

## 2 Spinoza's Metaphysics of Substance

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"Substance" (*substantia*, *zelfstandigheid*) is a key term of Spinoza's philosophy. Like almost all of Spinoza's philosophical vocabulary,<sup>1</sup> Spinoza did not invent this term, which has a long history that can be traced back at least to Aristotle. Yet, Spinoza radicalized the traditional notion of substance and made a very powerful use of it by demonstrating, or at least attempting to demonstrate, that there is only one, unique substance – God (or Nature) – and that all other things are merely modes or states of God. Some of Spinoza's readers understood these claims as committing him to the view that only God truly exists, and while this interpretation is not groundless, we will later see that this enticing and bold reading of Spinoza as an "*acosmist*" comes at the expense of another audacious claim Spinoza advances, namely, that God/Nature is absolutely and actually infinite. But before we reach this last conclusion, we have a long way to go. So, let me first provide an overview of our plan.

In the first section of this chapter, we will examine Spinoza's definitions of "substance" and "God" at the opening of his magnum opus, the *Ethics*. Following a preliminary clarification of these two terms and their relations to the other key terms defined at the beginning of the *Ethics*, we will briefly address the Aristotelian and Cartesian background of Spinoza's discussion of substance. In the second section, we will study the properties of the fundamental binary relations pertaining to Spinoza's substance: inherence, conception, and causation. The third section will be dedicated to a clarification of Spinoza's claim that God, the unique substance, is absolutely infinite. This essential feature of Spinoza's substance has been largely neglected in recent Anglo-American scholarship, a neglect which has brought about an unfortunate tendency to domesticate Spinoza's metaphysics to more contemporary views.

The fourth section will study the nature of Spinoza's monism. It will discuss and criticize the interesting yet controversial views of the eminent Spinoza scholar, Martial Gueroult, about the plurality of

substances in the beginning of the *Ethics* and address Spinoza's claim in Letter 50 that, strictly speaking, it is improper to describe God as "one." Finally, it will evaluate Spinoza's kind of monism against the distinction between existence and priority monism recently introduced into the contemporary philosophical literature. The fifth and final section will explain the nature, reality, and manner of existence of modes.

#### THE DEFINITIONS OF "GOD" AND "SUBSTANCE"

The title of the first part of the *Ethics* reads "*De Deo*" ("On God"), and in this part we indeed find the core of Spinoza's metaphysics of substance. Substance is defined in the third definition of this part:

E 1d3: By substance I understand what is in itself and is conceived through itself, i.e., that whose concept does not require the concept of another thing, from which it must be formed [Per substantiam intelligo id, quod in se est, et per se concipitur; hoc est id, cuius conceptus non indiget conceptu alterius rei, a quo formari debeat].

For Spinoza, the proper definition of a thing must spell out the thing's essence.<sup>2</sup> E 1d3 focalizes on the *independence* of substance as its essential feature. Substance is said to be both *ontologically* independent (i.e., it is "in itself") and *conceptually* independent (i.e., it is "conceived through itself"). What is not ontologically and conceptually independent is not a substance. In E 1d5, Spinoza defines "mode" (*modus*) as having the inverted features of substance, that is, as that which is ontologically and conceptually *dependent*.

E 1d5: By mode I understand the affections<sup>3</sup> of a substance, or that which is in another through which it is also conceived.

The dual and symmetric formulation of the definitions of substance and mode (once in ontological terms, and then in terms of conception) does not seem to be a coincidence, for the very first definition of Part One of the *Ethics* follows the same pattern:

E 1d1: By cause of itself [*causa sui*] I understand that whose essence involves existence, or that whose nature cannot be conceived except as existing.

Why does Spinoza define his key notions twice, once in terms of their existence, and then in terms of how they are conceived? Recent

scholarship provides different answers to this intriguing question,<sup>4</sup> and we are going to leave it open, at least for a while. Let us only note that E 1d3 seems to make the substance's being in itself and conceived through itself the two essential expressions of the substance's independence.<sup>5</sup> In the following, I will refer to the relations of being in itself and in another as the opposite variants of the *inherence* relation.<sup>6</sup> Thus, substance inheres in itself, while modes inhere in another.

Moving ahead in our presentation of the core notions of Spinoza's metaphysics, let us turn now to the definitions of "attribute" and "God":

E 1d4: By attribute I understand what the intellect perceives of a substance, as constituting its essence [Per attributum intelligo id, quod intellectus de substantia percipit, tanquam ejusdem essentiam constituens].

E 1d6: By God I understand a being absolutely infinite, i.e., a substance consisting of an infinity of attributes, of which each one expresses an eternal and infinite essence [Per Deum intelligo ens absolute infinitum, hoc est, substantiam constantem infinitis attributis, quorum unumquodque aeternam, et infinitam essentiam exprimit].

Exp.: I say absolutely infinite, not infinite in its own kind; for if something is only infinite in its own kind, we can deny infinite attributes of it [NS:<sup>7</sup> (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 [Explicatio. Dico absolute infinitum, non autem in suo genere; quicquid enim in suo genere tantum infinitum est, infinita de eo attributa negare possumus; quod autem absolute infinitum est, ad ejus essentiam pertinet, quicquid essentiam exprimit, et negationem nullam involvit].

One crucial element in Spinoza's definition of attribute is the role of the intellect.<sup>8</sup> In one of his early letters, Spinoza quotes the definition of substance from an early draft of the *Ethics*. The definition is very similar to the one we find in E 1d3, though it concludes by noting: "I understand the same by attribute, except that it is called attribute in relation to the intellect, which attributes such and such a definite nature to substance."<sup>9</sup> We will not get into the details of Spinoza's definition of attribute, as this is the topic of another essay in this collection.<sup>10</sup> We

should, however, keep in mind two important points on this issue. First, for Spinoza, there is some distinction between the substance and its attributes. Second, the distinction between the substance and its attributes is rather subtle and weak.<sup>11</sup> In fact, in E 1p10 Spinoza will argue that insofar as the attributes constitute the essence of substance (E 1d4 and E 1d6e), they share the substance's essential feature of being conceived through itself.

Spinoza's definition of God (E 1d6) is probably the deepest ground of the entire metaphysical edifice of the *Ethics*. Spinoza frequently relies on this definition in proving later propositions in the book,<sup>12</sup> and E 1p16 – its main rival for the title of the most-cited text in the *Ethics* – relies primarily and explicitly on E 1d6. We too will return frequently to this key definition, but let us begin our explication by registering some crucial observations.

First, Spinoza defines God as a substance. However, he *does not define* either God or the substance as existing by virtue of its essence. In E 1p11, Spinoza will prove that God exists and that God's essence involves existence. However, Spinoza's proof relies heavily on a strong version of the Principle of Sufficient Reason, and specifically on the alleged implication of this principle according to which *everything* (God included) must have a cause for its existence.<sup>13</sup> Spinoza's main argument for the existence of God in E 1p11d has been frequently referred to in the existing literature as a variant of the "ontological argument."<sup>14</sup> Though such reference to E 1p11 is not groundless,<sup>15</sup> it is still quite misleading, as Spinoza proves – rather than assumes – that existence pertains to the nature of God.<sup>16</sup> The Principle of Sufficient Reason – the claim that everything must have a reason or cause – plays hardly any role in Anselm's ontological argument (or in the ontological argument in Descartes's Fifth Meditation).<sup>17</sup> In contrast, Spinoza's two main arguments for the existence of God (in E 1p11d) would be absolutely toothless without assuming that *everything* (God included) must have a cause both for its existence as well as for its non-existence.<sup>18</sup>

Second, the definition of God asserts that God "consists [*constan-tem*]" of infinite attributes. The same claim also appears in the *Short Treatise*.<sup>19</sup> But what could this claim mean? The attributes cannot be parts of God, since in E 1p14 Spinoza proves that God is indivisible.<sup>20</sup> Without venturing too much into the discussion of the nature of the attributes, I think it is fair to say that per E 1d6 the attributes must have a very intimate and real relation to God. This rather modest conclusion seems to undermine those interpretations of Spinoza's definition of attribute (E 1d4) which

take this definition to assert that the attributes are *merely perceived* as constituting the essence of God, but do not *truly* constitute it.<sup>21</sup>

Third, the final phrase in E 1d6 – “quorum unumquodque aeternam, et infinitam essentiam exprimit” – is adequately translated by Curley as: “of which each one expresses an eternal and infinite essence.” However, we should keep in mind that since the Latin has no definite and indefinite articles, the phrase may also be translated as “of which each one expresses *the* eternal and infinite essence”; the Latin text does not rule out the possibility that it is the same one essence that is expressed by each of the attributes. Martial Gueroult, the eminent Spinoza scholar, points out some interesting considerations in favor of the reading that takes each attribute to express a distinct essence of God.<sup>22</sup> There is, I think, textual evidence at least as strong in favor of the alternative reading.<sup>23</sup> Here I wish merely to raise the question, draw the reader's attention to it, and leave it open.

Fourth, the definition of God and its *explicatio* draw an important distinction between what is *absolutely infinite* and that which is merely *infinite in its kind*. God is absolutely infinite, but each of the infinitely many attributes of God is merely infinite in its kind,<sup>24</sup> since we can deny of it all of the *other* infinitely many attributes. Spinoza makes the last point quite explicitly in one of his early letters, where he uses the example of the attribute of extension and states: “Extension is not infinite absolutely, but only insofar as it is Extension, i.e., in its own kind.”<sup>25</sup> The kinds (*genera*) at stake seem to be just the attributes themselves. Spinoza does not define infinity, but in E 1d2 he provides a definition of finitude (in a kind):

E 1d2: That thing is said to be finite in its own kind that can be limited by another of the same nature.

For example, a body is called finite because we always conceive another that is greater. Thus, a thought is limited by another thought. But a body is not limited by a thought nor a thought by a body.

The attribute of thought is the kind to which all ideas, or thoughts, belong. The attribute of extension is the kind to which all bodies belong. Spinoza's employment of E 2d2 later in the book confirms that each attribute constitutes a kind of its own.<sup>26</sup>

Having this preliminary exposition of Spinoza's definitions of substance and God in our minds, let us turn now to examine briefly the historical background of Spinoza's metaphysics of substance.<sup>27</sup>

We have already noted that the essential characterization of Spinoza's substance is its *independence*. Substance is both ontologically and conceptually independent. It is a thing that does not depend on anything else in order to be or be conceived. This understanding of substance follows traditional theories of substance, though the slight (or apparently slight) changes Spinoza introduces into the concept of substance lead to radical and revolutionary conclusions. We provide this concise overview of the historical background of Spinoza's discussion of substance not only for the obvious reason that Spinoza was not working in a void, but also because the two competing theories of substance that were readily available to Spinoza – those of Aristotle and Descartes – suggest two main ways of understanding Spinoza's own concept of substance. Due to the complexity of these matters, we can only supply a very general outline of the delicate issues.

The two main *loci* for Aristotle's discussion of substance are the *Categories* and the *Metaphysics*. In the *Categories*, Aristotle discusses substance (*ousia*) while explicating the ten categories of being, of which *substance* is the first and most important. Aristotle defines substance as follows:

A *substance* – that which is called a substance most strictly, and most of all – is that which is neither said of a subject nor in a subject, e.g., the individual man or the individual horse. The species in which the things primarily called substances are, are called *secondary* substances, as also the genera of these species.<sup>28</sup>

For Aristotle, the term “substance” in the fullest sense of the word applies only to particular things, such as a particular horse or a particular man. Whatever is not a particular thing can either be *said of* a particular thing or *be in* a particular thing. To the first group belong the genera and species under which particular things fall (such as “man,” “animal,” etc.). The second group includes properties such as “red” or “hot” that do not constitute genera or species. In broad terms, we can say that the distinction between *being in* and *being said of* a thing is a distinction between accidental and essential predication.<sup>29</sup> Aristotle allows for the existence of secondary substances; these are the genera and species that are said of (but are not in) the primary substances.<sup>30</sup> Hence, whatever is not a primary substance depends on a primary substance, since it must either be *in* a primary substance or be *said of* a primary substance.<sup>31</sup>

In the *Metaphysics*, Aristotle suggests that the substratum (*hypo-keimenon*) “which underlies a thing primarily is thought to be in the

truest sense its substance." The "substratum" itself is defined as "[T]hat of which the other things are predicated, while it is not itself predicated of anything else."<sup>32</sup>

The element that is stressed in the discussions of substance in both the *Categories* and the *Metaphysics* is the *predicative independence* of the substance. That is, primary substances do not depend on anything else upon which they are said to be predicated. Let us mark this understanding of substance as the *predication definition of substance*: *x* is a primary substance if and only if it is a subject of predication<sup>33</sup> and it is not predicated of anything else.

What is Descartes's conception of substance? Clearly, the Aristotelian definition of substance was not alien to Descartes's contemporaries.<sup>34</sup> Descartes himself, in the Second Set of Replies appended to the *Meditations*, defines substance in terms that are quite close to Aristotle's view:<sup>35</sup>

*Substance.* This term applies to every thing in which whatever we perceive immediately resides, as in a subject, or to every thing by means of which whatever we perceive exists. By "what we perceive" is meant any property, quality or attribute of which we have a real idea.<sup>36</sup>

Unlike Aristotle's characterization of primary substance, however, Descartes's does not stipulate that a substance should not be predicated of anything else.<sup>37</sup> Yet it is clear that what makes something a substance is the fact that it is a subject of which properties are predicated. Following his definition of substance, Descartes defines God as "the substance which we understand to be supremely perfect, and in which we conceive absolutely nothing that implies any defect or limitation in that perfection."<sup>38</sup> Although it renders God supremely perfect, this definition does not say that God is *more of a substance* than other, finite substances. Such a distinction between God, the only substance in the strict sense of the word, and finite substances appears in Descartes's most famous discussion of the topic in section 51 of the first part of the *Principles*:

By *substance* we can understand nothing other than a thing which exists in such a way as to depend on no other thing for its existence. And there is only one substance which can be understood to depend on no other thing whatsoever, namely God. In the case of all other substances, we perceive that they can exist only with the help of God's

concurrence. Hence the term “substance” does not apply univocally, as they say in the Schools, to God and to other things; that is, there is no distinctly intelligible meaning of the term which is common to God and his creatures. In the case of created things, some are of such a nature that they cannot exist without other things, while some need only the ordinary concurrence of God in order to exist. We make this distinction by calling the latter “substances” and the former “qualities” or “attributes” of those substances.<sup>39</sup>

Some scholars suggest that in this passage Descartes introduces a new definition of substance as an “independent being.” This is somewhat imprecise, since Aristotle also stresses the independence of substance. Descartes diverges from Aristotle in the way he spells out this independence, however. While Aristotle defines the independence of primary substance solely in terms of *predication*, Descartes stipulates that substance in the full sense of the word must also be *causally* independent. Hence, in addition to being self-subsisting, a fully fledged Cartesian substance must also comply with the *causal stipulation of substance*: x is a fully fledged substance only if it is not caused to exist by anything else. Created substances, according to the passage above, are self-subsisting yet externally caused by God (they need “God’s ordinary concurrence”).<sup>40</sup> As a result, they are *not* fully fledged substances for Descartes.

