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Spinoza and the Problem of Other Substances

Spinoza defines a substance as "what is in itself and is conceived through itself" (E1d3). It is the basic metaphysical building block of the universe; that which is existentially and conceptually independent. He defines an attribute as "what the intellect perceives of a substance as constituting its essence" (E1d4).[1] Examples of attributes include Thought (E2p1) and Extension (E2p2). One of Spinoza's main goals in the *Ethics* is to prove that all the attributes, including Thought and Extension, belong to one substance, God, and that no other substance exists. Spinoza's overall argument to that effect is roughly this:

(1) God exists necessarily (E1p11)

(2) God has infinite—that is, every—attribute (E1d6)

(3) Substances cannot share attributes (E1p5)

(4) So, God is the only possible substance (E1p14).[2]

But there is a well-known problem with this overall argument for substance monism.[3] The primary arguments that Spinoza uses to demonstrate (1) do not rely, at least not essentially, on any claims about special features of God, defined as the substance with infinite attributes. Rather, those arguments rely merely on claims about *general* features of substance, such as its infinitude or causal independence, and a substance would have these general features *even if* it weren't God. For example, Spinoza writes that something can be infinite in its own kind without having infinite attributes: "if

[1] E = *Ethics* (d = definition; a = axiom; p= proposition; d = demonstration; c = corollary; s = scholium; e = explanation); Ep = Letter; G = *Opera*; C = *The Collected Works of Spinoza*, translated and edited by Edwin Curley. Princeton: Princeton University Press.

[2] There are of course other key claims in involved, such as Spinoza's claim that, contra Descartes, a substance can have more than one attribute (E1p10s).

[3] See Garrett (1979, 211), Lin (2007, 272), Della Rocca (2002, 25), Donagan (1988, 77-84), Viljanen (2011, 70ff), and Kulstad (1996, 302-304).

something is infinite in its own kind, we can deny infinite attributes of it" (E1d6e). These infinite, but non-divine, substances are still very much live options at the point when Spinoza offers his proofs of God's existence. As a result, the arguments for God's existence appear to prove the existence of these alternative substances just as well as they prove the existence of God. This is a serious problem. After all, Spinoza's opponent could use those very arguments to demonstrate the existence of a substance which is extended but not thinking, and thereby prove that Spinoza's God does not exist. I will call this problem the *Problem of Other Substances*.

There are at least two kinds of solutions to the problem.[4] The first argues that other substances, but not God, have internally inconsistent natures. Since the arguments for God's existence pertain only to substances with consistent natures, they pertain only to God. The second kind of solution admits that other substances are internally consistent, but argues that their existence, but not God's, would conflict with some principle that Spinoza is committed to independently of God's existence. One rather common version of the second solution argues that the existence of non-divine substances would conflict with a strong form of the Principle of Sufficient Reason which says that "a thing exists necessarily if there is no reason or cause which prevents it from existing" (E1p11d). This strong form of the Principle of Sufficient Reason—what I call the "Negative PSR"—includes as a reason for the existence of a thing *the fact that there is no reason against its existence*. According to this common version of the second solution, since there can be no reason against God's existence, he—rather than other substances—exists.

I will argue that Spinoza opts for the second solution, but not the common version. Rather, I will argue that he relies on an irreducible *principle of plenitude* to explain God's precedence over other

[4] A third solution would be to admit that those other substances exist. This is essentially Gueroult's (1968) solution. He infamously argues that E1p5 applies only to one-attribute substances and that God is a super-substance composed of one-attribute substances. Smith (2014) offers a lengthy, and not implausible, defense of Gueroult. See di Poppa (2009) for a recent argument against Gueroult's interpretation.

substances. That principle states that the degree of reality of a thing's nature corresponds to the strength of reasons for its existence and that therefore the most real combination of compossible existents actually exists. Since God is more real than any competitor substance, he exists. The paper will proceed as follows. In the first section, I will argue that non-divine substances are internally consistent and that the first solution therefore fails. In the second section, I will argue that the Negative PSR proves the existence of non-divine substances just as well as it proves the existence of God. The common version of the second solution therefore also fails. In the third and fourth sections, I will detail the content of the principle of plenitude and argue that it cannot be derived from the Negative PSR, as many claim, or from considerations of parsimony. In the fifth section, I will examine the plenitude argument that Spinoza uses to solve the Problem of Other Substances. Finally, in the sixth section, I will argue that the operative notion of plenitude allows Spinoza to explain not only why God is more real than any *individual* non-divine substance, but also why he is more real than even an infinite *collection* of non-divine substances.

1. Against the First Solution

Spinoza distinguishes between two potential sources of a thing's impossibility: "a thing is also called impossible…either because its essence, *or* definition, involves a contradiction, or because there is no external cause which has been determined to produce such a thing" (E1p33s1).[5] The first kind of impossibility is what I will refer to as an *internally inconsistent* impossibility. An impossibility is internally inconsistent when *from its definition alone* we can derive a proposition of the [P and not-P] form. Spinoza uses the example of a square circle to illustrate this first kind of impossibility: "the very nature of a square circle indicates the reason why it does not exist, viz. because it involves a

[5] He makes the same distinction in the *Metaphysical Thoughts* (I 240/C 306). See Lin (2012), Lin (2007, 283-284), Griffin (2012), Newlands (2010, 73) for recent attempts to use this passage to interpret Spinoza's theory of possibility in terms of *per se* possibilities.

contradiction" (E1p11d). From the definition of a square circle alone we can derive the proposition that a square circle would (i) have some interior angles (given that it would be a square) and yet (ii) not have any interior angles (given that it would be a circle). The second kind of impossibility I will refer to as an *internally consistent* impossibility. It is an impossibility from whose definition alone one cannot derive a [P and not-P] proposition. The cause of its impossibility lies instead in the fact that its existence would conflict with the rest of nature: "the reason why a circle or triangle exists, or why it does not exist, does not follow from the nature of these things, but from the order of the whole of corporeal nature" (E1p11d). That is, while no contradiction can be derived from their nature alone, the conjunction of their existence with the existence of the rest of nature would entail a [P and not-P] proposition.[6] Spinoza uses an example of a large elephant passing through the eye of a needle to illustrate this exact point:

> If we were to conceive the whole order of nature, we should discover that many things *whose nature we perceive clearly and distinctly*, that is, whose essence is necessarily such [clear and distinct], cannot in any way exist. For we should find the existence of such things in nature to be just as impossible as we now know the passage of a large elephant through the eye of a needle to be, *although we perceive the nature of each of them clearly*. So the existence of those things would be only a chimaera. (G I 241-242/C I 308, my emphasis)

A large elephant and an eye of a needle are each internally consistent—we perceive their natures clearly. But they are jointly inconsistent, at least when the conjunction involves the latter passing through the former. They are, to use Spinoza's term, a chimaera: "that whose nature involves an explicit contradiction" (G I 233/C I 299). So, the two kinds of impossibilities both entail contradictions, but they do so in very different ways. With internally inconsistent impossibilities, the contradiction follows *solely* from the definition of the thing. With internally consistent impossibilities,

[6] In the E1p33s passage, Spinoza says that the latter kind of impossibilities lack an external cause. But the *reason* they lack an external cause is because an external cause would cause an inconsistency in nature. So, the ultimate reason for their non-existence is that they are inconsistent with what exists.

the contradiction follows only when the existence of the thing is conjoined to something else, such as the actual history of the universe.

