is countable, he has the imaginative concept in mind. But the ontological concept can still be applied to him: "since it pertains to the nature of substance to exist…it follows necessarily…that there is only one of the same nature" (E1p8s).

[195] If it did, then saying that there is one God would be akin to saying that God is *being* (E2p40s).

[196] In Letter 34, Spinoza seems rehearse this exact argument for John Hudde (S: 202).

Laerke (2012) grants Gueroult the distinction between the imaginative and ontological concepts of number. But he denies that they can be applied to anything other than modes. Number does not apply to substance because all numbers—whether imaginative or ontological—require relating a thing to a common class for the purposes of distinguishing it from that class. But there is no common class that God belongs to, so he cannot be counted. Laerke's argument is based on the idea that the number one does not have the special status for Spinoza that it does for others (254-5). For many medievals, the number one is special because it does not refer to anything besides itself. To say that something is one is just to say that it has a unity. Unity therefore has a priority over multiplicity: in order to count distinct things x, y, and z, it is necessary that x, y, and z have a unity or a one-ness to them. Aquinas, for instance, writes that "multitude itself would not be contained under being, unless it were in some way contained under one" (ST: p.1 q.11 a.1, quoted in Laerke: 255). Laerke argues that Spinoza reverses the order of priority by making a thing's unity dependent on its relation to a multitude. In Letter 50, Spinoza refers to his earlier remarks in the CM where he says that unity "is just a mode of thinking by which we separate the thing from others which are like or which agree with it in some way" (G I 245 30/ C 311). As Laerke puts it, "when we say that a thing is *one*, we are only ascribing to the thing a relative property by means of which we distinguish *one* thing from *one other* thing" (255, emphasis original). But there is no other thing of the same nature as God which God can be distinguished from. So, God can only improperly be called "one". As Spinoza says in Letter 12, it is only "from the fact that we separate the affections of Substance from Substance itself, and arrange them in classes so that we can easily imagine them as far as possible, [that] there arises Number" (S: 104). Without a common class to compare God to, we cannot apply number to him.

Laerke's interpretation, while interesting, fails to explain what it is about God's intrinsic nature that makes him uncountable. It claims that God is uncountable in virtue of his unshared nature, but this only raises the question: in virtue of *what* is God's nature unshared? I think we can answer that question rather straightforwardly on the power-interpretation. We can count *particular*, determinate powers. For example, there is the power to hum, to knock over a building, to solve basic arithmetical problems, and to cook eggs. But these are modes of God, not God *qua* substance. As substance, God is nothing but pure ability or power. As such, he cannot be counted.[197] Taking seriously Spinoza's E1p34 claim that God's essence is power therefore goes a long way towards making sense of Spinoza's repeated claims that number does not apply to God. Number does not apply to God because nothing shares a nature with him and nothing shares a complete nature with God because God's nature is fundamentally different from that of modes.[198]

God's uncountability provides a direct solution to the problem of diversity. The problem is set up as a question about how infinite diversity follows from one being. But Spinoza can resist this formulation because it assumes that God is countable. If God is not one being, but instead power itself, then the problem doesn't get off the ground. Recall Tschirnhaus' original worry:

> In mathematics I have always observed that from any thing considered in itself—that is, from the definition of any thing—we are able to deduce at least one property; but if we wish to deduce more properties, we have to relate the thing defined to other things. It is only then, from the combination of the definitions of these things, that new properties emerge. S: 353

[197] It is important to keep in mind that Latin has no articles. English translations therefore automatically color our conception of God as countable. What reads in English as "a substance" or "the substance" could just as well read "substance." For example, E1p7 can be translated as "It is the nature of substance to exist."

[198] Cf. Malebranche's claim that "God is all being, since he is infinite and comprehends everything; but he is no being in particular" (OC 1:439; LO 231).

In the phrase "the definitions of these things," Tschirnhaus signals his assumption that God is one being among many. But Spinoza is free to reject this characterization of God. Once he does, the problem of diversity is transformed into the challenge of explaining why there is a diversity of things in the world. Spinoza has the resources to answer *that* challenge.