This brings us to an interesting asymmetry between causation and predication in Descartes’s view of substance. While Descartes grants the title “substance” to things that *causally* depend only on God, he does not make the same compromise in regard to *predication*. Things which depend only on God in terms of predication (i.e., God’s attributes) are not recognized in this passage (or, as far as I know, in any other text of Descartes) as substances, even in the weaker sense of the word.<sup>41</sup> This seems to indicate that even for Descartes, the sine qua non condition for substantiality is still independence in terms of *predication*. Only when this necessary condition is satisfied can the test of *causal* self-sufficiency distinguish between God, the substance in the full sense of the word, and finite, created substances (which depend on God in terms of causation, but not in terms of predication).

The view of God as the only substance in the full sense of the word (and of finite things as substances only in a secondary sense), appears also in a major medieval work which, though unknown to Descartes, was clearly familiar to Spinoza.<sup>42</sup> Consider the following passage from



the *Wars of the Lord*, by the early fourteenth-century Provençal Jewish philosopher, Levi ben Gerson, or Gersonides:

It can be verified that the attributes of God are predicated of Him primarily but of other things secondarily, even though it be conceded that there is no relation [*yahas*]<sup>43</sup> between God and His creatures . . . It is important to realize that there are attributes that must be attributed to God, for example, that He is a substance. The term "substance," however, is not predicated of God and other things univocally but [of God] primarily and [of everything else] secondarily. For, that which makes all things describable by some attribute in such a way that they are [truly] describable by that attribute – i.e., by virtue of what these things have acquired essentially and primarily from it – is more appropriately called by that term. Now God makes [*sam*] all other things in such a way that they are substances, for he endows them with their substantiality; accordingly, he is more appropriately describable as "substance." Moreover, the divine substance exists by virtue of himself [*nimtza me-atzmo*],<sup>44</sup> whereas all other substances derive their existence from something else, and whatever exists by virtue of itself is more appropriately described as "substance" than something whose existence derives from another thing.<sup>45</sup>

Like Descartes, Gersonides feels the pressure to extend the Aristotelean definition of substance as independent in terms of *predication* to *causal* independence as well. Yet, if we push this line to its conclusion, we would have to deny the substantiality of any created thing, and for Gersonides, just as for Descartes, this appeared to go one step too far.

To return to Spinoza, he seems to have little patience for the Cartesian, in-between category of "created substance." If the title "substance," in its strict sense, applies only to God (since God is the only entity that is not dependent on anything else in terms of both predication and causation), Descartes's willingness to grant the status of "created substance" to things which "need only the ordinary concurrence of God in order to exist" may rightly seem a mere concession to popular religion and its demand to secure the substantiality (and hence everlastingness) of human minds.<sup>46</sup>

As I have already noted, Spinoza does not *define* substance as causally independent, yet it takes him no more than five propositions to prove that "[o]ne substance cannot be produced by another substance" (E 1p6) and to derive from this proposition the corollary that "substance cannot be produced by anything else" (E 1p6c). Thus, substance must be

causally independent from anything else. However, for Spinoza, the causal independence of substance does not only mean that it is not caused by anything else, but also that substance is *positively* self-caused.<sup>47</sup> Relying on E 1p6, and on the implicit and crucial assumption that everything must have a cause,<sup>48</sup> Spinoza proves in E 1p7d that substance is “the cause of itself.” But what does it mean for a thing to be “cause of itself?”

Though the notion of *causa sui* seemed paradoxical to many of Spinoza’s predecessors,<sup>49</sup> Spinoza did not shy away from using it and even assigning it a central role. As we have already seen, the *Ethics* opens with the definition of this very notion. Let us have a second look at it:

E 1d1: By cause of itself I understand that whose essence involves existence, or that whose nature cannot be conceived except as existing.

A *cause of itself* is a thing whose essence alone necessitates its existence, and which cannot be conceived as non-existing.<sup>50</sup> The causal independence of substance leads Spinoza to the conclusion that substance must exist by virtue of its own essence (E 1p7) – otherwise, the existence of substance could not be explained.

#### THE SUBSTANCE’S RELATIONS

Having briefly studied Spinoza’s definitions of substance and God and some of the historical background of Spinoza’s conception of substance, I would like to turn now to the three quintessential relations which the substance bears: *inherence*, *conception*, and *causation*.<sup>51</sup> I will first consider Spinoza’s view of the interconnections among these relations and then turn to examine the logical properties of each relation.

Two of the aforementioned relations – inherence and causation – can be composed so that the results are the relations of *immanent* and *transient causation*.<sup>52</sup> The term “*causa immanens*” first appears in the *Ethics* in E 1p18. I cite the proposition and its demonstration in its entirety, since it tells us precisely what is an immanent cause.<sup>53</sup>

E 1p18: God is the immanent, not the transitive, cause of all things.

Dem.: Everything that is, is in God, and must be conceived through God (by P15), and so (by P16C1) God is the cause of [NS: all] things, which are in him. That is the first [thing to be proven]. And then

outside God there can be no substance (by P14), i.e. (by D3), thing which is in itself outside God. That was the second. God, therefore, is the immanent, not the transitive cause of all things, q.e.d.

In the first sentence of E 1p18, Spinoza establishes that God is the immanent cause of all things by pointing out his previous demonstrations that (1) all things inhere in God<sup>54</sup> and that (2) God is the efficient<sup>55</sup> cause of all things.<sup>56</sup> This, Spinoza claims, suffices to establish "the first thing," that is, that God is the immanent cause of all things. Thus, *causa immanens* seems to be just the composition of the relations of causation and inherence.<sup>57</sup> In his early work, the *Short Treatise*, Spinoza presents an eightfold taxonomy of the kinds of efficient causes. One of the distinctions in that taxonomy is between immanent and transient causes: the former causes an effect "in itself," the latter causes an effect "outside itself."<sup>58</sup> The very same distinction is at work in E 1p18d. In order to establish that God is not a transient cause of anything, Spinoza points out (in the second sentence of E 1p18d) that there is nothing outside God.<sup>59</sup> Thus, it is clear that a transient cause is a cause whose effect does not inhere in the cause, while an immanent cause is a cause whose effect inheres in the cause.<sup>60</sup> The discussion of the distinction between immanent and transient cause in the *Short Treatise* also makes clear that the terms "internal cause" and "external cause" have precisely the same denotation as "immanent cause" and "transient cause," respectively.<sup>61</sup>

Let us turn now to our third relation: conception. Spinoza does not need to suggest a composition of conception with one of his other two fundamental relations, since he thinks the connection between conception and causation is built into the nature of both relations. In E 1a4, one of the most crucial axioms of the *Ethics*, Spinoza erects a bridge between causation and conception:

The cognition<sup>62</sup> of an effect depends on, and involves, the cognition of its cause [Effectus cognitio a cognitione causae dependet, et eandem involvit].

The precise meaning and import of this axiom cannot be determined merely from this axiom itself, since it can be read in several different ways. Many of Spinoza's contemporaries and predecessors would have been likely to accept it at first glance, and then be horrified by the implications Spinoza draws from it.<sup>63</sup> In order to fix the meaning of the axiom, we need to look carefully at its applications later in the book.<sup>64</sup> Without getting too

much into the details of the issue,<sup>65</sup> let me point out that it is uncontroversial that the axiom commits Spinoza to the conditional: if  $x$  is the cause of  $y$ , then  $y$  is conceived through  $x$ . It is, however, controversial whether the axiom also commits Spinoza to the converse claim: if  $y$  is conceived through  $x$ , then  $x$  is the cause of  $y$ . In other words, it is not clear whether E 1a4 constitutes a bidirectional bridge between conception and causation, or merely a unidirectional bridge (from causation to conception, but not the other way around). Though I do not think we currently have conclusive evidence either way, I tend to accept the commonly held view according to which E 1a4 is a bidirectional bridge between causation and conception.<sup>66</sup> Let us turn now to examine the logical properties of the three relations of inherence, conception, and causation.

For Spinoza, all three relations are *neither reflexive nor irreflexive*. In some instances, a thing inheres in itself, in others, not.<sup>67</sup> In some instances, a thing is conceived through itself, in others, not.<sup>68</sup> In some instances, a thing causes itself, in others, not.<sup>69</sup>

Spinoza seems to consider all three relations as *transitive*,<sup>70</sup> though it is hard to point out texts in which he explicitly proves this feature.<sup>71</sup> In E 1p28s Spinoza notes that if God produces (i.e., efficiently causes) mode A, and mode A produces mode B, then God should also be considered the producer of B. Similarly, in E 1p23 Spinoza argues that if an infinite mode B follows from (i.e., is caused by and inheres in)<sup>72</sup> an infinite mode A, and infinite mode A follows from (the nature of) God, then infinite mode B also follows from God (or more precisely, God's nature).<sup>73</sup> Spinoza also uses conception as a transitive relation, though here we should be careful to spell out the sense of " $a$  is conceived through  $b$ " as equivalent to " $a$  is explained by  $b$ ."<sup>74</sup> Other uses of the terminology of conception (and conceivability), even among Spinoza's contemporaries, need not be transitive.<sup>75</sup>

Are inherence, conception, and causation *symmetric* relations? I will begin with what seems to be the easier case: inherence. Apparently, inherence is *anti-symmetric*, that is, if  $x$  inheres in  $y$ , and  $y$  inheres in  $x$ , then  $x = y$ .<sup>76</sup> Why cannot inherence be a symmetric relation? Obviously, one substance cannot inhere in another (per E 1d5). However, let us consider a hypothetical scenario in which two modes,  $x$  and  $y$ , inhere in each other. Now, we may ask whether – in addition to their mutual inherence –  $x$  and  $y$  also inhere in any substance. We have three mutually exclusive and jointly exhaustive possibilities: either both modes do not inhere in a substance, or the one inheres and the other does not, or, finally, both inhere in a substance.<sup>77</sup>

If neither one of them inheres in a substance, we have an impossibility, since by their definition (E 1d5) modes depend for their existence on a substance and cannot exist detached from the substance. If one of the two modes (say  $x$ ) inheres in substance  $S$ , while the other mode  $y$  does not inhere in  $S$ , we reach another absurdity:  $x$  inheres both in  $S$  and in  $y$ . Since  $x$  is a mode of  $S$ ,  $x$ 's dependence on  $y$  also implies that its substance,  $S$ , depends on  $y$  (while  $y$  is not in  $S$ , per our assumption).<sup>78</sup> However, this would contradict  $S$ 's status as substance, that is, as a being strictly *in se*. Let's consider, then, the third and final possibility:  $x$  and  $y$  inhere in each other, and they also inhere in substance  $S$ . Now, the traditional understanding of the *in alio* relation considers the mode (the dependent thing) to be *less real* than the thing on which it depends.<sup>79</sup> Obviously,  $x$  cannot be less real than  $y$ , while  $y$  is also less real than  $x$ . Our question is whether Spinoza accepts this traditional feature of the *in alio* relation, and specifically whether he requires that the dependent entity be less real than that on which it depends, or whether he might instead accept a slightly weaker requirement according to which a dependent being is *less-or-equal* in reality to the thing on which it depends.<sup>80</sup> I think we have clear textual evidence showing Spinoza accepts the stronger requirement.

At the beginning of the Appendix to Part 1 of the *Ethics*, Spinoza considers the relationship among the infinite modes which follow in a linear order<sup>81</sup> from the absolute nature of God. Spinoza is committed to the view that from each infinite mode must follow another infinite mode, and that the linear order of these modes runs to infinity.<sup>82</sup> In the following passage, Spinoza argues against divine teleology by claiming that such a view inverts the order of infinite modes (the subject of E 1pp21–23) by making infinite modes, which are more distant from God's absolute nature, the *telos* (and hence the perfection) of the more immediate infinite modes:

This doctrine concerning the end turns nature completely upside down. For what is really a cause, it considers as an effect, and conversely. What is by nature prior, it makes posterior. And finally, what is supreme and most perfect, it makes imperfect.

For – to pass over the first two, since they are manifest through themselves – as has been established in E 1pp21–23, *that effect is most perfect which is produced immediately by God, and the more something requires intermediate causes to produce it, the more imperfect it is*. But if the things which have been produced immediately

by God had been made so that God would achieve his end, then the last things, for the sake of which the first would have been made, would be the most excellent of all. (II/80/10–22; emphasis added)

In the italicized passage above Spinoza suggests that there is a *depletion* of perfection in the order of infinite modes, and that the more distant from God's nature an infinite mode is, the less perfect it is.<sup>83</sup> Now, since in E 2d6 he asserts, "By reality and perfection I understand the same thing," it follows that an infinite mode is also *less real* the more distant it is from God's nature. This, of course, should not surprise us, since as we mentioned above, the traditional understanding of the *in alio* relation is that a mode is less real than the substance on which it depends. By extending this very logic, we reach the conclusion that the more a mode is dependent on other intermediaries, the less real it is.<sup>84</sup>

We therefore have, I believe, clear evidence that, for Spinoza, the relation of being *in alio* involves a difference of reality between the dependent (and hence less real) being, and that other upon which it depends (which is thus more real). We can therefore conclude that two modes cannot inhere in each other, and that the inherence relation must be *anti-symmetric* (while its *in alio* variant is *asymmetric*).

Is *causation* symmetric or asymmetric in Spinoza? It seems that Spinoza places no in-principle restrictions on the symmetry/asymmetry of causal relations. Some causal relations do not (and cannot) obtain reciprocally. For example, God's essence is the cause of Fido (per E 1p16c1); however, Fido is not the cause of God's essence.<sup>85</sup> Other causal relations are reciprocal. Consider, for example, Spinoza's claim in Letter 32 that parts of the same whole adapt themselves to each other,<sup>86</sup> communicate their motions to each other,<sup>87</sup> and "are determined by one another to existing and producing an effect."<sup>88</sup> Similarly, the "Physiological Digression"<sup>89</sup> following E 2p13s addresses *mutual interaction* between colliding bodies,<sup>90</sup> as well as between particles and the surfaces of the human body.<sup>91</sup> Thus, causation for Spinoza is neither symmetric nor asymmetric.<sup>92</sup>

Turning now to *conception*, it seems that given the causation-conception bridge of E 1a4, conception, like causation, would have to be neither symmetric, nor asymmetric. In some instances of the relation Cxy (=def x is conceived through y), Cxy obtains, while Cyx doesn't.<sup>93</sup> In other cases, both Cxy and Cyx obtain.<sup>94</sup>

We could point out several other logical properties of the relations of causation, inherence, and conception,<sup>95</sup> though for the purpose of

providing an overview of the foundations of Spinoza's metaphysics, our discussion so far should suffice.