The two kinds of solutions to the Problem of Other Substances correspond to this distinction between two sources of impossibility. The first solution argues that other substances are like square circles, i.e., they are internally inconsistent. The second solution argues that other substances are *internally* consistent but inconsistent with some *other* thing, God, whose existence is uniquely supported by an independent principle. Let's see if the first solution succeeds. A non-divine substance will count as internally inconsistent only if it is possible to derive a [P and not-P] proposition *solely* from its definition. Given this criterion, some non-divine substances will prove to be inconsistent, but not others. Consider a finite substance. As a substance, it would be conceived through itself (E1d3) and yet as a finite thing it would be partly conceived through others of the same nature (E1d2). So, we have a [P and not-P] proposition that is derived solely from the definitions of finitude and substance. But finite substances are not relevant to the *Problem of Other Substances*. The problem concerns a specific category of non-divine substances—those that have fewer than all the attributes—and they need not be defined as finite. After all, their natures are still infinite in their own kind (E1d6e) and they are self-conceived insofar as they have attributes (E1p10). So, the relevant question is not whether *some* non-divine substances have internally inconsistent natures, but whether a substance with fewer than all the attributes has an internally inconsistent nature.

There are at least two reasons to think that such a substances is *not* internally inconsistent. First, if it were internally inconsistent, then it would be a *conceptual truth* that substance has every attribute. That is, the existence of one attribute would entail, *as a matter of concepts*, the existence of all the others. But Spinoza denies that we can make this inference. He says in E1p10s that "two attributes may be conceived to be really distinct (i.e., one may be conceived without the aid of the other)" and in the definition of God that "if something is only infinite in its own kind, then we can deny infinite

attributes of it" (E1d6e).[7] This strongly suggests that a substance with fewer than all the attributes is not internally inconsistent.

Second, it is widely recognized that the fourth and final *Ethics* proof for God's existence is intended to preempt the Problem of Other Substances and yet in that argument Spinoza does *not* try to show that those substances are internally inconsistent.[8] In order to show that they are internally inconsistent, he would need to show that it's part of the concept of either substance or attribute that a substance must have infinite attributes. But instead of attempting such a derivation, Spinoza instead hauls in the *additional* premises that (A) "to be able not to exist is to lack power, and conversely, to be able to exist is to have power" and (B) "since being able to exist is power, it follows that the more reality belong to the nature of a thing, the more powers it has, of itself, to exist" (E1p11d; E1p11s). Set aside whether these premises are plausible or not. The key point is that Spinoza says that (A) is "known through itself" whereas (B) is supposed to follow from (A). As long as they are not derived from either the definition of substance or attribute, then the concept of a substance with fewer than all the attributes is not an internally inconsistent concept.

Of course, the existence of a one-attribute substance is ultimately inconsistent with the truth of Spinoza's two claims about power. In other words, those claims, together with Spinoza's earlier claims, entail the existence of God alone. But it does not follow that the nature of a one-attribute substance is *itself* inconsistent. Rather, its logical status is analogous to that of non-actual worlds within Leibniz's system: internally consistent but inconsistent with God's goodness.[9] Garrett's (1979)

[7] The conceptual independence of the attributes is of great importance to Spinoza. For example, in order to prove God's existence, Spinoza must use the conceptual independence of the attributes to block the Cartesian objection that a substance can have only one attribute.

[8] See footnote 3.

[9] Though Leibniz's alternative worlds are possible *simpliciter*, Spinoza's alternative substances are only *logically* possible in the sense that they are not internally inconsistent.

influential argument that non-divine substances have inconsistent natures arguably overlooks this key distinction. He writes: "[t]he inconsistency of a definition must have some source within the definition itself…[and] ascribing only some attributes to a substance should lead to inconsistency even though ascribing all attributes to a substance would not" (218-219). The inconsistency that Garrett has in mind is this:

(i) a non-divine substance could not be prevented from existing (insofar as it is a substance)

(ii) it would be prevented from existing (insofar as it has fewer than all the attributes).

Let's assume that (i) follows from the definition of a substance. But what about (ii)? How exactly does it follow from the definition of a substance with fewer than all the attributes? Garrett explains:

> since God has the greater power of existence (by Proposition IX ['The more reality or being each thing has, the more attributes belong to it']), God would prevent that substance from existing after all, contrary to the nature of substances. Thus we see that only a being with the greatest power of existence could fulfill all the conditions for being a substance. To speak of a substance which does not have the very greatest power of existence (that is, greatest number of attributes) is a contradiction, and any attempt to define such a substance will be inconsistent. (218-219)

Garrett is correct that (i) and (ii) are inconsistent. But (ii) does not follow *solely* from the definition of a substances with fewer than all the attributes. Rather, it depends on Spinoza's claims that (A) "to be able to not exist is to lack power," (B) "the more reality belong to the nature of a thing, the more powers it has, of itself, to exist", and the E1p9 claim that "the more reality or being each thing has, the more attributes belong to it." Spinoza thinks that E1p9 follows from the definition of an attribute (E1p9d). Let's grant him that, though it's not obvious. But (A) and (B) seem independent to the definitions of substance and attribute. Spinoza says (A) is self-evident and (B) a consequence of it. Garrett even calls (A) a 'stipulative' definition of power, which suggests it is an independent premise (211). Infofar as neither (A) nor (B) are derived from the definition of a substance with fewer than all the attributes, it has not been shown that non-divine substances are inconsistent. Rather, it has been shown only that non-divine substances are inconsistent with God, whose existence is demonstrated

partly on the basis of those independent principles.[10] Unless there is some heretofore unmentioned way to show that non-divine substances *themselves* entail a contradiction, they are not inconsistent in the sense that Spinoza has in mind when he talks about the impossibility of square circles. The fact that Spinoza relies on independent claims about power to rule out non-divine substances suggests that he does not think that they are like square circles.[11]

2. Against the Common Version of the Second Solution

The second kind of solution for overcoming the Problem of Other Substances involves finding some principle which conflicts with the existence of non-divine substances but not with God. It is important to emphasize that this principle must be one that Spinoza can help himself to *independently* of God's existence. If the principle relies on the existence of God, then Spinoza cannot, except on pain of circularity, use it to explain why God's existence has precedence over that of non-divine substances. We've already seen one potential principle for this role: Spinoza's claim about power. But this claim strikes many readers as obscure.[12] So, one is tempted to look elsewhere. One principle which commentators look to in this context is the Negative PSR.[13] Spinoza endorses a more general version of the PSR when he writes that "for each thing there must be assigned a cause, *or*

[10] Garrett's interpretation relies heavily on the PSR, so it might be better characterized as an instance of the second solution: God exists rather than other substances because the existence of those other substances would conflict with the PSR. In that case we are in agreement about the logical status of other substances.