E1p35 claims that God does everything in his power. E1p35 is part and parcel of Spinoza's general denial of unactualized powers. As Carriero outlines above, Spinoza denies the Aristotelian distinction between a power and its exercise. A power *just is* its exercise. This is why Spinoza denies in E2p48s the existence of faculties of thought:

> [T]here is in the mind no absolute faculty of understanding, desiring, loving, and the like. From this it follows that these and similar faculties are either complete fictions or nothing but metaphysical beings or universals, which we are used to forming from particulars. So intellect and will are to this or that idea, or to this or that volition as "stone-ness" is to this or that stone, or man to Peter or Paul.

Without any ontological distinction between a power and its exercise, there is no logical room for the existence of powers that are not exercised. So, in answer to the question of why there is a diversity of things in the world, Spinoza answers: because God does everything he can do and each thing in the world is within God's power to do.

Bibliography

Bennett, Jonathan. *A Study of Spinoza's* Ethics. Indianapolis: Hackett Publishing, 1984.

Bird, Alexander. "The Regress of Pure Powers?" *Philosophical Quarterly* 57 (2007) 513–34.

Carriero, John. "Conatus and Perfection in Spinoza." *Midwest Studies in Philosophy* 35 (2011): 69-92.

---. "On the Relationship between Mode and Substance in Spinoza's Metaphysics." *Journal of the History of Philosophy* 33 (1995): 245-273.

Cover, Jan. "Spinoza's Extended Substance." *New Essays on the Rationalists*, (eds.) Rocco J. Gennaro and Charles Huenemann. Oxford: Oxford University Press, 2003: 105-33.

Curley, Edwin. *Behind the Geometrical Method*. Princeton: Princeton University Press, 1988.

---. *Spinoza's Metaphysics: An Essay in Interpretation*. Cambridge, MA: Harvard University Press, 1969.

Della Rocca, Michael. *Representation and the Mind-Body Problem in Spinoza*. New York: Oxford University Press, 1996.

---. *Spinoza*. New York: Routledge, 2008.

---. "The Power of an Idea: Spinoza's Critique of Pure Will." *Nous* 37 (2003): 200–31.

Descartes, Rene. *The Philosophical Writings of Descartes*.3 volumes. Translated by John Cottingham, Robert Stoothoff and Dugald Murdoch. Cambridge: Cambridge University Press, 1985.

Garber, Daniel. *Descartes' Metaphysical Physics*. Chicago: University of Chicago Press, 1992.

Gueroult, Martial. *Spinoza.* Vol. 1 and 2. Paris: Aubier-Montaigne, 1968.

Iltis, Carolyn. "Leibniz and the *Vis Viva* Controversy." *Isis* 62 (1971): 21-35.

Jacobs, Jonathan. "Powerful qualities, not pure powers." *The Monist* 94 (2011): 81-102.

Janiak, Andrew. *Newton as Philosopher.* New York: Cambridge University Press, 2008.

Klever, Wim. "Moles in Motu: Principles in Spinoza's Physics." *Studia Spinozana* 4 (1988): 165–93.

Laerke, Mogens. "Spinoza's Monism? What Monism?" Philip Goff, ed., *Spinoza on Monism*. London: MacMillan-Palgrave, 2012: 244-61.

Lin, Martin. “Rationalism and Necessitarianism.” *Noûs* 46 (2012):418-48.

---. “Spinoza’s Metaphysics of Desire: IIIP6D.” *Archiv f ̈ur Geschichte der Philosophie* 86 (2006): 21-55.

LoLordo, Antonia. “Descartes and Malebranche on Thought, Sensation, and the Nature of the Mind.” *Journal of the History of Philosophy* 43 (2005): 387-402.

Malebranche. *Oeuvres Complètes de Malebranche*. Edited by A. Robinet. Paris: J. Vrin, 1958-84.

---. *The Search after Truth.* Translated and edited by Thomas S. Lennon and Paul J. Olscamp. Cambridge: Cambridge University Press, 1997.

Manning, Richard. “Spinoza's Physical Theory.” *The Stanford Encyclopedia of Philosophy* (2012), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/spr2012/entries/spinoza-physics/>.

Martin, Christopher. “The Framework of Essences in Spinoza.” *British Journal for the History of Philosophy* 16 (2008): 489 – 509.