Before we conclude our discussion of the relation of causation, inherence, and conception, let me address briefly an exciting suggestion made recently by Michael Della Rocca. In his 2008 book, Della Rocca argued in favor of what he called "the twofold use of the Principle of Sufficient Reason." According to Della Rocca, Spinoza not only requires that everything must have a reason or cause, but also further demands that everything must be ultimately explained in term of – or reduced to – reason.<sup>96</sup> Applying this bold claim to the relation of inherence and causation, Della Rocca argues that Spinoza reduced the relations of inherence and causation to conceivability.<sup>97</sup> In the course of developing his bold reductive argument, Della Rocca claims that in Spinoza causation, inherence, and conception (intelligibility) are coextensive, that is,  $x$  is conceived through  $y$  if and only if  $x$  is caused through  $y$ ; and  $x$  is caused through  $y$  if and only if  $x$  inheres in  $y$ .<sup>98</sup> If causation, conception, and inherence are indeed coextensive, one could argue that such coextensiveness cannot be a brute fact, and that therefore the reduction of causation and inherence to conception provides the required explanation for the alleged coextensiveness of the relations.

More recently, Samuel Newlands has pushed Della Rocca's reading one step ahead by arguing that Spinoza is not only a *substance monist*, but also a *relations monist*, holding that all the various dependence relations that obtain in Spinoza's metaphysics are reducible to *one* fundamental relation of conceptual dependence.<sup>99</sup>

I find Della Rocca's and Newlands's readings truly exciting. They are innovative, daring, and original, and for all I can tell this is just philosophy at its best. That being said, I think both readings strongly conflict with Spinoza's key doctrines; furthermore, both readings fail to acknowledge the crucial differences between the properties of the relations at stake, differences which preclude any attempt to identify these relations.

I have argued elsewhere that Della Rocca's identification of inherence and causation conflicts with many of Spinoza's key metaphysical claims.<sup>100</sup> Thus, for example, the identification of inherence and causation rules out the very possibility of transient causation, that is, a cause whose effect does *not* inhere in the cause.<sup>101</sup> Spinoza makes ample use of the notion of a transient (or what is the same, an external) cause, and thus, this consideration alone seems to me to pose a very strong challenge to Della Rocca's reading.

Let me add here briefly two additional considerations against the identification of inherence and causation which I have not discussed so far. First, consider Spinoza's claim in E 1p17s that when "one man is the cause of the existence of another man," then, "if the existence of the one perishes [*pereat*], the other's existence will not thereby perish."<sup>102</sup> The choice of men to exemplify the causal principle here is clearly random. A porcupine that was brought into existence by another porcupine would just as much fail to perish when its cause (ancestor) perished. Thus, Spinoza seems to be holding that at least some cases of causation *do not involve the existential dependence* of the effect on the cause. This would flatly conflict with the strict existential dependence which is built into the relation of inherence: a mode is in another (E 1d5), and as such it cannot exist in the absence of its substratum. This crucial difference between the existential dependence involved in the inherence relation and the lack thereof in some cases of causation is exemplified very nicely in a passage of the *Short Treatise* which singles out the properties of the immanent cause, that is, the relation composed of (efficient) causation and inherence.<sup>103</sup> "The freest cause of all, and the one most suited to God, is the immanent. For *the effect of this cause depends on it in such a way that without it, [the effect] can neither exist nor be understood.*"<sup>104</sup> When we contrast the E 1p17s passage with the above passage from the *Short Treatise*, it becomes clear that Spinoza makes a sharp distinction between immanent and transient causation. The effect of the immanent cause existentially depends on its cause (it cannot be without the cause), while the effect of a transient cause (discussed in E 1p17s) does not depend for its existence on its cause. Since the difference between an immanent and a transient cause is that the former involves inherence, while the later doesn't, and since existential dependence is built into the nature of the inherence relation, it is clear that it is only the element of inherence in immanent causation that makes the effect of this cause existentially depend on its cause. Causation simpliciter (without inherence) does not make the effect depend existentially on the cause. Since inherence is by its nature an existential-dependence relation, while causation is not, it would not make sense to identify these two relations.

The second consideration against the identification of inherence and causation is quite straightforward. We have seen earlier that the *in alio* relation is *asymmetric*. We have also noticed that Spinoza allows for reciprocal (transient) causation, as when two billiard balls collide, or when two parts of the same whole interact with each other.



*A symmetric relation cannot be identical with an asymmetric relation.* Moreover, the case of the colliding balls provides a clear counterexample to the alleged coextensiveness of causation and inherence. Now, even if we accept the claim that inherence is merely anti-symmetric and not asymmetric,<sup>105</sup> the case of the colliding billiard balls still provides a clear counterexample to the coextensiveness of causation and inherence, since anti-symmetry requires that if  $Rxy$  and  $Ryx$ , then  $y = x$ . However, our two colliding billiard balls remain *two* items, in spite of the mutual causal relations they bear to each other.<sup>106</sup>

The foregoing arguments against Della Rocca's identification of inherence and causation are obviously potent as well against Newlands's stronger theory of relations monism. I will only add here briefly two further counterexamples which I believe refute Newlands' suggestion that in Spinoza all relations are reducible to conceptual dependence. Consider first the part-whole relation. This relation is ubiquitous in Spinoza's metaphysics and is closely tied to essential notions of Spinoza's philosophy, such as extension, infinity, parallelism, the adequacy and inadequacy of ideas, the infinite modes, and the nature of individuals and singular things. A particular issue relative to which the importance of the parthood relation is stressed most explicitly is Spinoza's definition of destruction: "to destroy a thing is to resolve it into such parts [rem destruere est illam in ejusmodi partes resolvere] that none of them express the nature of the whole . . ." <sup>107</sup> In short, parthood cannot be brushed away as a marginal, unimportant relation in Spinoza's philosophy. Now, in E 1p12d, as well as in numerous other texts, Spinoza asserts that parts are prior to their wholes, both in terms of existential dependence and in terms of conceptual dependence.<sup>108</sup> If we accept Newlands's suggestion that there is one, and only one, dependence relation in Spinoza, it would seem that parthood would also have to be reduced to conception. Specifically, since substance is that which is conceptually independent while a mode is that which is conceptually dependent, it would seem that reducing parthood to conception would force us to assert that *the substance* (the independent relatum) *is part of its mode* (the dependent relatum). This seems very odd indeed. To be sure, oddness is not sufficient for invalidity. But there is still, I believe, more conclusive evidence.

For Spinoza (as for most of his contemporaries),<sup>109</sup> the concept of *part* is restricted to what we would call a *proper part*.<sup>110</sup> This is clearly indicated by Spinoza's remark that "the whole is greater than its part" is a necessary truth (E 4p18s).<sup>111</sup> Thus, for Spinoza, parthood is an

*irreflexive* relation. Since, for Spinoza, the relation of conceptual dependence is neither reflexive nor irreflexive (the substance is conceived through itself while the modes are not), conception and parthood cannot be the same relation. In other words, were conception and parthood the same relation, the fact that substance is conceived through itself would commit Spinoza to the claim that the substance is part of itself. But were the substance part of itself, this part would be equal to its whole: a view Spinoza explicitly rejects as a logical absurdity.

The second dependence relation which I believe we can show cannot be reduced to conception is the relation of *expression*. In E 1d6, Spinoza asserts that the attributes express the (or an)<sup>112</sup> essence of God. Now, if we accept the claim that expression, conception, inherence, and causation are coextensive, then God's essence would turn out to be the *cause* in which the attributes inhere. However, this seems to create an ontological distance between God's essence and the attributes that cannot be admitted. Making the attributes inhere in – and be effects of – God, obliterates Spinoza's crucial distinction between attributes and modes, while Spinoza clearly groups the attributes together with the substance in the realm of *natura naturans*, and not in the realm of *natura naturata*, the domain of the modes.<sup>113</sup> Asserting that an attribute is a mode seems to be a flat contradiction, given Spinoza's characterization of the two notions: a mode is conceived through another (E 1d5), whereas an attribute is conceived through itself (E 1p10).

Despite my great sympathy with the boldness, elegance, and originality of the readings of Della Rocca and Newlands, I think that, at the end of the day, they are not tenable.<sup>114</sup> I turn now to the issue of Spinoza's understanding of infinity.

#### HOW MUCH IS INFINITE?

At the beginning of the first section above, we encountered Spinoza's definition of God (E 1d6) "as a being absolutely infinite, i.e., a *substance consisting of an infinity of attributes*, of which each one expresses an eternal and infinite essence."<sup>115</sup> Although this most central definition of the *Ethics* unequivocally asserts that God has infinitely many attributes, the reader of the *Ethics* will find only two of these attributes discussed in any detail in Parts 2 through 5 of the book. Addressing this intriguing gap between the infinity of attributes asserted in E 1d6 and the discussion merely of the two attributes of Extension and Thought in the rest of the book, Jonathan Bennett writes: "Spinoza seems to imply that there are

other [attributes] – he says indeed that God or Nature has ‘infinite attributes.’ Surprising as it may seem, there are reasons to think that by this *Spinoza did not mean anything entailing that there are more than two attributes.*”<sup>116</sup>

In this section, I will argue that Bennett’s claim is fundamentally wrong and deeply misleading. I do think, however, that addressing Bennett’s challenge will help us better understand Spinoza’s notion of infinity. I will begin by summarizing Bennett’s arguments. I will then turn to examine briefly the textual evidence for and against his reading. Then I will respond to each of Bennett’s arguments and conclude by pointing out theoretical considerations which, I believe, simply refute his reading.

Bennett presents the following five arguments to motivate his surprising claim: (1) Spinoza frequently uses “infinite” as virtually synonymous to “all.” The claim that God has all the attributes merely commits him to the view that whatever attributes are there, they must be instantiated in God. If there are only two possible attributes, then the claim that God has infinite attributes amounts to nothing over and above the claim that God has two attributes.<sup>117</sup> (2) If Spinoza was serious in ascribing infinitely many attributes to God, he should have discussed them in some detail in the body of the *Ethics*.<sup>118</sup> (3) In Letters 64 and 66, Spinoza attempts to explain why we cannot know any attributes other than Thought and Extension. However, argues Bennett, Spinoza’s claim is “a move so abrupt, ad hoc, and unexplained that we cannot even be sure whether it is a retraction of the metaphysics or of the epistemology.”<sup>119</sup> (4) The traditional conception of God as an *ens realissimum* could have motivated Spinoza to ascribe to God *all* attributes or perfections. However, there was no respectable theological tradition that would motivate him to ascribe to God *infinitely* many attributes.<sup>120</sup> (5) Spinoza had no theoretical or philosophical pressure that would push him to assert that God has more than two attributes.<sup>121</sup>

Let us turn now to examining Spinoza’s text and check whether it can support the claim that God/Nature has no more than the two attributes of Extension and Thought. We’ll begin with a simple question: is there *any* text in Spinoza’s oeuvre in which Spinoza asserts that there are no more than two attributes? To the best of my knowledge, the answer is a resounding “no.”<sup>122</sup> In contrast, we have abundant texts – in the *Ethics* and outside it – in which Spinoza clearly commits himself to the existence of attributes other than thought and extension. Consider the following two passages from E 2p7s:

Whether we conceive nature under the attribute of Extension, or under the attribute of Thought, *or under any other attribute*, we shall find one and the same order, *or one and the same connection of causes*, i.e., that the same things follow one another.<sup>123</sup>

So long as things are considered as modes of thinking, we must explain the order of the whole of nature, or the connection of causes, through the attribute of Thought alone. And insofar as they are considered as modes of Extension, the order of the whole of nature must be explained through the attribute of Extension alone. *I understand the same concerning the other attributes.*<sup>124</sup>

Notice that in both passages Spinoza does not entertain *the slightest doubt* about the existence of the unknown attributes. He does not say, "I understand the same concerning the other attributes, *if there are any.*" Instead, he affirms *without any reservation* that the same order of explanation should obtain with regard to the other, unknown, attributes. Interestingly, we do have a nice example of Spinoza's formulating a claim about an issue he is not confident about. Consider E 3p2: "The Body cannot determine the Mind to thinking, and the Mind cannot determine the Body to motion, to rest or to anything else (*if there is anything else*)."<sup>125</sup> In E 3p2, Spinoza formulates his claim in a reserved manner that entertains the possibility that a body might be determined to states other than motion and rest, without committing himself to the existence of this third kind of state. In contrast, both passages in E 2p7s clearly commit Spinoza to the existence of attributes other than extension and thought.

In addition to the two crystal-clear passages from E 2p7s, there is an interesting yet more intricate passage in E 2p13d in which Spinoza is bothered by the possibility of a mismatch between the minds of modes of different attributes, that is, he is bothered by the possibility that "the object of the Mind were something else also, in addition to the Body."<sup>126</sup> In order to rule out the possibility that my mind might have as its object not only my body but also a mode of one of the unknown attributes, Spinoza appeals to E 2a5 which asserts that the human mind has access *only* to modes of Extension and Thought. I reconstruct this argument in greater detail in another place.<sup>127</sup>

Turning now to Spinoza's correspondence, in Letter 56 (dated Oct./Nov. 1674) Spinoza writes: "I don't say that I know God completely, but only that I know some of his attributes, not all of them, *not even most of them. Certainly, being ignorant of most of them*, does not prevent my knowing some."<sup>128</sup>

Spinoza's assertion that we do not know the *majority* of the attributes, clearly entails that he believed there are at least . . . five attributes. In an earlier letter, Spinoza referred to "other attributes" of God, other than intellect (i.e., Thought),<sup>129</sup> hence implying that there must be at least . . . three attributes.<sup>130</sup>

In Letters 64 and 66, Spinoza unmistakably asserts the existence of infinitely many attributes unknown to the human mind. We will postpone the explication of these crucial letters until we address the important question of Spinoza's reasons for asserting that we cannot know any attributes other than thought and extension.

In the *Theological-Political Treatise*, Spinoza does not employ his typical metaphysical terminology of substance, attributes, and modes,<sup>131</sup> yet in a note appended to his discussion of nature in the sixth chapter, he remarks: "By Nature here I understand not only matter and its affections, but in addition to matter, infinite other things."<sup>132</sup> It is highly likely that these "infinite other things" are the infinite attributes (apart from Extension).