[11] There is still an important question about what where the essences of non-divine substances reside. Though I cannot defend my view at length here, I think the following account is promising. Each attribute is self-conceived, so the essence of a non-divine substance is just God's attribute considered in isolation from the others. For example, we can consider God as thinking without representing whether or not he is also extended. The essences of these other substances are just isolated parts of God's essence which we highlight exclusively when we discuss a substance with *only* one attribute. For a potentially different account, see Di Poppa (2009). She argues that in the *Short Treatise* Spinoza is happy to adopt talk about what turn out to be non-existent substances, so long as doing so helps to advance the dialectic with his opponent.

[12] For example, see Bennett (2001, 115) and Lin (2007, 280). The latter interprets the power claim in terms of the Negative PSR.

[13] See Della Rocca (2008), Lin (2016), and Lin and Melamed (2017) for discussion of the PSR in Spinoza.

reason, as much for its existence as its nonexistence" (E1p11d). But this general version of the PSR is one even the first solution relies on. After all, even those who invoke the first solution are identifying a *reason* why non-divine substances don't exist, viz. that they are internally inconsistent. What interests us here is the more specific Negative PSR. The Negative PSR includes as a potential reason for the existence of a thing the fact that there is no reason against its existence. It states that "a thing exists necessarily if there is no reason or cause which prevents it from existing" (E1p11d).[14]

Della Rocca (2002) uses the Negative PSR to attempt to solve the Problem of Other Substances. Spinoza writes that "although two attributes may be conceived to be really distinct (i.e., one may be conceived without the aid of the other), we still cannot infer from that that they constitute two beings, *or* two different substances" (E1p10s). In other words, because attributes are conceptually independent, nothing about a substance's possession of an attribute precludes its having other attributes. For example, the fact that a substance is thinking is no evidence that it lacks Extension. So, Della Rocca argues, if a substance had fewer than all the attributes, it would be inexplicable why it failed to have all of them:

> the substance that has thought and no other attribute, that is, ts1, is not a possible substance. This substance cannot exist, because its existence …would involve very many brute facts: the fact that ts1 lacks extension, the fact that it lacks attribute x, and so on for all the other attributes (with the exception of thought itself). Regarding each of these facts, one cannot, without at some point violating the conceptual barrier between the attributes, explain why it holds. Thus there can be no explanation, on Spinozistic terms, of such facts. Since, for Spinoza, there can be no unexplainable facts and since the existence of ts1 would bring with it many such facts, it follows that it is impossible for ts1 to exist. (30-31)

Since there is no reason for a thinking substance not to have all the attributes, it must have all the attributes (by the Negative PSR). A substance with all the attributes is God. Therefore, God exists rather than other substances. Lin (2007) argues in a similar manner:

[14] Lin uses the example of the empty set as a helpful illustration (2017, 15-16).

> Something is absolutely real, as we have seen, if it is independent of external causes. If something is independent of external causes, then nothing external can exert any causal influence on it. Preventing existence, it seems obvious, is a form of causal influence. Therefore, nothing can prevent a possible nature with infinite reality [God] from being exemplified. So if an absolutely real being did not exist, its nonexistence would have to be a brute fact and hence violate the PSR. (282-283)

God is independent of external causes. If he were prevented from existing by the fact that other substances existed, then those other substances would be exerting a causal influence on him. But they can't—he's causally independent. Since there are no reasons for why an internally consistent, causally independent thing doesn't exist, he exists (by the Negative PSR).

The problem with Della Rocca's and Lin's arguments is that the Negative PSR can be used to demonstrate the existence of non-divine substances in the exact same way that it can be used to demonstrate the existence of God. This shouldn't come as a surprise. Spinoza uses the Negative PSR in the second proof of God's existence but it is not until the fourth proof that he attempts to preempt the Problem of Other Substances. If the Negative PSR proved only the existence of God, then the fourth argument would be redundant. Let's consider Della Rocca's argument first. Della Rocca points out, rightly, that one cannot preclude a substance's possession of an attribute on the basis of its possession some *other* attribute. This follows from the conceptual independence of the attributes. But the conceptual independence of the attributes also blocks a different inference: from the fact that a substance has a given attribute we cannot infer that it has other attributes. Spinoza makes this point in the definition of God: "if something is only infinite in its own kind, then we can deny infinite attributes of it" (E1d6e). Attributes are only infinite in their own kinds, so the fact that a substance has attribute A doesn't say anything, for *or* against, its having attribute B. Keeping this in mind, there are two options concerning how attributes are distributed among substances. First, attributes might clump in one substance, i.e., they might all be united in God. Second, they might be spread among multiple substances, i.e., some might exist in one substance, but others in another substance or substances. Della Rocca argues that attributes clump because there is no reason for them *not* to clump.

But the *exact same* argument can be used to show that the attributes are spread across multiple substances. An attribute's conceptual independence means that we cannot say *anything* about the distribution of attributes across substances. So, the attributes *could* be spread out—there is nothing about the nature of attributes preventing this scenario. Now apply the Negative PSR: there is no reason for attributes *not* to be spread out, so they are spread out. Della Rocca's argument in favor of God's existence works only if there is some default presumption in favor of attributes clumping. But the Negative PSR cannot explain the presumption itself.

Lin's argument suffers from the same problem. It relies on the following key claims. First, that God is independent of external causes. Second, that preventing x from existing is a way of exerting causal influence on x. Third, that there are no reasons against the existence of thing except an external cause or internal inconsistency. Fourth, that God's nature is not internally inconsistent. Finally, that if there is no reason against x's existence, x exists (the Negative PSR). Since God is causally independent and logically consistent, there are no reasons against his existence. So, by the Negative PSR, he exists. But the argument runs into a fatal problem once we ask why God is causally independent. It is because he is a *substance*: "a substance cannot be produced by anything else [and] therefore it will be the cause of itself" (E1p7d). In a letter to Hudde, discussed at length in Section 5, Spinoza makes clear that even a one-attribute substance would be causally independent. He says that Extension is not imperfect for lacking Thought and that it is only through imperfection that a thing is subject to external causes:

> [Extension] will never be called imperfect because it does not think, since its nature, which consists only in extension, that is, in a definite kind of being, requires nothing of that sort. G IV 185/C II 30
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> [I]mperfection…is located in some defect or certain limits which a Nature of that kind would possess, or in some change which it could undergo from external causes. G IV 182/C II 27

A one-attribute substance lacks nothing pertaining to its nature, so it is causally independent. We can now use Lin's argument to prove the existence of a one-attribute substance. First, a one-attribute

substance, as a substance, is independent of external causes. Second, preventing x from existing is a way of exerting causal influence on x. Third, there are no potential reasons against the existence of a one-attribute substance except external causes and internal inconsistency. Fourth, a one-attribute substance is internally consistent. Finally, if there is no reason against x's existence, x exists (the Negative PSR). Since a one-attribute substance is causally independent and logically consistent, there are no reasons against its existence. So, by the Negative PSR, it exists.