Melamed, Yitzhak. *Spinoza’s Metaphysics: Substance and Thought*. Oxford: Oxford University Press, 2013.

---. “‘Omnis determinatio est negatio’ – Determination, Negation and Self-Negation in Spinoza, Kant, and Hegel” in Eckart Förster and Yitzhak Melamed (eds.), *Spinoza and German Idealism*. Cambridge: Cambridge University Press, 2012: 175-96.

---. “Why is Spinoza not an Eleatic Monist (Or Why Diversity Exists)” in Philip Goff (ed.), *Spinoza on Monism.* London: Palgrave, 2012: 206-22.

---. “Acosmism or Weak Individuals? Hegel, Spinoza, and the Reality of the Finite.” *Journal of the History of Philosophy* 48 (2010): 77-92.

---. “Hasdai Crescas and Spinoza on Actual Infinity and the Infinity of God’s Attributes.” In Steven Nadler (ed.), *Spinoza and Jewish Philosophy*. Cambridge: Cambridge University Press, forthcoming: 204-15.

---. “The Exact Science of Non-Beings: Spinoza's View of Mathematics.” *Iyyun - The Jerusalem Philosophical Quarterly* 49 (2000): 3-22.

---. “Spinoza’s Metaphysics of Substance: The Substance-Mode Relation as a Relation of Inherence and Predication.” *Philosophy and Phenomenological Research* 78 (2009): 17-82.

---. "Spinoza's Deification of Existence." *Oxford Studies in Early Modern Philosophy* 6, eds. Dan Garber and Donald Rutherford. New York: Oxford University Press, 2012: 75-104.

Nadler, Steven. *Spinoza's* Ethics: *An Introduction*. New York: Cambridge University Press, 2006.

---. "Spinoza's Monism and the Reality of the Finite." Philip Goff, ed., *Spinoza on Monism*. London: MacMillan-Palgrave, 2012: 223-43.

Peterman, Alison. "Spinoza on Physical Science." *Philosophy Compass* 9 (2014): 214-223.

Schliesser, Eric. "Newton and Spinoza: on Motion and Matter (and God, of course)." *The Southern Journal of Philosophy* 50 (2012): 436-458.

Schmaltz, Tad. "Spinoza on the Vacuum." *Archiv für Geschichte der Philosophie* 81 (1999): 174-205.

---. "Spinoza's Mediate Infinite Mode." *Journal of the History of Philosophy* 35 (1997): 199-235.

Spinoza. *The Collected Works of Spinoza*, volume I. Translated by Edwin Curley. Princeton: Princeton University Press, 1985.

Spinoza. *The Letters*. Translated by Samuel Shirley. Indianapolis: Hackett, 1995.

Ward, Thomas. "Spinoza on the Essences of Modes." *British Journal for the History of Philosophy*, Volume 19, Issue 1, January 2011, pp. 19-46.

Woolhouse, Roger. *Descartes, Spinoza, Leibniz: The Concept of Substance in Seventeenth Century Metaphysics.* New York: Routledge, 1993.

van Inwagen, Peter. *Metaphysics.* Boulder, CO: Westview Press, 1993.

Viljanen, Valtteri. *Spinoza's Geometry of Power*. New York: Cambridge University Press, 2011.

---. "Field Metaphysic, Power, and Individuation in Spinoza." *The Canadian Journal of Philosophy* 37 (2007): 393–418.

Yetter, Timothy. "Clarke against Spinoza on the Manifest Diversity of the World." *British Journal for the History of Philosophy* 22 (2014): 260-80.

Conclusion

The general aim of the dissertation was to argue that Spinoza's views on possibility are more sophisticated than they might appear at first glance. Some of my arguments were defensive in character in that they aimed to defend Spinoza against two objections to his necessitarianism. First, that necessitarianism leaves unexplained the apparent contingency of the world. Second, that it undermines standard forms of philosophical argumentation. Other arguments were more offensive. Not only are Spinoza's views on possibility not as vulnerable to objections as they might seem, but he uses them to solve problems which are unrelated to necessitarianism. More precisely, I argued that he uses his solution to a traditional problem about possibility—viz. its grounding—in order to respond to two key objections to his monism. Those objections claimed that monism cannot explain the existence of either motion or diversity. I argued that Spinoza can explain both of these phenomena by explaining how all possibilia are expressions of God's power. I will conclude by outlining three potential themes for future research.