In the *Short Treatise*, the infinitely many unknown attributes are discussed in detail in KV 1.1,<sup>133</sup> and the Second Appendix to the *Short Treatise* offers an elaborate discussion of the nature of the minds, or souls, of the modes of the unknown attributes:

The essence of the soul consists only in the being of an Idea, or objective essence, in the thinking attribute, arising from the essence of an object which in fact exists in Nature. I say of an object that really exists, etc., without further particulars, in order to include here not only the modes of extension, but also the modes of all the infinite attributes, which have a soul just as much as those of extension do.<sup>134</sup>

Finally, as a piece of external evidence, consider the following passage from Leibniz's notes on Spinoza's metaphysics, following a conversation he had with their common friend, Walter von Tschirnhaus. As we will shortly see, Tschirnhaus was particularly knowledgeable about Spinoza's views on the unknown attributes: "*He [Spinoza] thinks that there are infinite other positive attributes besides thought and extension. But in all of them there is thought, as here there is in extension. What they are like is not conceivable by us; every one is infinite in its own kind, like space here.*"<sup>135</sup> In summary, we have, I believe, a solid body of textual evidence committing Spinoza to the existence of infinitely many other attributes beyond thought and extension. We do not have even a single text in which Spinoza asserts that God has, or even

might have, only the two known attributes of Extension and Thought. I turn to address Bennett's arguments in favor of his reading.

(1) Bennett's claim that in Spinoza "infinite" always means "all" is not precise. In Letter 12, the foremost text for Spinoza's discussion of infinity, he notes that some "kind of infinite can be conceived to be greater than another infinite, without any contradiction."<sup>136</sup> Thus, the smaller infinity may not contain *all* the items contained within the larger infinity. But this is a marginal point. The following consideration seems to me more important. Bennett is right in claiming that if by "infinity" Spinoza meant nothing over and above "all," and if there were only two possible attributes, then for God to have infinite attributes would amount to nothing more than having two attributes. Yet, why not extend Bennett's logic one step further? If *no* attributes were possible (and *no* modes were possible), it would be perfectly correct under Bennett's reading to assert that God has infinitely many attributes and infinitely many modes. Yet, such an assertion would be highly misleading, and it would make no sense for a speaker who even suspects that there might be no possible attributes to assert that there are infinitely many attributes. The very same consideration works against reading Spinoza's infinity of attributes as "all, that is, two." If Spinoza meant to claim that God merely has all the attributes, why should he not use the simple and common term "all" instead of the highly misleading "infinity"?

(2) Spinoza does not elaborate upon the nature of the other attributes in Parts 2 to 5 of the *Ethics* for a simple reason: the aim of these parts is the study of the nature of the human mind and the best measures leading to its blessedness. The preface to Part 2 announces as much. It explains that from that point onward, Spinoza is homing in on a tiny fraction of his universe – that fraction that is relevant to the knowledge and blessedness of the human mind:

I pass now to explaining those things which must necessarily follow from the essence of God, or the infinite and eternal Being – not, indeed, all of them, for we have demonstrated (IP16) that infinitely many things must follow from it in infinitely many modes, *but only those that can lead us, by the hand, as it were, to the knowledge of the human Mind and its highest blessedness.*<sup>137</sup>

From Part 2 onward, Spinoza is focusing on the restricted part of his universe that is relevant to the achievement of human blessedness. For the most part, the knowledge of the infinitely many unknown

attributes is irrelevant to this endeavor.<sup>138</sup> This is the trivial and primary reason for Spinoza's silence about the infinitely many attributes.<sup>139</sup> In addition, Spinoza had good reasons to believe that while we know that God/Nature has infinitely many attributes, we can hardly know anything about the nature of these attributes. He develops these claims in Letters 64 and 66, and we shall turn now to examine his reasons.

(3) Spinoza had a perfect explanation for the fact that one does not know the nature of any attributes other than Thought and Extension. According to Spinoza, the human mind is a complex idea (i.e., mode of Thought) whose object is nothing but a human body (a mode of Extension).<sup>140</sup> One of the most central doctrines of the *Ethics* asserts that there is a parallelism, or isomorphism, between the order of things and the order of ideas (E 2p7).<sup>141</sup> Things (*res*) for Spinoza are everything that is real, including bodies and ideas. In the first section of this chapter, we encountered Spinoza's claim that each attribute must be conceived through itself (E 1p10). Relying on E 1p10, Spinoza proves in E 2p6 that the attributes are also *causally* isolated from each other (i.e., a mode from one attribute cannot cause a mode from another attribute). Thus, there is a causal and conceptual barrier between the infinitely many attributes.<sup>142</sup>

In Letter 66, Spinoza relies on these two doctrines – the Ideas-Things Parallelism and the barrier among the attributes – to prove not only that items belonging to different attributes cannot interact causally with each other, but also that *mental representations of items belonging to different attributes cannot causally interact with each other*. In other words, in addition to the barrier among the attributes introduced in E 1p10 and E 2p6, there is a *parallel barrier within* the attribute of thought among representations (i.e., ideas) whose objects are items belonging to different attributes. Thus, it is not only the case that my body cannot causally interact with a mode of the third attribute, but also the case that my mind (which is just the idea of my body) cannot causally interact with any mind (or idea) which represents items of the third attribute. The *parallel barrier*, which is internal to Thought, does not allow *any communication* between ideas representing different attributes. Our minds (i.e., the ideas of our bodies) cannot communicate with the minds of the infinitely many attributes, just as our bodies cannot interact with the modes of the infinitely many other attributes. Each attribute (and its representation in Thought) is isolated from every other attribute (and its representation in Thought). Thus, contrary to Bennett's claim, Spinoza's argument in Letters 64 and 66 is well grounded in E 1p10 and E 2p7.<sup>143</sup>

(4) Spinoza was well acquainted with a philosophical and theological tradition that ascribes infinitely many attributes to God, though it was not the tradition under Bennett's lamplight. In his discussion of the divine attributes in the *Light of the Lord*, Crescas develops in great detail the claim that God has infinitely many attributes and that each of his attributes is infinite.<sup>144</sup> Given Spinoza's detailed discussion and endorsement of Crescas' conception of actual infinity in Letter 12,<sup>145</sup> it is highly unlikely that he was unaware of this claim, especially since Crescas was not the only medieval Jewish thinker to advance such an argument.<sup>146</sup> Another philosopher with whom Spinoza was of course acquainted and who affirmed that God has "countless" attributes beyond the ones we know is Descartes.<sup>147</sup> These "countless" attributes of God cannot be just non-essential modes, since Descartes explicitly denies that God has any modes.<sup>148</sup> There is, however, a remarkable difference between these claims of Descartes and Spinoza. Descartes's claim that there are uncountable divine attributes which we cannot comprehend secures the transcendence of the Cartesian God.<sup>149</sup> Spinoza's claim that *Deus sive Natura* has infinitely many attributes which are not accessible to us makes *Nature* (with a capital "N," i.e., as not restricted to extended and thinking nature) just as transcendent to us as God is.<sup>150</sup> This is a bold and highly original view that is consistent with Spinoza's deep critique of anthropocentrism.<sup>151</sup>

(5) Let's turn to Bennett's final point. Were there any theoretical and philosophical pressures within Spinoza's system that would push him to affirm the existence of more than two attributes? Yes, there were. We will point out two strong reasons that motivated Spinoza to affirm that God has infinitely many attributes beyond extension and thought: (i) Spinoza's first reason for rejecting the idea that the infinity of attributes may mean only "all possible attributes, even if there is only a finite number of them" is quite straightforward. Both in the *Short Treatise* and in the *Ethics*, Spinoza denies that the infinite can be composed of an accumulation of finite parts.<sup>152</sup> Now suppose, per Bennett's suggestion, that God has all the attributes, and that the number of attributes,  $n$ , is finite. Thus, "the infinity of attributes", that is, the number  $n$  of attributes, would be composed of  $n$  attribute units, and this would flatly contradict Spinoza's assertion that the infinite cannot be composed from the finite. (ii) To begin elucidating Spinoza's second reason, consider E 1p9:

The more reality or being [*esse*] each thing has, the more attributes belong to it.



In E 1p10s, Spinoza points to E 1p9 as explaining his reason for defining God – at the very beginning of Part One – as consisting of an infinity attributes.

Nothing in nature is clearer than that each being must be conceived under some attribute, and the more reality, or being it has, the more it has attributes which express necessity, or eternity, and infinity. And consequently, there is also nothing clearer than that a being absolutely infinite must be defined (as we taught in D6) as a being that consists of infinite attributes, each of which expresses a certain eternal and infinite essence.<sup>153</sup>

The passage above would appear pretty odd under Bennett's reading: Why would Spinoza formulate a *general rule* about the correspondence between the reality and the number of attributes a thing has, when only two attributes are possible at all? Again, to expose oddity is not to refute. But, yet again, we can push this line of objection toward a more conclusive result.

In a letter dated October 1674, three years before his death, Spinoza writes:

Truly, I confess I still don't know in what respect spirits are more like God than other creatures are. *I know this: that there is no proportion [nullam esse proportionem] between the finite and the infinite*; so the difference between the greatest, most excellent creature and God is the same as that between the least creature and God.<sup>154</sup>

Since the reality of God (per E 1p9) correlates with the number of attributes God has, then, if God were to have any finite number of attributes  $n$ , there would be a clear and simple proportion between the reality of a finite being – for example, me – and God's reality. Since I am constituted by modes of *two* attributes, the proportion between God's reality and mine would be *precisely*:  $n/2$ . Yet, as the passage above states unequivocally, Spinoza denies the very possibility of such a ratio between the infinity of God and the finitude of finite things.<sup>155</sup>

We have thus pointed out two significant philosophical reasons – as well as a theological tradition – that would have motivated Spinoza to hold that God has infinitely many attributes beyond thought and extension. We have exhibited numerous texts, both in the *Ethics* and outside it, in which Spinoza commits himself to the existence of the infinitely many other attributes, and we have found not even a single text in which Spinoza asserts that God has – or even might have – only two attributes. We also

explained Spinoza's flawless argument in Letters 64 and 66 concerning why human beings (and generally, the minds of modes of extension) cannot know any other attributes beyond thought and extension.<sup>156</sup> I submit that the case for taking Spinoza at his word, and reading "infinite attributes" as greater than any number, is as strong as it can be.<sup>157</sup>

#### SUBSTANCE MONISM

Spinoza is frequently portrayed as a "substance monist." Like similar headings, this title is slightly imprecise. In the current section, I would like to address a few challenges raised against the description of Spinoza as "substance monist," and help clarify his type of monism.

One recent challenge was raised by Mogens Laerke, who rightly pointed out that both in the early *Cogitata Metaphysica* and in Letter 50 (dated June 1674) Spinoza stressed that God may only improperly be called one, or even unique.<sup>158</sup> Here is the passage from Letter 50, where Spinoza's claims are presented very clearly:

Regarding the demonstration I establish in the Appendix of the Geometric demonstrations of Descartes's Principles, namely that God can only very improperly be called one or unique, I reply that a thing is said to be one or unique only in relation to its existence, but not to its essence. For we don't conceive things under numbers unless they have first been brought under a common genus.<sup>159</sup>

Let me first note that the view that God is "one but not in number," or that strictly speaking it is improper to describe God as one, is found throughout medieval and early modern Jewish literature: in philosophy, Kabbalah, and even liturgy.<sup>160</sup> The ubiquity of this view in the Jewish context does not, however, provide any answer to the question: Why is it improper to call God "One?" To the best of my knowledge, there is more than one reason for denying "oneness" from God. One clear motivation is negative theology, which denies that any attributes of finite things can be applied, even by analogy, to God.<sup>161</sup> However, as Letter 4 states explicitly, Spinoza held a view completely opposite to negative theology.<sup>162</sup>

Let us have a look then at Spinoza's own explanation for denying that God may be properly called "one":

For example, someone who holds a penny and a dollar in his hand will not think of the number two unless he can call the penny and the

dollar by one and the same name, either "coin" or "piece of money." For then he can say that he has two coins or two pieces of money, since he calls not only the penny, but also the dollar, by the name "coin" or "piece of money."

From this it is evident that *nothing is called one or unique unless another thing has been conceived which (as they say) agrees with it.* But since the existence of God is his essence, and we can't form a universal idea concerning his essence, it is certain that someone who calls God one or unique does not have a true idea of God, or is speaking improperly about him.<sup>163</sup>

Spinoza's reasoning seems to be the following. *A thing x may be called "one," only if a plurality of x's is conceivable.* In such a case, to say that there is actually one x is informative: though there could be a number of x's, it is the case that only one obtains. In this manner, "one" is functioning like any other number. We begin with a sortal under which an unknown number of individuals may fall, and then, when we claim that are x items of the given sortal, we are providing valuable information.

In the case of God, Spinoza's absolutely infinite substance, this process cannot even commence, since the notion of an absolutely infinite substance *logically excludes the very possibility of any similar items.* This is precisely Spinoza's argument in E 1p14: "Except God, no substance can be *or be conceived.*"<sup>164</sup> The inconceivability of another (substance, and a fortiori, another) God rules out the possibility of appealing to a genus or sortal – or, as Spinoza says: "we cannot form a universal idea concerning his essence" – and thus the whole process of counting does not even get off the ground.