The Negative PSR therefore cannot solve the Problem of Other Substances. What Spinoza needs is a *positive* reason for the existence of God that cannot also function as a reason for the existence of other substances. I will argue that God's greater reality functions as a unique reason in favor of his existence. But unlike Lin, who reduces God's greater reality to his causal independence, I will argue that God's greater reality is an *irreducible* reason for his existence.

3. The Principle of Plenitude

On my interpretation, Spinoza's solution to the Problem of Other Substances relies on a principle of plenitude stating that the degree of reality of a thing's nature corresponds to the strength of reasons for its existence and that therefore the most real combination of compossible existents actually exists.[15] Though I will be focused mostly on the principle as it applies to substances, it is

[15] See Newlands (2010, 70). Spinoza's affinity for the principle of plenitude has not gone unnoticed. Lovejoy (1936) writes that in Spinoza's system "no genuine potentiality of being can remain unfulfilled, that the extent and abundance of creation must be as great as the possibility of existence" (52) and that Spinoza "expressed the principle of plenitude in its most uncompromising form" (155). Commentators have put the principle to great use. For example, they frequently use it to explain why the actual series of finite modes exists rather than some alternative series. Consider Carriero (1991, 82): "there is a unique maximal order of created things such that it would be a sign of imperfection or lack of reality on God's part for him not to create that order". In a similar spirit, Garrett (1991, 197) claims that Spinoza "would regard 'substance whose attributes express less than the greatest possible reality and perfection through their series of finite modes' as a contradiction, thus making the series of finite modes that expresses the highest degree of reality and perfection necessary, and all lesser series impossible." More recently, Newlands argues that Spinoza's affinity for the principle explains why there are so many ways of *conceiving* God: "Spinoza's substance is such that it can be conceived in a plentiful number of complete

important to note that Spinoza utilizes the principle at two different levels, viz. that of substance and that of modes.[16] His use of the principle at the level of modes occurs in his explanation for why the actual series of modes exists, rather than some alternatives series.[17] He writes that

> things have been produced by God with the highest perfection, since they have followed necessarily from a given most perfect nature….if things had been produced by God in another way, we would have to attribute to God another nature, different from that which we have been compelled to attribute to him from the consideration of the most perfect being. (E1p33s2)

If a series of modes other than the actual series had followed from God's nature, then God would have had a different nature, namely, a less perfect one. So, the fact that the actual series of modes exists and not some alternative isn't because the alternatives are internally inconsistent, but because they are all inconsistent *with God's most perfect nature.*[18] The goal of this section is to describe the general content of the principle, so that it can be applied equally to modes and substances. In the next section I will reject two proposed bases for the principle: the Negative PSR and considerations of parsimony. In the final two sections I will apply the principle to solve the Problem of Other Substances.

There are two key aspects of the content of the principle of plenitude: its invocation of degrees of reality and its reference to a comparison class of non-actualities that is less real than what actually exists. It'll be better to start with the issue of the relevant comparison class. It is a pressing issue because there is only one possible world in Spinoza's system: "in nature there is nothing contingent, but all things have been determined from the necessity of the divine nature to exist and produce an

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and incomplete ways" (2012: 73). He even goes so far as to argue that the principle explains why finite modes are *both* necessary and contingent, depending on the context in which they are conceived (75).

[16] Lovejoy (1936), Carriero (1991), Garrett (1991), Look (2007), and Newlands (2010) and (2013) pay more attention to this purpose. Della Rocca (2002) discusses the principle in the context of substance, but considers the principle idle. Donagan (1988) challenges Spinoza on the issue of God's plenitude.

[17] See Carriero (1991) and Garrett (1991) for detailed discussion of this argument.

[18] This is confirmed in the scholium when Spinoza talks about the *order* of creation: "it still follows from his perfection that things could have been created by God in no other way or order" (G II 75).

effect in a certain way" (E1p29).[19] If the way the world *is* is also the only way that the world *could* be, then the principle of plenitude begins to sound trivial. After all, if there is only one way the world could be, then it is automatically the most real of the options. But this worry about triviality disappears if we recall that internal inconsistency is only one of two ways that a thing can be made impossible. That is, some impossibilities are nonetheless internally consistent. So, the appropriate comparison class invoked in the principle of plenitude is the class of internally *consistent* impossibilities, e.g., one-attribute substances or alternative series of modes.[20] When we understand the principle to be comparing actual reality with internally consistent alternatives, it is no longer trivial.

We can now turn our attention to degrees of reality. Spinoza equates a thing's degree of reality with its degree of perfection when he says that "by reality and perfection I understand the same thing" (E2d6). This is not particularly helpful. But we can make progress on understanding what Spinoza means by 'perfection' by examining one of the longstanding medieval views that equate a thing's reality with its *goodness*.[21] According to a common, Aristotelian version of this view, a thing's degree of reality tracks the degree to which its nature is completed. MacDonald (1991a) summarizes this version of the view well:

> The end, completion, or perfection of a natural substance is its having fully actualized its specifying capacity, its actually performing the activity for which its form or nature provides the capacity. Since the state or activity that constitutes a substance's full actuality is that substance's end and an end is good, that state or activity constitutes the substance's good. On this account, then, the good for a substance of a given nature is the end determined by its nature, its being complete or fully actual as a thing of that nature. I will call this approach to understanding the relation between being and

[19] Two recent defenses of anti-necessitarian readings include Curley and Walski (1999) and Martin (2010). Bennett (1984) argues that Spinoza is simply inconsistent on the matter. Newlands (2010) argues that Spinoza is both a necessitarian and an anti-necessitarian, depending on the level of description.

[20] Spinoza's use of the principle to explain the existence of the actual series of modes comes immediately after he distinguishes two different kinds of impossibilities. So it is very unlikely that he thinks all alternative series are internally inconsistent.

[21] See MacDonald (1991a; 1991b), Goris and Aertsen (2016), and Gracia (1992) for helpful introductions to the history of this view.