1. The Nature of Necessity

Though much of the dissertation was devoted to defending Spinoza against objections to necessitarianism, not much was said about necessitarianism itself. The central question surrounding interpretations of Spinoza's necessitarian concerns the nature of necessity: what does it *mean* to say that everything is necessary? The most natural answer for readers in the early 21st century is the one Leibniz gives: necessity is truth in all possible worlds. That this is the most natural way to interpret Spinoza is reflected in the fact that most contemporary interpreters gloss necessitarianism as the claim that the actual world is the only possible world.

But there are at least two reasons to think that this is not how Spinoza would cash out the concept of necessity. First, the possible worlds-based approach to modality is a rather recent development in the history of philosophy. Though the approach does in fact begin, at least most explicitly, with Leibniz, one risks muddling the views of early moderns by interpreting them through the lens of possible worlds.[199] Second, there is a tradition, dating back to Aristotle and very arguably present throughout much of the early modern period, which seeks to explain central concepts like necessitation and essence in a non-modal way.[200] According to this tradition, essence and necessitation are more fundamental than mere truth in all possible worlds. We find hints of this approach in Spinoza in at least two places. First, in E1p21 he claims that the infinite modes are necessitated by God and that God is necessitated by nothing but himself. But since God and his infinite modes are both necessary, there is no way to explain the necessitation of infinite modes in terms of truth in all possible worlds. Within a possible-worlds framework, x necessitates y if and only if every possible world in which x exists is a world in which y exists. This would entail that infinite modes necessitate God, a claim Spinoza would surely reject. Second, a thing's essence, for Spinoza, refers to the thing's definition, i.e. the properties that make it what it is. On the possible-worlds framework, however, a thing's essence is comprised of just those properties which it has necessarily. Given necessitarianism, this would entail that a thing's essential properties are the same as its actual properties. But Spinoza denies that an essence exhausts a thing's properties (E2p37). So if we interpret necessitarianism in terms of possible worlds, we likely distort Spinoza's actual view.

[199] This is arguably happens all too easily in discussions of the creation of the eternal truths in Descartes. See, for instance, Curley (1984).

[200] See Fine (1994) for a good introduction to this way of thinking.

One alternative strategy for interpreting necessitarianism involves looking at is the relationship between power and necessity. There is an obvious connection between power and modality more generally. A thing's power is bound up with what it it is possible for it to do: x can do y only if y is possible. But there is a tendency, at least among contemporary philosophers, to think that the concept of power is less fundamental than that of possibility. On most possible worlds analyses of modality, that x has the power to do y is defined in terms of what happens in the possible worlds in which x exists. For example, I have the power to catch a ball tossed at me if and only if the set of possible worlds in which a ball is tossed at me includes at least one world in which I catch the ball. Possible worlds themselves are defined independently of powers, so possibility is, on these accounts at least, the more fundamental concept.[201] But there is an alternative view of modality—again, going back to Aristotle—which claims that this gets the order of explanation backwards: that y is possible is explained by the fact that x has the power to do it. For example, that it's possible for me to catch a ball tossed at me is explained not by the goings-on of some possible world, but by various physiological powers of my body. In general, possibilities are grounded in the powers of actually existing things. There is reason to think this view maps on well to Spinoza's view. For instance, E1p16 makes it clear that God's power grounds all possibilities. If possibilities were more fundamental than powers, then God's power wouldn't ground all possibilities. So it's plausible that necessitarianism should be interpreted not in terms of possible worlds, but in terms of powers.[202]

[201] To use a popular metaphor: the realm of possibility is like a vast mosaic and to say that something has a power is merely to describe a certain segment of the mosaic.

[202] The need to account for a "deeper" sense of necessitation is not unique to Spinoza or Aristotelians. Contemporary philosophers interested in issues like grounding and hyperintensionality need such an account as well. For two recent accounts of how to explain modal notions without possible worlds, see Jacobs (2010) and Vetter (2013).