Another notable challenge to the characterization of Spinoza as substance monist was raised originally by Gueroult, and more recently by A. D. Smith.<sup>165</sup> Both pointed out, rightly to my mind, that at the beginning of Part 1 of the *Ethics* Spinoza refers to substances of only one attribute as genuine possibilities. A particularly compelling piece of evidence brought forward by Smith is that if we look closely at E 1p12 ("No attributes of a substance can be truly conceived from which it follows that the substance can be divided"), and E 1p13 ("A substance which is absolutely infinite is indivisible"), it becomes clear that E 1p13 would be completely redundant, unless we realize that E 1p13 addresses the substance of infinitely many attributes ("absolutely infinite"), while E 1p12 refers to a substance of one attribute ("infinite in its kind").<sup>166</sup> I would add that, prior to E 1p14, Spinoza is not entitled to exclude the possibility of

single-attribute substances, and that therefore they should have been part of the logical space mapped out at the opening of Part One.<sup>167</sup>

While I accept the core claim of Gueroult and Smith that at the beginning of Part One of the *Ethics* Spinoza is also addressing single-attribute substances, I beg to differ with a related thesis of their reading, namely, that “the single substances are synthesized into a single divine substance” or that “God is ‘constructed’ out of substances of a single attribute.”<sup>168</sup> Both scholars are aware of the problem involved in such claims, although neither, as far as I can see, addresses it adequately.<sup>169</sup>

The issue should be clear to us following our recent discussion of infinity: *the infinite cannot be constructed from the finite*, or as Spinoza asserts in E 1p15s (II: 58/27): “infinite quantity . . . is not composed of finite parts.” The infinity of the attributes is not constructed, or synthesized, from adding the extended substance to the thinking substance, and then these to the infinitely many unknown attributes (which we do not know, so in what sense can they be synthesized?). Rather, the infinity of the attributes is built into the very definition of God. No construction of God’s absolute infinity is possible, and none is needed, since for Spinoza the “proper order of philosophizing” is to begin with the absolutely infinite God, and then go on to give an account of the rest of things.<sup>170</sup> How the infinitely many attributes (which are each “infinite in their own kind”) are related to God, the “absolutely infinite being” having infinitely many attributes, is indeed a crucial question. In another place, I have attempted to answer it by arguing that each attribute is a causally and conceptually independent *aspect* of the very same being: God or Nature.<sup>171</sup>

The third and final monism-related issue I would like to discuss is the distinction, introduced by Jonathan Schaffer, between Priority and Existence Monism. Schaffer suggests a very helpful general framework for a taxonomy of metaphysical monisms.<sup>172</sup> The distinction that interests us (and is also at the center of Schaffer’s discussion) is that between Existence Monism and Priority Monism. The Existence Monist holds that there exists exactly one concrete token (this one concrete token might be the world, though we can conceive of alternative variants of Existence Monism). The Priority Monist maintains that there is exactly one concrete *fundamental* token.<sup>173</sup> An item is fundamental if “it has nothing prior to it,” that is, if, within the domain of concrete objects, it does not depend on anything else.<sup>174</sup>

At this point in his argument, Schaffer claims that “[t]he priority monist holds that whole is prior to (proper) part, and that the maximal

whole is ultimately prior."<sup>175</sup> Schaffer does not seem to motivate the identification of the "fundamental concrete token" with the "whole," and of the priority relation with the relation of parthood, but let us grant him this move.

Since for Schaffer the whole is prior to its parts, and since Spinoza is strictly committed to the priority of parts to their whole,<sup>176</sup> one might be tempted to conclude that Spinoza is simply not a Priority Monist. I suspect this conclusion is somewhat premature, since it is not clear that Schaffer and Spinoza are using the term "part [*pars*]" in the very same sense (and the term is notorious for its ambiguity). For Spinoza, substance is prior to its modes (E 1a1). Since everything that is in Spinoza's universe is just the substance and its modes (E 1p4d), substance is prior to everything else. Now, if Schaffer is willing to expand his notion of the parthood relation so that it would contain the priority (i.e., inherence) relation obtaining between Spinoza's substance and its modes, then I think it would be fair and apt to describe Spinoza as a certain kind of Priority Monist (*Substance*-Priority Monist, but not *Whole*-Priority Monist). Schaffer characterizes his Priority relation as irreflexive and transitive,<sup>177</sup> and as we saw earlier in this chapter, both characterizations are also true of Spinoza's *in alio* relation. Thus, we have good grounds to assume much in common between Schaffer's Priority relation and Spinoza's *in alio* relation (though not according to Spinoza's understanding of the part-whole relation). Lest we lose track of it, let me restate the obvious: Spinoza defines the modes as posterior or dependent entities (E 1d5 and E 1p1). Now, since Spinoza is committed to the most radical plurality of modes ("infinita infinitis modis"), using Schaffer's terminology, we may now characterize the uniqueness of Spinoza's position as its combining of Priority Monism with the most radical plurality of non-fundamental concrete tokens.

#### THE NATURE AND REALITY OF MODES

Our discussion of Spinoza's concept of substance cannot be complete without an explication of the complementary notion of *mode* (*modus*). At the beginning of this chapter we have seen that, contrary to the definition of substance as that which is in itself and conceived through itself (E 1d3), a mode is defined as what is in another and conceived through another (E 1d5). The definition of mode also tells us that a mode is "an affection" or a property of a substance.<sup>178</sup> Thus, a mode is a property that strictly depends on the substance.

In order to get a deeper understanding of the nature of modes, it will be useful to examine Spinoza's claims in his celebrated "Letter on the Infinite" (Ep 12). Though the letter is dated to April 1663, we know Spinoza circulated copies of the letter – and referred his colleagues to this letter – even at a very late period,<sup>179</sup> and thus it clearly reflects the views of the late Spinoza as well. The letter presents in a condensed manner much of the core of Spinoza's metaphysics. The main topic of the letter is certain "discoveries" Spinoza made about the infinite,<sup>180</sup> but in order to explain his discoveries Spinoza asks his correspondent, Lodewijk Meyer, to let him first briefly "explain these four [concepts]: Substance, Mode, Eternity, and Duration."<sup>181</sup> Explaining his understanding of substance, Spinoza stresses three points: (1) that existence pertains to the nature of substance, (2) that there exists only one substance of the same nature, and (3) that every substance must be understood as infinite. All three points should be familiar to us from the beginning of the *Ethics*.<sup>182</sup> At this point, Spinoza turns to the concept of mode, beginning with an explicit definition of modes.

I call the Affections of Substance Modes. *Their definition, insofar as it is not the very definition of Substance, cannot involve any existence.* So even though they exist, we can conceive them as not existing. From this it follows that when we attend only to the essence of modes, and not to the order of the whole of Nature, we cannot infer from the fact that they exist now that they will or will not exist later, or that they have or have not existed earlier. *From this it is clear that we conceive the existence of Substance to be entirely different from the existence of Modes.*<sup>183</sup>

In this passage, Spinoza defines modes simply as "the Affections of Substance." More importantly, Spinoza seems to imply that modes can be conceived in *two* opposed ways. *On the one hand, we may consider modes to be defined by the very definition of substance.* Regrettably, Spinoza does not here tell us anything more about how we should think of modes "insofar as they *are* defined by the definition of substance" (but, as we shall shortly see, he *will* elaborate on this in other places). The alternative way to conceive of modes is as *not* defined by the definition of substance. On such a conception, says Spinoza, the essence of modes does not involve existence, since it is only of the essence of substance to involve existence.<sup>184</sup>

We thus have a clear contrast between the *existence of substance*, which belongs to the very essence of substance, and the *existence of*

*modes* – insofar as we conceive of modes as not defined by the definition of substance – which does not follow from their essence, but rather from “the order of nature.” The existence of modes, that is, follows from the chain of their previous causes.<sup>185</sup> When we conceive modes as detached from the substance, their essence does not determine their existence, and thus their existence must be determined by external causes. This sharp contrast between the existence of substance and the existence of modes gives rise to another crucial distinction between two kinds of existence: the distinction between *eternity* and *duration*. Thus, in the paragraph that immediately follows the passage we have been discussing, Spinoza writes: “The difference between Eternity and Duration arises from this. For it is only of Modes that we can explicate<sup>186</sup> the existence by Duration. But [we can explicate the existence] of Substance by Eternity, i.e., the infinite enjoyment of existing, or (in bad Latin) of being.”<sup>187</sup> Spinoza here presents a clear dichotomy between the existence of modes, which *can* be explicated by duration (notice that Spinoza does *not* rule out here the possibility of explicating modes through eternity), and the existence of substance, which is explicated through eternity.<sup>188</sup> But how precisely does this distinction between eternity and duration “arise” from the fact that the essence of substance involves existence, while the essence of modes does not? To answer the last question, we had better turn to the definitions of eternity and duration at the beginnings of Parts 1 and 2 of the *Ethics*, respectively.

E 1d8: By eternity I understand existence itself, insofar as it is conceived to follow necessarily from the definition alone of the eternal thing.

Exp.: For such existence, like the essence of a thing, is conceived as an eternal truth, and on that account cannot be explained by duration or time, even if the duration is conceived to be without beginning or end.

E 2d5: Duration is an indefinite continuation of existing.

Exp.: *I say indefinite because it cannot be determined at all through the very nature of the existing thing, nor even by the efficient cause, which necessarily posits the existence of the thing, and does not take it away.*<sup>189</sup>

E 1d8 defines eternity as existence following necessarily from the essence of the eternal thing.<sup>190</sup> This claim is consistent with Spinoza's assertion in Letter 12 that the essence of substance involves existence.

Such an existence, says Spinoza, is an eternal truth. Thus, eternity, the existence of substance, is due *merely* to the definition – or, what is the same for Spinoza, the essence – of substance, and cannot be affected at all by anything else. Duration, on the other hand, is the existence of a thing whose essence does not necessitate its existence, that is, modes.<sup>191</sup> As such, the essences of enduring things, or modes, leave their existence completely “indefinite,” and Spinoza adds that even the efficient cause that brings about the existence of an enduring thing cannot *fully* explain its duration, since it is another cause that will bring about the end of the duration of the enduring thing.

In the “Letter on the Infinite,” Spinoza takes the contrast between substance and modes two steps further. First, he argues that, in contrast to the indivisibility of substance, modes are divisible.<sup>192</sup> Second he asserts that, unlike the substance, which can be conceived only by the *intellect*, the modes are commonly conceived by the *imagination*.

From all this it is clear that when we attend only to the essence of Modes (as very often happens), and not to the order of Nature, we can determine as we please their existence and Duration, conceive it as greater or less, *and divide it into parts – without thereby destroying in any way the concept we have of them*. But since we can conceive Eternity and Substance only as infinite, they can undergo none of these without our destroying at the same time the concept we have of them. . .

But if you ask why we are so inclined, by a natural impulse, to divide extended substance, I reply that we conceive quantity in two ways: *either abstractly, or superficially, as we have it in the imagination with the aid of the senses; or as substance, which is done by the intellect alone*. So if we attend to quantity as it is in the imagination, which is what we do most often and most easily, we find it to be divisible, finite, composed of parts, and one of many. But if we attend to it as it is in the intellect, and perceive the thing as it is in itself, which is very difficult, then we find it to be infinite, indivisible and unique, as I have already demonstrated sufficiently to you before now.<sup>193</sup>

In the following, I will refer to the passage above as “Paragraph A.” Addressing the second half of Paragraph A, Michael Della Rocca writes:

Seeing things as divisible is, for Spinoza, a function of the imagination. This is something Spinoza stresses in Letter 12: “if we attend to



quantity as it is in the imagination . . . it will be found finite, divisible, and composed of parts." Since division is a function of the imagination and since, for Spinoza, the imagination is the domain of inadequate, confused, and not true ideas, it seems that to see reality in terms of divisible modes is, for Spinoza, to fail to grasp the way the world really is.<sup>194</sup>

Undoubtedly, Della Rocca is right in stressing that the imagination is the source of our inadequate, confused, and mutilated ideas,<sup>195</sup> and I therefore think Della Rocca is pointing out an extremely important and sensitive problem in Spinoza. As far as I can see, Paragraph A is almost the only text in Spinoza's works that seems to support the so-called acosmist reading of Spinoza,<sup>196</sup> developed originally by Salomon Maimon, and then made highly influential in Hegel's reading of Spinoza.<sup>197</sup> According to the acosmist reading, Spinoza denies the reality of the world of diverse phenomena and affirms the sole existence of God. Hegel presents Spinoza's alleged acosmism as a modern revival of the ancient Eleatic philosophy. Like Parmenides and Zeno, claims Hegel, Spinoza denied the reality of plurality, change, and duration, and affirmed the sole existence of the one, immutable, and indivisible substance. The plurality of attributes and modes in Spinoza is, according to Hegel, a mere illusion<sup>198</sup> and "has no truth."<sup>199</sup>

I have to confess that I have much sympathy for the acosmist reading of Spinoza, due to its boldness, elegance, and the fact that it might have some ground in Spinoza's texts. Still, on final consideration, I think it must be rejected. Let me point to some of the main textual and theoretical considerations in favor of this conclusion.<sup>200</sup>

(1) I have claimed that Paragraph A in Letter 12 is the strongest textual support for the acosmist reading. Let me first note that Paragraph A, while asserting that modes are commonly conceived by the imagination, does not rule out the possibility that modes might be conceived by the intellect. Indeed, we have seen that an earlier passage in Letter 12 alludes to the possibility that modes may be defined by the definition of substance, and presumably such a conception of the modes is adequate and not imaginary. Furthermore, if we continue reading Letter 12, we encounter a passage in which Spinoza criticizes certain opponents<sup>201</sup> for "depriving Corporeal Substance of its Affections and bringing about that it does not have the nature which it has."<sup>202</sup> The passage not only makes clear that the affections (i.e., modes) of substance truly belong to it, but it also asserts that were the substance not

to have the affections which it actually has, it would have to have a different nature or essence (which is, for Spinoza, a clear absurdity). The argument here is simple, since the actual affections of substance follow *necessarily* from God's nature; were God not to have the actual affections it has, it would have to have a different nature.<sup>203</sup> The context of this passage makes no reference to the imagination and provides no reason to think that it is only by virtue of the imagination that we ascribe affections to the substance. (2) Along similar lines, in another passage in Letter 12, Spinoza speaks about "the way Duration flows from eternal things" and the errors that result when we separate duration from its source.<sup>204</sup> Since duration is the kind of existence typical of modes, it would seem that Spinoza genuinely considers duration and modes to flow (or be the effects) of the eternal core of the substance. In this passage, again, the context contains no indication that the flaw at stake is merely imaginary. (3) The third and last passage from Letter 12 I would like to consider is the following: "From everything now said, it is clear that some things are infinite by their nature and cannot in any way be conceived to be finite, that others [are infinite] by the force of the cause in which they inhere, *though when they are conceived abstractly* they can be divided into parts and regarded as finite."<sup>205</sup>

The distinction in this passage is between the infinity of substance and its attributes (which is due to its essence) and the infinity of the infinite modes (which is due to the infinity of the substance in which they inhere). Notice Spinoza's emphasis on the point that it is only when the infinite modes are *conceived abstractly* (i.e., detached from the substance) that they can be divided, and thus subject to the operation of the imagination. The clear implication of this passage is that the (infinite) modes can also be conceived in another manner (i.e., non-abstractly), and when the modes are conceived in the latter manner, they are not subject to division and the operation of the imagination.