> goodness the *nature* approach…goodness consists in the completion or actualization of a nature. (5)

Spinoza will of course have no patience for this talk of objective goodness or natural ends (E1pref), but he nonetheless seems to retain the idea of completeness of a nature as a key aspect of a thing's reality. First, he says in one letter to Hudde that "perfection consists in being and imperfection in the privation of being" (G IV 184/C II 29) and that privation "signifies that something is lacking to a thing which pertains to its nature" (G IV 185/C II 30). Now there is a sense of 'nature' according to which a thing never lacks anything pertaining to its nature because its nature or essence is just its necessary or sufficient conditions for existence (E2d2). But there is another sense of 'nature' in which a mode can lack something pertaining to its nature, viz. the nature each thing has insofar as it is conceived under its attribute. For example, my pen has the nature of an extended thing and insofar as it has this nature it is imperfect "because it does not last longer, or does not keep its position, or is not larger" (G IV 185/C II 30). In other words, there are no such limits in the nature of extension itself, and so my pen lacks the limitless spatial capacities that are part of the nature of extension itself. Second, recall the remark in the same letter that "[extension] will never be called imperfect because it does not think, since its nature, which consists only in extension, that is, in a definite kind of being, requires nothing of that sort" (G IV 185/C II 30). The reason that extension isn't imperfect for lacking thought is because its nature doesn't involve thought. So, while it *lacks* thought, it nonetheless lacks nothing pertaining to its nature. It is complete, and therefore not imperfect.

Though completeness is one component of Spinoza's account of degrees of reality, it is not it is the sole component.[22] If reality were equivalent to completeness of a nature, then a one-attribute

[22] In the preface to Part Four of the *Ethics*, Spinoza says that "insofar as we attribute something to [things] which involves negation, like a limit, an end, 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/208, my emphasis). This could be read as a rejection of completeness as a criterion of reality. But I do not think the

substance would be just as real as God. After all, an extended-only substance lacks thought, but is not *deprived* of thought. It is therefore just as complete as God insofar as both realize their natures fully. Since Spinoza denies that God and other substances are equally real (E1p9), completeness cannot be the only component of a thing's reality. This brings us to the second component of reality: power of expression. Spinoza writes that "the intellect…infers more properties the more the definition of a thing expresses reality, i.e., the more reality the essence of the defined thing involves" (E1p16d). According to this component, X is more real than Y if we can infer *more* properties from the definition of X alone than we can from the definition of Y alone. This view of reality is confirmed many times throughout the *Ethics* and elsewhere. For example, Spinoza defines an act in terms of things following from the agent's nature alone: "we act when something happens, in us or outside us, of which we are the adequate cause, that is (by E3d1), when something in us or outside us follows from our nature, which can be clearly and distinctly understood through it alone" (E3d2). The more a thing can *do*, the more *real* it is: "one [thing] is more excellent than the other, and contains more reality…in proportion as [it] is capable of doing many things at once" (E2p13s).[23] So, there are two different variables operative in Spinoza's account of degrees of reality. According to the first, a thing is more real to the extent it has everything pertaining to its nature. If we want to compare two things with the same natures, then this completeness component is sufficient: X is more real than Y if and only if X lacks less pertaining to its nature than Y does. But we might want to compare two things which do not share a nature, especially if both are fully complete. In this case, we need the second, power

passage is so clearly intended to reflect that. Instead, Spinoza might just be trying to distant his value-neutral view of reality from the value-infused medieval view which equates a thing's reality with its intrinsic goodness or natural end.

[23] See also, for instance, E2p1d and Ep. 80-83. That Spinoza retained this claim in the last letters to Tschirnhaus, which he wrote near the end of his life, suggests how committed he is to this component of reality.

component: X is more real than Y to the extent that more properties follow from X's nature alone than from Y's alone.[24]

With this account of degrees of reality in place, we are in a position to ask why God is more real than other substances and why the actual series of modes is more real than any alternative series. I will answer the first question in sections 5 and 6. Spinoza doesn't give an answer to the second question, but I want to briefly speculate about two potential explanations for why the actual series of modes is more real than any alternative series. Nothing in the rest of the paper depends on what follows. According to the first explanation, the actual series is infinite whereas all the alternatives are finite. Whether this explanation is plausible depends on whether there are internally consistent *infinite* alternative series. And whether there are such series depends on whether a contradiction can be derived solely from the nature of an infinite series which doesn't exist. If an infinite alternative series is inconsistent, then the actual series will count as the most real because infinite properties follow from its nature, whereas only finite properties follow from the natures of the alternative series.[25] The second potential explanation relies on Spinoza anticipating the modern distinction between countable and uncountable infinities. According to this explanation, the actual series is uncountably infinite, whereas the alternative series are, at most, countable infinite. I do not know if there is much of a textual basis for this second explanation, but Spinoza does say that from God's nature there follows "infinite things in infinite modes" (E1p16). So it at least deserves further consideration.[26] In any case, the onus is on

[24] It is important to note that this power component of reality will automatically also track how diverse a given class of entities is. This is because Spinoza accepts the identity of indiscernibles (E1p4). So, the more things that follow from a thing's definition, the more diverse the set of things that follow from its definition.

[25] A finite series would be inconsistent with God's nature (E1p21), but it doesn't follow that its nature is internally inconsistent.

[26] See Ariew (1990), Wolfson (1934), and Melamed (forthcoming) for a discussion of the infinite in Spinoza. See Schechtman (forthcoming) for a very helpful discussion of the infinite in the early modern period.

Spinoza to not merely claim that the actual series is more real than any alternative, but to explain, at least in rough outline, *how*.

4. Two Potential Bases of the Principle

Most readers associate the principle of plenitude with Leibniz. For Leibniz, plenitude is one aspect of a world's perfection and God uses information about the perfection of worlds to decide which to create: "God's decree consists solely in the resolution he forms, after having compared all possible worlds, to choose that one which is best, and to bring it into existence" (1951, pt. 1 §52). [27] God cares about the perfection of worlds because he is morally perfect and is vulnerable to blame if he fails to create the best world: "there would be something to correct in the actions of God if it were possible to do better" (pt. 1 §8). So, for Leibniz, plenitude is one dimension of a more general teleological and value-laden principle about which world God ought to create. But Spinoza's adherence to the principle of plenitude cannot be motivated in the same way because his system lacks both the objective value and teleology of Leibniz's system. [28] So, we need to say more about what motivates Spinoza's use of the principle. I will consider two potential explanations for the principle and argue that neither is plausible. At the end of the paper I will suggest my own tentative explanation.

One potential recent interpretation—Newlands (2010)—argues that Spinoza is actually only concerned with plenitude at the level of modes, and that considerations of parsimony explain God's precedence over other substances. He writes that "Spinoza's metaphysical system was oriented around his commitment to maintain both extreme ontological parsimony at the fundamental level of substance and maximal expressive plenitude of that singular substance" (83). In this case, the principle of plenitude is motivated partly by considerations of parsimony insofar as the value of maximal mode plenitude goes hand in hand with the value of maximal substance parsimony. This is an interesting

[27] See Lovejoy (1936) and Strickland (2006) for discussion.