2. The General Problem of Error

In Chapter One I outlined a specific version of Spinoza's general problem of error. The specific version asks: if everything is necessary and all ideas successfully represent their objects, then how are ideas about possibility false? My proposed solution located the error not in a failure to represent the world, but in a failure to identify the content of one's ideas. There are a couple of issues that remain for this solution, as well a potential line of inquiry into Spinoza's general problem of error.

Errors are, on my account, failures to identity the content of one's ideas. But there is the unresolved question about how this failure ought to be construed. All mental acts are representations. If a failure to identify the content of one's ideas constitutes a mental act, then it is a representation. If it is a representation, then a dilemma arises: either the representation is true and there was *no* failure to identify the content of one's ideas, or it was false and the problem of error raises its head again. So there is a worry that my solution only pushes the problem under the rug, leaving it to be dealt with as a higher-order mistake about one's ideas rather than a first-order mistake about the world. I think this would still count as progress insofar as it renders all ideas about the external world both true and false. But the progress would not generalize to representations of the mental realm.

A potential way to understand ideas of possibility is to compare them to Cartesian obscure and confused ideas. In both cases, the objective reality of the idea is masked. One sees glimpses of this picture in Spinoza's discussion of skepticism—both in the TdIE and the *Ethics*—where he suggests that only true ideas, as it were, wear their content on their sleeve. False ideas successfully represent their objects, but not their content. If Spinoza accepts roughly this account, then he would seem to possess something like the concept of an obscure and confused idea whose content is

concealed from introspection. This concealment would be a feature of an idea and not a further mental act. So one interesting direction of research would focus, first, on whether Spinoza actually has this concept and, second, whether it can be extended to the general problem of error, e.g. perhaps all errors are the result of a failure of ideas to show their content.

3. The Nature of Inherence

The power-interpretation of substance that I defended in the final chapter entails that all things are *in* God in virtue of participating in his power. This might strike some as a rather strange view of inherence, as well as an attenuated version of monism. No longer is there one thing which expresses itself in infinite ways. There is just power and its infinite expressions. But as I pointed out in the final chapter, Spinoza seems to want to retain a substance-mode ontology while abandoning the traditional notion of inherence. So we should expect his theory of substance to be anything but traditional.

Spinoza's power-based ontology is one attempt among many in the early modern period to fill the vacuum left by hylomorphism. Given the general importance that Spinoza places on activity, it is unsurprising that he opts to let power play the role of substance. A pin-cushion picture of substance, such as the one exhibited by Locke's general idea of substance, would be insufficiently dynamic. What is less clear is why Spinoza is so focused on dynamic properties to begin with. I think one potential explanation—and one worth pursuing—is that he sees his view of substance as a secular answer to the problem of created powers. This is the problem of explaining the relationship between God's power and the causal activity of creation. Traditionally, there are three main solutions. At one extreme, conservationism claims that God merely sustains the existence of creation. Creatures need help existing, but once they exist, nothing more is required for them to be causally efficacious. At the other extreme is occasionalism, which claims

that God does all the causal lifting. Created objects are mere "occasions" for God's activity. Between these two positions lies concurrentism. It claims that creatures are causally efficacious, but that they need God's continual assistance for their powers to have any effect. To use an analogy: creatures are like toasters and God is like electricity. The toaster has the power to toast bread, but only if it's plugged in. Similarly, creatures have causal powers, but these powers need to be sustained by God's power. It would be interesting to see whether Spinoza's shift to a power-based ontology is an attempt to take a side in the debate over causal powers, but without the additional baggage of a transcendent God. It would mark just one more instance in which Spinoza takes a traditional theological concern and naturalizes it.[203]

[203] Donagan (1988) argues along these lines.

Bibliography

Curley, Edwin. "Descartes on the Creation of the Eternal Truths." *The Philosophical Review* 93 (1984): 569-97.

Donagan, Alan. *Spinoza*. Chicago: Chicago University Press, 1988.

Fine, Kit. "Essence and Modality." *Philosophical Perspectives* 8 (1994):1-16.

Jacobs, Jonathan. "A powers theory of modality: or, how I learned to stop worrying and reject possible worlds." *Philosophical Studies* 151 (2010): 227-48.

Vetter, Barbara. "'Can' without Possible Worlds: A Semantics for Anti-Humeans." *Philosophers' Imprint* 13 (2013): 1-27.