(4) E 1p16 is probably the most central juncture in the derivational map of the *Ethics* (no fewer than twenty passages cite it *explicitly*).<sup>206</sup> In this proposition, Spinoza argues that "infinite infinitis modis" follow from God's essence, and in the demonstration of this proposition Spinoza refers to the flow of the infinite infinity of modes as "what the intellect infers" from God's essence. For Spinoza, the intellect is *never* a source of error. Thus, the facts that the modes that follow from God's essence are inferred by the intellect and are described by Spinoza as "falling under an infinite intellect"<sup>207</sup> seem to guarantee their veracity and reality, and this sharply contradicts the acosmist denial of the reality

of modes. (5) E 1p16 itself relies on one text only: the definition of God as “a being absolutely infinite, i.e., a substance consisting of an infinity of attributes, of which each one expresses an eternal and infinite essence” (E 1d6). In the third section above, we saw that Spinoza has a very strong understanding of infinity as *actual*, quantitative, and transcending any finite number or quantity (i.e., having no *ratio* to the finite). Such an understanding of God as embedding the *most radical plurality* possible is diametrically opposed to the acosmist denial of any plurality. Now, one may make the methodological point that almost any comprehensive interpretation of a philosopher like Spinoza is likely to contain some unresolved tensions and may conflict with one text or another.<sup>208</sup> I tend to agree with this last claim. Yet I do not think that all tensions and textual conflicts are of equal value. In many cases, we can clearly point out the texts that constitute the very core of the philosophical system at stake, and in the case of Spinoza, I argue, E 1d6 and E 1p16 constitute this very core. Of course, there can be (and should be) debates about what constitutes the core of a certain philosophical system. On my side, I would be ready to enter such a debate, if asked, and would argue that *Spinoza-sans-E 1d6* is a radically domesticated animal, one deserving of mercy rather than admiration.

(6) The definition of God as absolutely infinite provides at least a partial answer to Hegel's main argument in favor of the acosmist reading of Spinoza. Frequently, Hegel argues that – due to Spinoza's lack of recognition of the importance of dialectic – Spinoza failed to derive the reality of the multiplicity of finite things from the absolute unity of substance (and that as a result the multiplicity of phenomena is not really grounded in reality).<sup>209</sup> This kind of argument relies on the misperception of Spinoza as beginning from an Eleatic point of departure, and then attempting (and failing) to prove the derivation of the plurality of modes from the original, absolute unity of God. Yet, the radical plurality built into the definition of God in E 1d6 makes this reading plainly false. Spinoza *begins* his system with absolute infinity, and thus he does not need to derive plurality, as a negation of the One, in the manner Hegel would like him to do.

(7) I have been alluding for quite some time to the fact that in Letter 12 Spinoza implies, but does not develop, the alternative conception of modes as things which are conceived by the intellect and defined by the very definition of substance. Conceived in this manner, modes would be eternal, and presumably also indivisible. Let us now turn to two crucial passages in the *Ethics* where Spinoza develops this kind of

conception of modes "*sub specie aeternitatis*." The first passage appears in E 2p45s. The proposition that precedes the scholium asserts that each idea of each singular thing involves God's eternal and infinite essence (E 2p45):

*By existence here I do not understand duration, i.e., existence insofar as it is conceived abstractly, and as a certain species of quantity. For I am speaking of the very nature of existence, which is attributed to singular things because infinitely many things follow from the eternal necessity of God's nature in infinitely many modes (see IP16). I am speaking, I say, of the very existence of singular things insofar as they are in God. For even if each one is determined by another singular thing to exist in a certain way, still the force by which each one perseveres in existing follows from the eternal necessity of God's nature.*

The topic of the passage is the *existence* of singular things, that is, modes. Notice Spinoza's insistence that he is speaking here not of duration but rather "of the very nature of existence," that is, of the innermost kind of existence, which is clearly eternity. Modes can be conceived as eternal once we consider them, not as in any way independent, but rather "as they are in God." When we conceive of modes in this manner, we really conceive of God, and God's existence is eternity. Thus, conceived or defined by the very definition of substance, the modes are eternal.

(8) Spinoza's talk about conceiving modes "insofar as they are in God" may appear too general, and we may wish to have an illustration of such a conception. In E 5p30, Spinoza provides an example of a conception of a certain mode "insofar as it is in God." The mode at stake is nothing but the human mind:

E 5p30: Insofar as our Mind knows itself and the Body under a species of eternity, it necessarily has knowledge of God, and knows that it is in God and is conceived through God.

Dem.: Eternity is the very essence of God insofar as this involves necessary existence (by ID8). To conceive things under a species of eternity, therefore, is to conceive things insofar as they are conceived through God's essence, as real beings, or *insofar as through God's essence they involve existence*. Hence, insofar as our Mind conceives itself and the Body under a species of eternity, it necessarily has knowledge of God, and knows, etc., q.e.d.<sup>210</sup>

Notice the phrase in italics above. When we conceive a mode – here, the human mind – through God's essence, the mode is really defined by the definition of substance, and *to that extent* the mode involves existence, that is, is eternal.<sup>211</sup>

Let me summarize. We have, I think, an extensive body of textual evidence showing that modes are not illusory, and that in the rare cases when we conceive them properly to involve existence through the essence of God, the modes are eternal.

Let me return now to Della Rocca's important question from a few pages ago. We have, I think, a solid body of evidence showing that the modes may be conceived by the intellect, and not only by the imagination. But are modes divisible when conceived by the intellect? I tend to think that the answer is: no. Modes, conceived through the definition of substance, are eternal, just like the substance, and presumably they should also be indivisible like the substance. Does that mean that we are back with the Eleatic conception of the mere existence of one, indivisible being? I do not think so.

The basic premise of Spinoza's mereology is that parts are prior to their wholes, both in existence and in knowledge.<sup>212</sup> For this reason, the substance is indivisible: were it to have parts, the parts would be prior to the substance, and the substance would cease to be *in itself* and *conceived through itself*. Thus, the substance cannot have parts that are prior to it. Can it have parts that are posterior to the substance? With one apparent exception, Spinoza never recognizes parts which are posterior to their whole,<sup>213</sup> but he does have another term for such entities, namely, modes,<sup>214</sup> and in the *Ethics* Spinoza speaks ceaselessly about the plurality of modes. The fact that the substance has two distinct modes, *n* and *m*, does not make the substance divisible (according to Spinoza's mereology), since neither *n* nor *m* are prior to the substance. Thus, the substance's having a plurality of modes seems to be consistent with its indivisibility.

## CONCLUSION

In this chapter, I have attempted to provide a multilayered account of Spinoza's metaphysics of substance. Following a brief introductory study of the main definitions at the opening of the *Ethics*, we turned to examine the logical properties of three core relations of Spinoza's metaphysics: causation, conception, and inherence. I argued that these relations have different logical properties and cannot be identified. Nor can

either one of these relations be identified with the parthood relation in Spinoza. In the third part of the chapter, I argued against Bennett's claim that Spinoza is not committed to the existence of more than two attributes. I showed that, given Spinoza's bold advocacy of actual infinity, the interpretation of "infinite" as entailing no more than two attributes makes little, if any, sense. In this section, I also explained Spinoza's reasons for holding that God cannot have a merely finite number of attributes. Following an elucidation of the nature of Spinoza's substance monism (in the fourth section), I proceeded to discuss the reality and nature of modes in Spinoza's metaphysics. I argued that Spinoza is committed to the view that the modes can be conceived by the intellect as defined by the very definition of substance, and that when modes are conceived as such, they are eternal. I have also argued that the indivisibility of substance is consistent with the reality of the plurality of modes and attributes, and that, as a result, the acosmist interpretation of Spinoza, despite its inherent allure, must be rejected.

We have no doubt left untouched many aspects of Spinoza's metaphysics of substance, but I hope, and believe, that we have been able to break some new ground in achieving a more nuanced and precise understanding of this subject. It turns out that – as the formidable edifice of Spinoza's *Ethics* itself testifies – unraveling the simple and bold assertion that only one substance exists requires one to engage in a lengthy, detailed, and nuanced project of philosophical elaboration.

#### NOTES

- 1 The notion of an "infinite mode" seems to be the only key concept of Spinoza's metaphysics that was first introduced by Spinoza and has no antecedents in the writings of his predecessors. See Melamed 2013a: 113. Unless otherwise marked, all quotations from Spinoza's works and letters are from Curley's translation (CW I). I have relied on Gebhardt's critical edition (Spinoza 1925) for the Latin text of Spinoza. I would like to thank Justin Bledin, Don Garrett, Zach Gartenberg, Colin Marshall, John Morrison, and Kristin Primus for their most helpful and discerning comments on earlier versions of this chapter.
- 2 See TIE §95: "To be called perfect, a definition will have to explain [*explicare*] the inmost [*intima*] essence of the thing." "*Explicare*" might be better rendered here as "explicate."
- 3 It is not easy to pin down the precise meaning of "affection" (*affectio*) in Spinoza. Roughly speaking, the term refers to a quality. In CM 1.3, Spinoza notes that "by affection we have here in mind what Descartes has elsewhere called attributes"

- (Descartes 1985: *Principles of Philosophy*, 1.52). Spinoza reserves the terminology of “attribute” for what Descartes would call a “principal attribute,” that is, an attribute that constitutes the essence of a thing (*Principles* 1.53). Cf. Curley's editorial notes in CW: I: 625.
- 4 Compare Della Rocca 2008: 42; and Newlands 2010 with Melamed 2013a: 198–99.
  - 5 Unlike these two features, the *causal* independence of substance is not built into the definition of substance. It is demonstrated in E 1p6 and its corollary.
  - 6 Apart from one rare occasion in Letter 12 (IV: 61/2), Spinoza hardly uses the term “inherence.” Still, I will keep on using it to denote the *in se/in alio* relations in accordance with current conventions.
  - 7 “NS” [*Nagelate Schriften*] refers to the text of the 1677 Dutch translation of Spinoza's works.
  - 8 This is in contrast to Descartes's discussion of the principal attributes, which makes no reference to the intellect. See Descartes 1985: *Principles of Philosophy* 1.53.
  - 9 Ep 9 | IV: 46/22. Italics added.
  - 10 See Chapter 3 of this volume.
  - 11 In Melamed 2017, I argue that the distinction between the substance and its attributes (and between any two attributes) is one which was classified as a “distinction of reasoned reason” in late medieval and early modern philosophy. Sam Newlands (2017) has independently reached the same conclusion.
  - 12 See, for example, E 1p10s, E 1p11, E 1p14, E 1p14c1, E 1p16, E 1p19, E 1p23, E 1p23, E 1p23, E 1p31, E 2p1, E 2p45, E 4p28, and E 5p35.
  - 13 See E 1p7d: “A substance cannot be produced by anything else; therefore, it will be the cause of itself.” By “the Principle of Sufficient Reason” I understand the claim that everything must have a reason, or that there are no brute facts. For further elaboration on the principle and its role in Spinoza's philosophy, see Melamed and Lin 2016.
  - 14 See, for example, Bennett 1996: 64.
  - 15 In E 1p8s2 Spinoza writes: “Since it pertains to the nature of a substance to exist (by what we have already shown in this Scholium), its definition must involve necessary existence, and consequently its existence *must be inferred from its definition alone*” (italics added). In E 1p7d, Spinoza indeed infers the existence of substance, yet this inference does *not* rely on the mere definition of substance but rather assumes that the substance must have a cause. I suspect that for Spinoza the last assumption was simply self-evident, and for this reason he could refer to the inference of the existence of substance as relying “on its definition alone.”
  - 16 For an excellent reconstruction of Spinoza's proof of E 1p11 and the role of the Principle of Sufficient Reason in this proof, see Della Rocca 2002. In Melamed 2015, I have traced Spinoza's experimentation with various definitions and conceptualizations of both substance and attribute. Notably, all the drafts of the

*Ethics* that are quoted in Spinoza's correspondence derive the claim that God's nature involves existence from the inability of one substance to produce another. The earliest draft of the *Ethics* (which is commonly accepted as such) is quoted in Letter 2, and the argument from the inability of one substance to produce another to the existence of God is hinted at in IV.8/5–8. The same argument also appears in Propositions 3 and 4 of the First Appendix to the *Short Treatise*. In Melamed 2019, I suggest that this appendix is most likely the earliest draft of Spinoza's *Ethics* we currently have.

- 17 AT VII: 65–67 | CSM II: 45–46.
- 18 This crucial point was first pointed out in Garrett's outstanding "Spinoza's 'Ontological' Argument." (Garrett 1979).
- 19 KV 1.7 note a | I: 44/23.
- 20 Moreover, since Spinoza is committed to the priority of parts to their whole (i.e., the whole depends asymmetrically on its parts both for its existence and for its conception; see E 1p12d), were the attributes parts of God, God would depend on the attributes. This would seem to undermine the status of God as being in itself and conceived through itself.
- 21 See, for example, Wolfson 1934: I: 53–54: "If the expression 'which the intellect perceives' is laid stress upon, it would seem that the attributes are only *in intellectu*. Attributes would thus be only a subjective mode of thinking, expressing a relation to a perceiving subject and having no real existence in the essence . . . . According to [this] interpretation, to be perceived by the mind means to be *invented* by the mind."
- 22 See Gueroult 1969: 51.
- 23 Since (1) Spinoza asserts that the attributes explicate and express God's existence (E 1p20d), and since (2) he also affirms that "God's essence and his existence are one and the same" (E 1p20d), it would seem to follow that the attributes express and explicate God's essence. I tend to think that both readings can be reconciled if we view each attribute as constituting an aspect of God's essence/existence. See my discussion of the attributes in Melamed 2012b: 101–3; 2017. Cf. Morrison 2020.
- 24 See Spinoza's assertion in E 1p16d: "Each of the attributes expresses an essence infinite *in its own kind*" (italics added).
- 25 Ep 4 | IV: 13/2–21.
- 26 See E 1p8d and E 1p21d. E 1p22d may commit Spinoza to the view that each degree of mediation of the infinite modes constitutes a separate kind. Cf. Melamed 2013a: 116–19.
- 27 In the following few pages I rely partly on Melamed 2017.
- 28 Aristotle 1963, *Categories* 2a12–2a17 (the translation is by J. L. Ackrill).
- 29 See *Categories* 2b31 (quoted in note 30). The further question of whether or not what is *in* a substance (such as whiteness) is repeatable is a subject of major



- controversy among scholars. For two opposing views, see Ackrill in Aristotle 1963 and Owen 1965.
- 30 Aristotle explicitly states his reason for considering genera and species as secondary substances: "It is reasonable that, after the primary substances, their species and genera should be the only other things called (secondary) substances. For only they, of things predicated, reveal the primary substance. For if one is to say of the individual man what he is, it will be in place to give the species or the genus" (Aristotle 1963: *Categories* 2b29–31).
- 31 For Aristotle, the relation *y is said of x* is transitive. Hence, the genus that is said of an individual's species is also (transitively) said of the individual itself.
- 32 *Metaphysics VII (Z)*, 1028b36.
- 33 An interesting question, which I will not discuss here, is whether an Aristotelian substance must have properties. On the one hand, if the substance were to have no properties it would be unintelligible (in fact, it would be very much like Aristotelian prime matter). On the other hand, if a substance must have properties, then the substance is dependent (admittedly, in a weak sense) on its properties, which seems to conflict with the independence of substance. Spinoza would face a similar problem were he to explain why God must have modes. For medieval objections to the possibility of substance without accidents, see Normore 2010: 675. For Leibniz's claims that the monad cannot subsist without some property, see Leibniz 1989: *Monadology*. For a defense of Spinoza's view that substance must have modes even though it is not in any way dependent on its modes, see Melamed 2012d.
- 34 See, for example, Arnauld and Nicole's characterization of substance: "I call whatever is conceived as subsisting by itself and as the subject of everything conceived about it, a thing. It is otherwise called a substance" (1996: 30). "Subsistence by itself" is traditionally explained as not being predicated of anything. According to Eustachius of St. Paul, "to exist or subsist *per se* is nothing other than not to exist in something else as in a subject of inherence" ([1609: I.97. iv]; translated in Rozemond 1998: 7).
- 35 Cf. Rozemond (1998: 7) for a similar stress on the continuity between the Scholastic and Cartesian views of substance.
- 36 AT VII: 161 | CSM II: 114.
- 37 In fact, in the Sixth Set of Replies, Descartes explicitly allows for one substance to be predicated of another substance, though only in a loose manner of speaking (AT VII: 435 | CSM II: 293).
- 38 AT VII.162 | CSM II.114.
- 39 CSM I: 210. The passage in angle brackets appears only in the French version of the *Principles*.
- 40 Cf. the Synopsis to the *Meditations* (AT VII: 14 | CSM II: 10).