[28] This is noted by Lovejoy (1936, 172).

proposal, but Newlands faces a dilemma about the value of parsimony in Spinoza's theorizing. There seem to be two options for why parsimony is valuable, if it is: it is valuable either because it is truth-conducive or because parsimonious systems have good-making aesthetic features such as beauty. If it is truth-conducive, then we would expect Spinoza to apply considerations of parsimony at the level of modes as well. But Newlands thinks the opposite: the level of modes is as far from parsimonious as possible. So suppose that parsimony is instead an aesthetic notion—a parsimonious system is simply more beautiful, for instance. Spinoza thinks that aesthetic notions, such as beauty, are projections of a finite imagination: "[they are] nothing but modes of imagining, by which the imagination is variously affected; and yet the ignorant consider them the chief attributes of things" (E1app). So, it is hard to picture Spinoza using aesthetic notions like parsimony as part of an overall argument for the existence of a God who is supposedly conceptually independent.

The second proposal argues that the principle follows from the Negative PSR, and so is motivated by Spinoza's rationalism. It is arguably the most common explanation of the principle.[29] Newlands (2010) explains the proposed derivation well:

> A generic POP [principle of plenitude] states that the fullest, or maximal, range of compossible existents exists. Actuality, as it were, is as filled up as it can be. By this principle of plenitude, if there were an intrinsically possible object that did not exist, such nonexistence could be explained only by an incompatibility between it and the maximal compossible set of existents. On the other hand, a positive reason for the existence of anything intrinsically possible will be the fact that there is nothing in the maximal series of compossible objects that prevents or excludes its existence. The fact that there is nothing in the maximally full series preventing its existence provides a positive reason for its existence. Thus, if there is ontological space to be filled, it will be filled. Why? Because, by reductio, if there were unfilled ontological space (pace POP), there would be something which had no reason for not existing, but which nonetheless didn't exist. Such non-existence would be an unexplained brute fact, something ruled out by Spinoza's PSR. Thus, Spinoza's conclusion would run, from the PSR we have some version of POP. (70-71)

[29] Lovejoy (1936), Della Rocca (2002) and (2003), Newlands (2010) and (2013), Garrett (1991), Lin (2007), and Carriero (1991) all see the PSR as more basic than the principle of plenitude.

The only way the world would fail to be as real as possible is if something failed to exist for no reason whatsoever.[30] But there are no such brute facts for Spinoza. So, in the absence of a reason for a thing not to exist, it exists.[31] It is only when actuality is "as filled up as it can be" that internally consistent things fail to exist (with their failure lying in their logical incompatibility with what exists).

However, the proposed derivation fails because the Negative PSR arbitrarily privileges the existence of precisely those entities whose existence would ground the truth of the principle of plenitude within Spinoza's system. Let us assume that God is more real than any other substance. I will defend it in the next section, but for now just assume it. The principle of plenitude is true, when applied to substances, only if God exists. So, the Negative PSR successfully explains the principle of plenitude only if it proves the existence of God. But, as we saw in Section 2, the Negative PSR does not prove the existence of God precisely because it *also* proves the existence of substances with fewer than all the attributes. After all, they *too* have internally consistent essences and so they too exist unless there's a reason for them not to. To say that God's existence blocks their existence, rather than *vice versa*, is to arbitrarily privilege God.

We can further appreciate the failure of the second proposal by considering why the actual series of modes exists rather than other series of modes. Spinoza's initial explanation is that the alternative series are blocked from existence by the actual order of the universe. Recall:

> The reason why a square or triangle exists, or why it does not exist, does not follow from the nature of these things, but from the order of the whole of corporeal Nature. For from this [order] it must follow either that the triangle necessarily exists now or that it is impossible to exist now. (E1p11d)

[30] As Newlands (2013) remarks: "part of Spinoza's motivation for POP may derive from the PSR itself, since if the actual world were sub-maximal, non-existing but intrinsically possible objects would have no reason for not existing, which would be a brute fact. Perhaps it would also be an undesirable brute fact if (*per impossibile*) a maximal world with fewer objects than the actual world existed."

[31] Newlands does claim that it's a "positive reason," but I think that this has to mean merely that it's a *genuine* reason.

The alternative series containing, say, a perfect triangle fails to exist because *something else* exists, namely the actual series, which it is logically incompatible with. But this explanation is rather unimpressive. One can always just ask: why does the actual series exist and not a different one containing perfect triangles? That is, why doesn't the series containing the perfect triangle block the series without one? Here's an analogy. Suppose I can't board the subway because there's no room left to stand. If I ask why I can't board, someone might say "you can't board because there's no room left". This is an unsatisfying answer because I could always just ask "Well, why did everyone else get the chance to board first?" Similarly, someone might ask: "Yes, I know there's no logical space left for the series with the perfect triangle, but why does the actual series get the default position and not the other series?" The Negative PSR explanation fails because it only gives this initial, unimpressive explanation. That is, it cannot explain why the actual series has precedence over the alternative series in the first place. For illustration, consider two internally consistent series, A and B. A and B are incompatible series—if one exists, then the other cannot. The Negative PSR says that modes, including entire series of modes, exist so long as there is no reason for them not to. So, as long as there is no reason for A not to exist, it exists. The same is true of B: it exists so long as there is no reason for it not to exist. But—and this is the crucial point—whether or not there is logical space left for a series depends on which series has a prior claim to existence. If A has the prior claim to existence, then B has a reason against its existence; if B has the prior claim, then A has a reason against *its* existence. Assume that A exists and blocks B. We're entitled to ask: why does A keep B from existing and not *vice versa*? To merely cite the existence of A as the reason B doesn't exist is analogous to saying I can't board the subway because there's no space left. Spinoza needs to say something which explains A got to board first, i.e, why its existence has precedence over B. The Negative PSR has nothing to say to explain this

precedence. [32] So, it is unlikely that the principle of plenitude is motivated by an adherence to the Negative PSR.

Fortunately, Spinoza offers a second explanation for why the alternative series don't exist: they are less real than the actual series and are therefore inconsistent with God's nature. The actual series of modes got to board earlier, so to speak, because God's most real nature saved it a seat.[33] And once the actual series is on board, it blocks the alternative series. We can now consider the same question with regards to substances: given that a bunch of different substances are all internally consistent and they all have the capacity to block each other from existing, why does God get precedence? That is, what is so special about God that he gets to board the substance train first? The answer will be, again, that God's most real nature saved a seat, but this time for himself.

5. The Plenitude Argument

Spinoza offers a response to the Problem of Other Substances in at least two places. The first is in E1p11s, where the fourth and final argument for God's existence is almost certainly an attempt to preempt the problem.[34] This is the argument which relies on the odd-sounding claims about power mentioned in Section 1. The second place, and the one I will focus on, is in the correspondence with Hudde. [35] Though I will focus on the correspondence, an upshot of my reading is that it goes a ways towards explaining the meaning of the claims about power that appear in E1p11s.