- 41 Of course, for Descartes, the distinction between substance and principal attributes is only a distinction of reason. Still, this does not make God's attributes into substances (at least no more than the attributes of any *finite* substance).
- 42 In a note in the *Theological-Political Treatise* (CW II), Spinoza refers to Gersonides as "virum eruditissimum [a most erudite man]" (III.257), a compliment quite uncommon for Spinoza. For discussion of Spinoza's response to Gersonides, see my "Spinoza's Critique of Gersonides' view on Divine Omniscience" (forthcoming).
- 43 I have slightly altered Feldman's translation, which renders "yahas" as "similarity." The more precise translation is, I believe, "relation."
- 44 I have again slightly altered Feldman's translation, which renders 'nimtza me-atzmo' as "self-subsisting,"
- 45 Gersonides 1560: III: 3.23b | 1884–99: II: 114.
- 46 Spinoza refuses to mark out a genuine category of "second best" substance, a category which would aim primarily at securing, or appeasing, common religion ("Why stop with 'second best' substances and not continue with 'third best' substances, etc.?" one might ask).
- 47 In Letter 60 (1675) Spinoza argues that a proper definition of a thing must express its efficient cause. In this letter he applies this stipulation to the case of God, indicating that *God must have an efficient cause as well*. Since God cannot be caused by anything other than itself, it must be the efficient cause of itself.
- 48 The claim that everything must have a cause is a variant or corollary of the Principle of Sufficient Reason, one can read E 1a3 as stating this principle.
- 49 Although, in the First Set of Replies, Descartes notably claims that God is the efficient cause of itself. Descartes characterizes the cause of itself in terms of independent existence, which differs little from his conception of substance (AT VII: 108–9). For a nuanced study of *causa sui* in Descartes, see Tad Schmaltz 2011. Cf. Carraud 2002: 266–87, 295–302.
- 50 Notice the dualistic nature of this definition that – like the definitions of substance and mode – defines the term in both ontological and conceptual terminology. On the nature of the "x involves y" relation, see Melamed 2012b: §3.1.
- 51 For the sake of simplicity of presentation, I will treat the above relations as binary (i.e., relations obtaining between *two* relata), though strictly speaking, Spinoza seems to consider at least some of them as multigrade relations, that is, having various degrees of arity. (Conception, e.g., may obtain between two relata, as when *y* is conceived through *x*, but it may also obtain among any other *n* number of relata, such as when  $x_1$  and  $x_2$  and  $x_3 \dots$  and  $x_n$  are all conceived through *y*.) For the distinction between unigrade and multigrade relations, see Leonard and Goodman 1940: 50–51.
- 52 Like Garrett, I translate "causa transiens" as "transient cause" (rather than Curley's "transitive causation") in order to avoid the likely confusion with transitivity as a property of logical relations.

- 53 In passing, let me note that the adjective “immanent” appears in Spinoza’s work in one and only one context, that is, as a modifier of “cause.” Spinoza is frequently described in current literature (especially in circles of so-called continental philosophy) as “immanentist.” Such a description, to the extent that it has any clear meaning, is just false. Later in this chapter, I will expound Spinoza’s strict commitment to the existence of infinitely many attributes that are just as real as our universe of extension and thought. To that extent, Spinoza’s God/Nature *infinitely transcends* what we understand by the notion of “nature.”
- 54 E 1p15: “Whatever is, is in God, and nothing can be or be conceived without God.”
- 55 For Spinoza, causation is primarily, and most probably uniquely, efficient causation (in the *Ethics* there is only one mention of non-efficient causation in E 5p31d). In his otherwise insightful book, Vincent Carraud has argued that Spinoza’s notion of causation should be understood as formal causation (2002: 313–24). As the discussion above shows, both immanent and transient causes (which are the most commonly mentioned causes in the *Ethics*) are indisputably efficient. Spinoza’s claim in Letter 60 (IV: 271/30) that the definition of God must express God’s efficient cause implies that God has an efficient cause. Obviously, the only being that can be God’s efficient cause is God himself. Therefore, we may conclude that for Spinoza (unlike Descartes) even the *causa sui* of E 1d1 is efficient.
- 56 E 1p16c1: “From this it follows that God is the efficient cause of all things which can fall under an infinite intellect.”
- 57 Cf. Garrett 2003: 157n31.
- 58 KV 1.3 | I: 35/20.
- 59 Strictly speaking E 1p18d argues that there is no *substance* outside God. Yet, since all things are either substances or modes (per E 1a1), if there were something outside God that were not a substance, it would have to be a mode. But a mode must be in a substance, and thus it must be in God, the only substance.
- 60 Later, in E 2p13s (II: 99/6), Spinoza will draw the very same distinction, though with the slightly different terminology of “internal/external cause.” Cf. KV 2.26 | I: 110/23.
- 61 See KV 2.25 | I: 110/23.
- 62 Curley translates “cognition” as “knowledge.” Spinoza, however, allows for inadequate and false *cognitio*. Therefore, I have amended the translation and rendered “cognition” as “cognition.”
- 63 In E 2p47, Spinoza relies on E 1a4 in order to establish the claim that “God’s essence is known to all,” that is, that one cannot fail to know God’s essence (though, of course, one may not know that she knows God’s essence). E 2p47

- makes the knowledge of God's essence the most accessible and trivial kind of knowledge, since any other knowledge assumes it. See Melamed 2013a: xvi.
- 64 E 1a4 is explicitly cited in E 1p3, E 1p6c, E 1p25, E 2p6, E 2p7, E 2p16, E 2p45, and E 5p22.
- 65 For two excellent studies of E 1a4, see Wilson 1999 and Morrison 2013.
- 66 For a powerful argument against the bidirectional interpretation, see Morrison 2013. Spinoza applies E 1a4 as implying causation from conception only once (in E 1p25d), and this one application could be a result of a simple confusion in opening a contrapositive. For my reasons for (hesitantly) supporting the bidirectional interpretation, see Melamed 2013a: 105–6.
- 67 The substance inheres in itself (E 1d3), while a mode does not (E 1d5). See, however, Garrett 2002 for an intriguing argument to the effect that even modes inhere in themselves to a degree.
- 68 The substance is conceived through itself (E 1d3), while a mode is not (E 1d5).
- 69 The substance is the cause of itself (E 1p7d), while a mode is not (since a mode is conceived through another [E 1d5], and per E 1a4 it must also be conceived through that other).
- 70 Notice that I am here using the term “transitive” in *our* sense, as a property of relations (which satisfy the condition: necessarily, if  $xRy$  and  $Ryz$ , then  $Rxz$ ), and not in the sense used by Spinoza (in Curley's translation) in talking about “transitive cause [causa transiens],” that is, an efficient cause whose effect does not inhere in the cause.
- 71 I assume he considers the transitivity of the three relations trivial eternal truths (just like the claim that the whole is greater than its part). Still, a certain degree of caution is in order here, since in the case of another relation that is almost universally considered as transitive, that is, identity, Spinoza has a rather surprising and bold view. See Garrett 2017.
- 72 In Melamed 2013a (123–24), I show that the relation “ $x$  follows from  $y$ ” (in E 1pp21–23) is one of immanent causation, that is, a combination of efficient causation and inherence.
- 73 Thus, any infinite mode “which exists necessarily and is infinite, has had to follow from the absolute nature of some attribute of God – either immediately *or by some mediating modification*, which follows from its absolute nature” (E 1p23d, italics added).
- 74 For the equivalence of conception and explanation in Spinoza, see Della Rocca 1996: 3–4.
- 75 One route to documenting the transitivity of conception in Spinoza is by relying on the transitivity of causation (per E 1p28s or E 1p23d), and the causation-conception bridge of E 1a4.
- 76 Since a thing may inhere in itself, inherence cannot be *asymmetric*.

- 77 I will not consider the possibility of the modes' inhering in each other and in *different* substances, since such a scenario would patently make the alleged substances mutually dependent by virtue of the mutual dependence of their modes.
- 78 Since in the absence of *y*, *S* would not have *x* as its mode.
- 79 And not merely equally-or-less-real than its substance. On the degrees of reality in Descartes, see Meditation III | AT VII: 41, and the Third Set of Replies | AT VII: 185. Spinoza endorses the view that reality comes in degrees in several texts. See, for example, E 1p9.
- 80 In such a case, *x* and *y* could inhere in each other as long as they were equally real.
- 81 Namely, the relation of flow of one infinite mode from another is transitive, asymmetric, and every two items it relates are comparable. See Melamed 2013a: 114–22.
- 82 Since everything must have an effect (E 1p36), and the effect of an infinite mode can only be another infinite mode (E 1p22), it follows recursively that there must be an infinite chain of infinite modes (in each attribute). For a detailed explication of this issue, see Melamed 2013a: 119–20.
- 83 This depletion of perfection would constitute a serious problem for an interpretation which ascribes to Spinoza strict adherence to the Principle of Sufficient Reason *and* a complete assimilation of inherence and causation. I would argue, however, that for Spinoza inherence – unlike (transient) causation – is not a closed system, and that the totality of inhering entities is *less* real, and less perfect, than the substance. In other words, (transient) causation, but not inherence, conserves the degree of reality among its two relata.
- 84 In the E 1ap passage above, Spinoza uses the terminology of causation in claiming “that effect is most perfect which is produced immediately by God.” I pointed out earlier that the causation among the infinite modes is that of immanent causation, which is a relation composed of efficient causation and inherence. The depletion of perfection/reality is truly the product of the inherence (rather than the causation) element in immanent causation (since Spinoza clearly accepts that modes are less real than the substance, and we have no textual evidence for the claim that an effect [of transient cause] is less real than its cause).
- 85 For otherwise, God's essence would have to be conceived through Fido (per E 1a4), and it would cease to be self-conceived.
- 86 Ep 32 | IV: 170/15–18.
- 87 Ep 32 | IV: 171/9–13.
- 88 Ep 32 | IV: 172/17.
- 89 I prefer the term “Physiological Digression” rather than the more common “Physical Digression,” since it is clear that this interlude in the middle of Part Two of the *Ethics* was not at all meant as an overview of Spinoza's physics (see Peterman's convincing argument in 2014: 218–21), but rather provides the relevant

- physiological background for Spinoza's theory of the imagination, developed in E 2pp17–19.
- 90 See II: 99/9–14.
- 91 Compare II: 99/16–21 with II: 105/5–9.
- 92 Since we have established before that, for Spinoza, causation is neither reflexive nor irreflexive, we can now further assert that causation is also neither antisymmetric, nor not-antisymmetric.
- 93 For instance, Fido is conceived through God's essence, but not the other way around.
- 94 As when two billiard balls A and B collide, and the explanation of the state of each ball (after the collision) lies partly in the nature of the other ball.
- 95 Thus, if we define A as the set of all things that exist in Spinoza's ontology (substance, attributes, and modes), the relation of conception  $Cxy =_{\text{def}} x$  is conceived through y) is *serial* on A, that is, for every  $x \in A$ , there exists  $y \in A$ , so that  $Cxy$ . The same will hold true for causation and inherence. Neither one of the three relations is *comparable* on A, since it is not the case that for every  $x, y \in A$ , either  $Rxy$  or  $Ryx$ . Comparability will obtain in more restricted domains of Spinoza's ontology. Thus, if we define E as the set of all infinite modes of extension, the relation of inherence  $Ixy =_{\text{def}} x$  is in y) is comparable on E, since for every  $x, y \in E$ , either  $Ixy$  or  $Iyx$ .
- 96 See, for example, Della Rocca 2008: 2, 8, and 30.
- 97 "Both inherence and mere causation are kinds of dependence, but, for Spinoza, by virtue of his rationalism, they are ultimately the same kind of dependence, and that is conceptual dependence tout court" (Della Rocca 2008: 67. Cf. 265).
- 98 Della Rocca (2008: 44) states the coextensiveness of causation and conception (a claim I readily accept), and he argues (2008: 68–69) for the identity of inherence and causation (a view I will shortly challenge). Newlands states the coextensiveness of three relations: "Necessarily, for all x and y, x is conceived through y, iff y causes x, iff x inheres in y, iff x requires y to exist" (2010: 471).
- 99 "Spinoza treats all instances of metaphysical dependence as synonymous or reducible to causation, inherence, or conceptual dependence. Examining these three relations in more detail will help us grasp Spinoza's remarkable monistic conclusion: *all* relations of dependence are just conceptual dependence relations" (Newlands 2010: 474). Newlands ambitious claims are a remission to Husserl's project in his third Logical Investigation (2001), which attempts to develop a theory of a relation of pure logical dependence.
- 100 See Melamed 2013a: 94–104.
- 101 See E 1p18d and my explication of E 1p18d above. For a possible response by Della Rocca, and a rebuttal to this response, see Melamed 2013a: 96–97.
- 102 E 1p17s| II: 63/18–22.