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[32] This assumes that there are non-overlapping alternatives series of modes. I think this assumption is warranted. One of the members of the alternative series is the perfect triangle (E1p11d). From a given cause, a given effect follows (E1a3). So, a perfect triangle follows from a cause which doesn't exist, which follows from a cause which doesn't exist, and so on. We can construct an infinite series this way, each of whose members does not actually exist.

[33] I do not intend this reading of E1p33s2 to be original to me. Carriero (1991) and Garrett (1991) both defend it. However, the argument for why it is not based in the PSR is original to me.

[34] See footnote 3.

[35] Curley agrees that the point of the argument is to block the possibility of a plurality of substances (C II 25).

The correspondence consists of three letters from Spinoza to Hudde.[36] Before looking at Spinoza's argument it detail, I should make clear that Hudde is worried about the Problem of Other Substances. In the first letter, Ep. 34, Spinoza gives an argument for why there is only one God, but he seems to have missed Hudde's point, because in the next two letters Spinoza offers a new argument for why there cannot be more than one *necessary being*. This change is reflected at the beginning of Ep. 35: "I shall pose the state of the question as you conceive it: whether there is only one Being which subsists by its own sufficiency or power?" (G IV 181/C II 26). In the next and final letter, he re-states what he takes to be Hudde's concern: "you say that your difficulty—why there could not be many beings, existing through themselves, but differing in nature, just as thought and extension are different, and can perhaps subsist by their own sufficiency—remains untouched" (G IV 185/C II 30). The "many beings" that exist "through themselves, but differing in nature" are substances which have fewer than all the attributes, e.g., a thinking-only substance and an extended-only substance.

The argument itself is based on the distinction between the two components of a thing's reality discussed earlier—its degree of completeness and its degree of power. With regards to completeness, Spinoza says, as quoted earlier, that a "perfection consists in being and imperfection in the privation of being" (G IV 184/C II 29) and that a privation "signifies that something is lacking to a thing which pertains to its nature" (G IV 185/C II 30).[37] A privation is an absence of something, but it is not a *mere absence*. Rather, it is absence of something belonging to a thing's nature. Here's an example. Suppose that it's part of human nature that we have two eyes. If so, then the fact that a person is missing an eye is a privation. But the fact that she is missing wings is a mere absence—it is not part of human nature that we have wings. Spinoza uses the notion of imperfection as incompleteness as a condition for necessary existence: "whatever involves necessary existence cannot have in it any

[36] Unfortunately, there are no extant copies of the letters written by Hudde.

[37] See Newlands (forthcoming) for a discussion of privation in the early modern period.

imperfection" (G IV 182/C II 27). In other words, any necessary being must have everything pertaining to its nature. On the one hand, this condition does not privilege God since non-divine substances will be fully complete as well. On the other hand, however, it confirms that mere causal independence is insufficient for determining which substance exists:

> If we want to ascribe any imperfection to a being of this kind, we shall immediately fall into a contradiction. For whether the imperfection we want to feign in such a Nature is located in some defect or certain limits which a Nature of that kind would possess, or *in some change which is could undergo from external causes*, by some lack of power, we are always reduced to this: that that Nature which involves necessary existence does not exist, or does not exist necessarily. (G IV 182/C II 27, my emphasis)

The italicized parts shows that causal dependence is sufficient for incompleteness. It follows that completeness is sufficient for causal independence. As we saw in Sections 2 and 3, a one-attribute substance, such as an extended-only substance, is not imperfect for lacking Thought (G IV 185/C II 30). So, it is complete and therefore causally independent. So, determining whether a substance is causally independent is necessary, but insufficient, for determining its existence. [38]

This is where Spinoza makes his move. To start, he denies the equivalence of *lacking imperfection* and *having perfection*. That is, it is possible for a thing to lack nothing pertaining to its nature and yet fail to possess full perfection. This is just another way of stating that completeness is only one of two components of a thing's reality. [39] The second component is power: a thing is more real to the extent that more can be inferred from its definition. As Spinoza puts it:

> since the nature of God does not consist in a definite kind of being, but in a Being which is absolutely unlimited, his nature also requires everything which expresses being perfectly, since otherwise *his* nature would be limited and deficient. (G IV 185/C II 30, my emphasis)

[38] Contrary to Lin (2007) and Garrett (1979).

[39] Della Rocca (2002, 26) and Lin (2007, 282) therefore both fail to distinguish God's self-sufficiency from his greater reality. All substances are self-sufficient, if they exist. But what earns God existence is his greater reality rather than his greater self-sufficiency.

Every being expresses God's nature and so every property can be inferred from his definition. As long as there are at least two attributes, more properties will follow from God's nature and therefore he will count as more real. So, God is more real but his greater reality is *not* due to the fact that he is more complete than other substances.[40] Spinoza then uses the greater reality of God to privilege his existence over other substances. All reasons in favor of other substances will also count as reasons for the existence of God:

> If we suppose that a being which does not express *all* perfections exists of its own nature [such as a one-attribute substance], we must also suppose that that Being also exists which comprehends in itself *all* perfections. (G IV 182/C II 27, my emphasis)
>
> if we want to maintain that extension or thought (each of which can be perfect in its own kind, that is, in a definite kind of being) exists by its own sufficiency, we will also have to concede the existence of God (G IV 185/C II 30)

But the reverse is not true. There are some reasons in favor of God's existence which are not also reasons in favor of the existence of other substances. Specifically, God will have a power of expression not shared with any other substance and this greater power is a reason for existence: "if a Being endowed with a lesser power exists by its own sufficiency, how *much more* must another endowed with a greater power" (G IV 182/C II 27-28, my emphasis). There would be no point in adding the "how much more" if possessing a power of expression were not a reason for existence. Since a power of expression is a component of reality, Spinoza is saying that a thing's degree of reality is a reason for its existence. Since God has a greater degree of reality, he has more reasons for his existence. Spinoza then applies this difference between God and other substances to solve the Problem of Other Substances:

[40] Perfection and imperfection are therefore not straightforward contraries of each other. In English, a thing can lack im-x and yet not have x. Consider a sandwich. It does not have the property of being precise. And yet it is not imprecise either. Nobody uses sandwiches to cut or to write with, so they are not imprecise. So, a sandwich plausibly lacks imprecision and yet fails to have precision.

> To come finally to the point, I affirm that there can *only* be one Being whose existence pertains to its nature, namely, *only* that being which has all perfections in itself, and which I call God. (G IV 182/C II 27-28, my emphasis) [41]

God therefore wins the competition with other substances because he is more real than they are.