- 103 Formally, if  $Cxy =_{\text{def}} x$  is the cause of  $y$ , and  $Ixy =_{\text{def}} x$  is that in which  $y$  inheres, then the immanent cause would be the composite relation:  $C \circ I$ .
- 104 KV 2.26 | I: 110/32–35. Italics added.
- 105 Newlands 2010: 470.
- 106 In the texts in which Spinoza discusses reciprocal causation, there is no trace of the view which identifies the two relata.
- 107 Ep 36 (IV: 184/24–29). This definition of destruction seems to be at work also in E 4p39d (II.240/10).
- 108 Thus, in the last step of the *reductio* argument in E 1p12s, Spinoza writes: “*and the whole (by D4 and P10) could both be and be conceived without its parts, which is absurd*, as no one will be able to doubt” (italics added). For other texts where Spinoza asserts the priority of parts, see, for example, DPP 1p17d, CM (I: 258/16), KV (1.25/23) and (I: 30/10), and Ep 35 (IV: 181/25).
- 109 For a helpful discussion of the medieval consensus that no part is identical to its whole, see Arlig 2015: §3 and §4.1.
- 110 The precise definition of “proper part” will require us to decide whether we allow for a null individual. Assuming there is no null individual, a proper part of  $x$  is any part of  $x$  that is not numerically identical to  $x$ .
- 111 “The whole is greater than the part” is also the Fifth Axiom of the First Book of Euclid’s *Elements*.
- 112 Since the Latin has no definite or indefinite articles, both readings are grammatically correct.
- 113 See E 1p29s: “Before I proceed further, I wish to explain here – or rather to advise [the reader] what we must understand by *Natura naturans* and *Natura naturata*. For from the preceding I think it is already established that by *Natura naturans* we must understand what is in itself and is conceived through itself, or such attributes of substance as express an eternal and infinite essence, i.e. (by P14C1 and P17C2), God, insofar as he is considered as a free cause. But by *Natura naturata* I understand whatever follows from the necessity of God’s nature, or from any of God’s attributes, i.e., all the modes of God’s attributes insofar as they are considered as things which are in God, and can neither be nor be conceived without God.”
- 114 For an alternative, and more intricate, reconstruction of the interrelations among conception, inherence, and causation in Spinoza, see Melamed 2013a: 105–12.
- 115 Italics added.
- 116 Bennett 1996: 65. Italics added.
- 117 Bennett 1984: 76; 1996: 65.
- 118 Bennett 1984: 78–79.
- 119 Bennett 1984: 78.
- 120 Bennett 1984: 76–77; 1996: 66.

- 121 Bennett 1984, 77.
- 122 The closest Spinoza comes to the last claim is in a note to the first chapter of the first part of the *Short Treatise* where he claims: "After the preceding reflections on Nature we have not yet been able to find in it more than two attributes that belong to this all-perfect being" (KV 1.17/35–38). However, he *immediately* continues and argues against the view that God has merely two attributes: "And these give us nothing by which we can satisfy ourselves that these would be the only ones of which this perfect being would consist. On the contrary, we find in ourselves something which openly indicates to us not only that there are more, but also that there are infinite perfect attributes which must pertain to this perfect being before it can be called perfect" (KV 1.17/38–42).
- 123 II: 90/14–18 (Italics added).
- 124 II: 90/23–28. Italics added.
- 125 Italics added.
- 126 II: 96/12.
- 127 Melamed 2013a: 169–71.
- 128 IV: 261/11–15. Italics added.
- 129 Ep 35 | IV: 181/16.
- 130 Though I would not put much weight on the latter source, since it addresses Spinoza's 1663 book, *Descartes' "Principles of Philosophy,"* and one could argue that there Spinoza is referring to the Cartesian conception of God's attributes.
- 131 See Melamed 2015b: 277–78.
- 132 TTP chapter 6 | III: 83/10.
- 133 See note d | I: 17/34–48.
- 134 KV Appendix 2 | I: 119/6–13. Cf. I: 120/1–6.
- 135 Pollock 1966: 161; Leibniz AA, 6th Series, Volume 3, 385 (lines 12–15; italics added). I slightly amended Pollock's translation by replacing "in this world" by "here." which is more loyal to the Latin *hic*.
- 136 Ep 12 | IV: 53/12–14.
- 137 E 2pr | II: 84/8–12. Italics added.
- 138 Though, as we have already seen, the issue occasionally crops up in E 2p13s, given the possibility of a mismatch between minds and their proper object.
- 139 One may speculate that the version of the *Ethics* written by Spinoza's twin in the third attribute would be silent about the nature of extension, since the latter kind of knowledge would be of no use in studying the measures leading to the blessedness of the mind of this third-attribute twin of Spinoza.
- 140 E 2p13.
- 141 E 2p7: "The order and connection of ideas is the same as the order and connection of things."
- 142 See the elegant account of the barrier in Della Rocca 1996: 9–22.



- 143 For a detailed presentation of this issue, see Melamed 2013a: chapter 6. My account here and in the next page relies partly on my paper "Building Blocks"
- 144 Crescas 1990: I: 3, 3 (pp. 106–8). Cf. Levy 1987: 204–7; and Harvey 2010: 91–94.
- 145 Ep 12 | IV: 62/1–10.
- 146 See Harvey 2010: 94.
- 147 See Descartes's Letter to Mersenne from July 1641 (AT III: 394 | CSM III: 185). The letter was included in the third volume of the first edition of Descartes' letters, published in Paris by Claude Clerselier, in 1667.
- 148 See *Principles of Philosophy*, 1.56. Cf. *Comments on a Certain Broadsheet* (AT VIIIb: 348 | CSM I: 297).
- 149 On the incomprehensibility of the infinite in Descartes, see Ariew 1990: 17.
- 150 Notice, however, that in contrast to the incomprehensibility of the Cartesian God, Spinoza's "unknown attributes" are comprehended by some *finite* minds, that is, the minds of the modes of the unknown attributes.
- 151 See Melamed 2010.
- 152 "The infinite cannot be composed of a number of finite parts" (KV 1.1 | I: 18/10). E 1p15s (II: 58/27): "infinite quantity . . . is not composed of finite parts." Cf. KV 2.24 | I: 107/1: "For how is it possible that we could infer an infinite and unlimited thing from one that is limited?"
- 153 E 1p10s | II: 72/10–17. Italics added.
- 154 Ep 54 | IV: 253/7–11. Italics added. A similar argument appears at the end of E 1p17s, where Spinoza argues that insofar as God is the cause both of the essence and existence of finite things, they must differ "and *cannot agree with it in anything except in name*" (II: 63/30). Italics added. Cf. CM 2.11 | I: 274/32–34.
- 155 The claim that there is no *ratio* between the infinity of God and finite things also appears in Gersonides (1560: III.3/23b | 1884–99: II.114.), quoted above, and in Crescas 1990: I: 3, 3. Cf. Melamed 2014: 213–14.
- 156 A reader who is still confused by Spinoza's arguments in Letters 64 and 66 is invited to consult my detailed reconstruction of Spinoza's arguments in Melamed 2013a: 156–65.
- 157 In passing, let me note that in his 1883 work *Foundations of a General Theory of the Manifolds: A Mathematico-Philosophical Investigation into the Theory of the Infinite*, Cantor was engaged in a close study of Spinoza's advocacy of actual infinity in Letter 12, and of his theory of the infinite modes. Thus, for example, Cantor notes: "An especially difficult point in Spinoza's system is the relationship of the finite modes to the infinite one; it remains unexplained how and under what circumstances the finite can maintain its independence with respect to the finite, or the infinite with respect to still higher infinities" (Cantor 1990: 892). Cantor's discussion of the independence of finite modes clearly echoes the concerns raised by Hegel (for a discussion of the last issue, see Melamed

2010a). Overall, Cantor's discussion of the kinds of infinity in Spinoza is blended with his own views about the transfinite numbers. Thus, Bennett's mockery of "Spinoza and his contemporaries" who unlike Cantor "had just muzzles and puzzles" (Bennett 1984: 76) seems somewhat out of place, as Cantor's writing seems to show that it was precisely "the muddles and puzzles" of Crescas, Spinoza, and Leibniz, that engaged Cantor and stimulated the development of his theory of transfinite numbers.

158 Laerke 2012.

159 Ep 50 | IV: 239/25–31. Italics added.

160 The formula "You are one but not in number [*had ve-lo be-hushban*]" appears in the Second Preface to the *Tikkunei Zohar* (in *Zohar* 1998: 10, 85). See also Ibn Gabbirol's magisterial poem, "Kingdom's Crown" (Gabirol 2010: 141): "You are one but not as one that's counted." "Yigdal," a liturgical poem that is recited in many Jewish communities at the conclusion of the Sabbath eve service, contains the phrases: "one but there is no one like him in his oneness [*ehad ve-ein yahid ke-yihudo*]." For an illuminative discussion of similar claims in Aquinas, see Geach 1971: 21–22.

161 See Yosef Irgas 1965: 80. Irgas cites several other sources supporting his view.

162 Ep 4 | IV: 14/12–16. Cf. Melamed 2012c: 189.

163 Ep 50 | IV: 239/32–240/25. Italics added.

164 Italics added.

165 Gueroult 1969: 107–76; Smith 2014. For Gueroult and Smith, every single attribute is a substance, and thus, even *after* the synthesis of the infinitely many single-attribute substances into God, there is a sense in which there infinitely many substances (just as there are infinitely many attributes).

166 Smith 2014: 659.

167 Smith rightly points out that even in E 1p15s Spinoza feels comfortable moving from the terminology of attributes to single-attribute substance, as in II: 56/21: "extended substance is one of God's infinite attributes." (Smith 2014: 672). Let me only add that in the early drafts of the *Ethics* (as documented in Spinoza's letters), Spinoza occasionally switches the definitions of substance and attribute, see Melamed 2015: 274–75.

168 Gueroult 1969: 184; Smith 2014: 656n7 and 685–86.

169 Gueroult 1969: 184–85; Smith 2014: 685–86.

170 E 2p10s | II: 93/30–94/4.

171 See the section discussing the attributes in Melamed 2013a: 83–86 and 154–56; 2017. For a recent attempt to develop this view, see Morrison 2020.

172 See Schaffer 2016: 1–9.

173 See Schaffer 2016: 8.

174 Concreta foundationalism is the view that every concrete item is either basic (among concreta) or dependent on something basic (among the concreta).  $\forall x(Cx \rightarrow$

- ( $Bx \vee \exists y(By \& Pxy)$ ) (when 'C' denoted the property of being concrete, 'P' the priority relation, and 'B' being a basic object (Schaffer 2016: 24). Priority Monism asserts that there is precisely one basic concrete object.
- 175 See Schaffer 2016: 24.
- 176 See, for example, E 1p12d.
- 177 See Schaffer 2016: 12.
- 178 In his *Spinoza's Metaphysics* and *Behind the Geometrical Method*, Edwin Curley argued that Spinozistic modes are merely caused by God, but that they do not inhere in God, and that therefore, Spinoza is not a pantheist. There is no doubt that Spinozist modes are indeed caused by God (or more precisely, caused by God's essence, or *natura naturans*, per E 1p16), but as far as I can see, Curley's reading conflicts flatly with the bulk of Spinoza's texts, and with many of his key philosophical doctrines. For a detailed critique of Curley's reading, see Carriero 1995 and my *Spinoza's Metaphysics*, (Melamed 2013a: 3–60).
- 179 See Ep 80 and Ep 81.
- 180 Ep 12 | IV: 52/25.
- 181 Ep 12 | IV: 53/18.
- 182 See E 1p7, E 1p5, and E 1p8, respectively.
- 183 Ep 12 | IV: 54/9–16. Italics added.
- 184 In Melamed 2012b, I show that the existence of substance is strictly *identical* to its essence.
- 185 Another place where Spinoza displays in sharp relief the contrast between the existence of substance and the existence of modes is E 2p10, where he argues (against Descartes) that the *esse* (being) of substance does not belong to the essence of man. On the distinction between the *esse* of substance and that of modes, see Schechter 2014: 61–62.
- 186 I amend here Curley's translation of "explicare" as "explain," since it is clear that Spinoza is not looking here for the causes which explain existence, but rather addresses the two opposite manners of explicating, or unfolding, existence.
- 187 Ep 12 | IV: 54/18–55/3.
- 188 In E 1p21, Spinoza ascribes eternity to the (immediate) infinite modes. However, the eternity of the infinite mode is of an inferior kind: it is a mere sempiternity (unlike the eternity of substance). I show that Spinoza distinguishes between these two kinds of eternity, and ascribes only the inferior eternity to the infinite modes, in Melamed 2012b: 93–96, 2016: 158–61.
- 189 Italics in original.
- 190 The definition of eternity in E 1d8 is circular, and arguably, it is intentionally (and legitimately) so. I discuss this issue in Melamed 2016: 152–56.
- 191 Yet, the existence of enduring things must be internally consistent, as well as consistent with the "order of nature," that is, the order of other things instantiated in duration. See E 2p8c.

- 192 On the indivisibility of substance and the divisibility of modes, see Melamed 2012b: 47–48 and 126–32.
- 193 Ep 12 | IV: 55/5–56/15. Italics added.
- 194 Della Rocca 2016: 196.
- 195 See Della Rocca 1996: chapters 3 and 6.
- 196 The only other significant text is E 1p5d (II: 48/12–13). Here, much depends on the meaning of the expression “*verè considerata*.” On the reading I am about to suggest, to consider modes to have functions *not grounded in their substance* is to consider them not truly.
- 197 See Melamed 2010a, 2014.
- 198 Hegel 1969: 98.
- 199 Hegel 1995: III: 269.
- 200 For some additional arguments against the acosmist reading, see Melamed 2012b: 79–82; 2013b: 209–10.
- 201 Those who believe that there is a beginning to movement and time, and thus that before that beginning, the extended substance “was deprived of its Affections.”
- 202 Ep 12 | IV: 60/13–14.
- 203 The argument here is a certain variant of *modus tollens*.
- 204 Ep 12 | IV: 56/17.
- 205 Ep 12 | IV: 61/1–3. Italics added.
- 206 For a detailed discussion of this key proposition, see Melamed 2013a: 50–52 and 150–51.
- 207 E 1p16d | II: 60/29–30.
- 208 See Della Rocca 2016: 296.
- 209 See Hegel 1969: 537–38; 1995: III: 260, 264, 288–89; and 2007: 138.
- 210 Italics added.
- 211 When we conceive the modes independently of the definition of substance, their essence does not involve existence (Ep 12 | IV: 54/10).
- 212 See E 1p12d | II: 55/12–14.
- 213 The one apparent exception is Letter 32 (IV: 174/13). See note 214.
- 214 In Letter 32, Spinoza does not employ the terminology of modes. The one apparent exception in Letter 32, where Spinoza refers to a part which is prior to its whole, is clearly a reference to what Spinoza would call in other texts a mode. Here is the relevant passage: “But in relation to substance I conceive each part to have a closer union with its whole. For as I tried to demonstrate previously to you in my first Letter, since it is of the nature of substance to be infinite, it follows that each part pertains to the nature of corporeal substance, and can neither be not be conceived without it” (Ep 32 | IV: 173/8–13).