6. The Infinite Collection

But Spinoza does face one final hurdle if he hopes to rely on the greater reality of God's nature to prove his existence. Even if we grant that God is more real than any *individual* non-divine substance, it doesn't yet follow that he is more real than an infinite collection of substances. Donagan (1988, 84) presses Spinoza on exactly this point: "[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?" Spinoza does not explicitly address this worry. But he has more than enough resources to overcome it.

The key is to note that Donagan's challenge depends on the assumption that reality is a *stuff*-based notion: two things are of equal reality if they have the same attributes and the same modes. But Spinoza's concept of reality is not a stuff-based notion. Rather, it is partly a *power*-based notion: a thing is more real to the extent that more can be inferred from its definition alone. So, while Donagan is correct that the things inferred from the collection are equal to the things being inferred from God—they contain the same modes, for instance—the inference does not come from *one* definition in the case of the collection. Rather, it comes from the same number of definitions as there are attributes. For example, if there are *n* attributes, then the definition of the collection is really a sum of *n* definitions. As such, God contains something that the collection does not have: the power for *everything*

[41] Smith (2014) argues that the argument from Ep. 35 and 36 are best read as supporting of Gueroult's (1968) super-substance interpretation. I am not unmoved by this reading, but I think it is hard to square with the explicit conclusion of the argument, viz. that there is not a plurality of necessary beings.

to be inferred from *one* definition. As long as one component of reality is power, God will be more real than even a collection of infinite substances.

One might wonder whether Spinoza is entitled to think the number of definitions at work in God is really fewer than the number in the collection. After all, God is defined as the substance with *infinite* attributes and we could define the collection as the collection with infinite one-attribute substances. But Spinoza actually has a straightforward response that is based in the fact that God's nature is more indeterminate than that of the attributes themselves. He says that "God is a being which is, not just [unlimited] in a certain respect, but absolutely unlimited in being" (G IV 185-186/C II 30). The same cannot be said of the collection. The collection is not absolutely unlimited, but only the sum of a bunch of natures which are unlimited in a certain respect. As a result, God's nature will have a greater power of expression, i.e., be more real:

> Extension will pertain to God, or it will be something which expresses God's nature in some way. … And this, which is said of Extension (as an arbitrary example), will also have to be affirmed of everything we want to maintain as having such a nature. (G IV 185-186/C II 30)

In the collection, not everything can be conceived to express *one* nature or definition because there is not that indeterminate being whose nature all properties ultimately express. So, there really is a power in God not present in the collection.

This notion of God as indeterminate Being might remind one of Wolfson's (1934, 146) view that God's essence is an unknowable reality *behind* the attributes. But two things are worth pointing out. First, as an indeterminate being, God is not so much the reality *behind* the attributes as he is a more indeterminate version of the attributes themselves.[42] Here's an analogy. Though a square expresses the nature of a rectangle and the nature of shape, the shape is no more an unknowable reality

[42] My view would therefore go a long way towards solving the problem of unity, viz. the problem of explaining the sense in which the multiplicity of attributes have a unity. Donagan (1973), Deveaux (2007), and Smith (2014, sec. 5) touch on the subject of unity at length.

behind the rectangle than the rectangle is an unknowable reality behind the square. Likewise, any existent, in addition to expressing the nature of the attribute it is conceived through, also expresses the nature of Being insofar as it is a form that Being can take. But the Being is just a more indeterminate version of the attribute. Second, by the time of the *Ethics*, Spinoza has begun to talk explicitly talk about God and the attributes as fundamentally *powers*.[43] For example, his proof of Thought as an attribute relies on the infinite power of Thought:

> The more things a thinking being can think, the more reality, *or* perfection, we conceive it to contain. Therefore, a being that can think infinitely many things in infinitely many ways is necessarily infinite in its power of thinking. Since we can conceive an infinite Being by attending to thought alone Thought is necessarily one of God's infinite attributes (E2p1s)

As Spinoza says, "God's power is his essence itself" (E1p34) and so Thought is one of God's attributes because Thought can *do* infinite things. Once God's nature is conceived not merely as an indeterminate version of the attributes, but as an indeterminate *power*, the distance from Wolfson's Spinoza grows. God is not unknowable, but simply the indeterminate power whose nature all the attributes and their respective modes express.[44] In other words, everything is a more determinate form of God's power. This view expressed nicely by Bayle: "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" (1991, 336).

7. Conclusion

I've argued that the principle of plenitude solves the *Problem of Other Substances* and that it cannot be reduced to the Negative PSR or to considerations of parsimony. But it is still an open

[43] Interpretations of Spinoza which construe power as the fundamental notion are currently popular. For example, Viljanen (2011) and Hubner (2015) both construe substance as fundamentally a formal causal power. Laerke (2011) and (2013) argues that God is best understood as literal efficient self-causation. Di Poppa (2013) argues that the attributes are fundamentally powers.

[44] I have argued elsewhere that God's indeterminate nature helps Spinoza avoid a different charge, leveled by Samuel Clarke and Tschirnhaus, that a multiplicity cannot follow from God's definition. See Barry (2016).

question *why* Spinoza thinks there is a connection between degrees of reality and its existence. The answer is fairly clear in the case of modes: only a fully real series of modes is consistent with God's most real nature. So the principle of plenitude, when applied to modes, is nothing over and above the claim that modes must be logically consistent with their substance's nature. But there is nothing prior to substance for God's most real nature to be logically consistent with. So the principle of plenitude is not so easy to explain when it applies to substance. Perhaps the best explanation for the principle of plenitude is that Spinoza simply thinks that a thing's degree of reality is a fundamental reason for its existence. Such a view is not unheard of. For example, Leibniz flirts with it in his *On the Ultimate Origination of Things*:

> 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, it follows from this that all possibles, that is, everything that expresses essence or possible reality, strive with equal right for existence in proportion to the amount of essence or reality or the degree of perfection they contain. (1989, 150)[45]

In a similar way, Spinoza describes a fundamental link between the reality of a thing's essence and its existence. For example, in the proof of the impossibility of self-destruction, he writes that "the definition of any thing affirms, and does not deny, the thing's essence, *or* it posits the thing's essence, and does not take it away" (E3p4d). A thing's essence affirms the thing. Though that affirmation can be overruled by external causes and so fail to result in existence, the affirmation of existence is automatically there. And Spinoza follows up his *Ethics* proofs of God's existence with the following remarks:

> [W]hatever 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.* (E1p11s, my emphasis)

[45] Blumenthal (1973) argues for a figurative reading according to which the reality of a thing makes it attractive to God when God freely chooses which world to create. Shields (1986) defends a literal reading, but one which still depends on God to choose which collection of finite substances to create.

For better or worse, Spinoza seems to have built a principle of plenitude into the foundation of his metaphysics. That something has a degree of reality is a reason for its existence and the greater the degree of reality, the more reasons for its existence. Odd as it may sound to our ears, it at least helps Spinoza derive the conclusion he seeks: "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).[46]

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