RESEARCH

Spinoza’s ‘Infinite Modes’ Reconsidered

Kristin Primus
UC Berkeley, US
kprimus@berkeley.edu

My two principal aims in this essay are interconnected. One aim is to provide a new interpretation of the ‘infinite modes’ in Spinoza’s Ethics. I argue that for Spinoza, God, conceived as the one infinite and eternal substance, is not to be understood as causing two kinds of modes, some infinite and eternal and the rest finite and non-eternal. That there cannot be such a bifurcation of divine effects is what I take the ‘infinite mode’ propositions, E1p21–23, to establish; E1p21–23 show that each and every one of the immanent effects of an infinite and eternal God is an infinite and eternal mode. The other aim is to show that these propositions can be understood as part of an extended critical response to Descartes’s infamous doctrine that God creates eternal truths and true and immutable natures. If we have the correct (Spinozan) conceptions of what God is and how God works, we see that an eternal and infinite God can only be understood to cause ‘eternal truths,’ and that these eternal truths are infinite and eternal modes of God.

Keywords: infinite modes; eternal truths; true and immutable natures; Spinoza’s response to Descartes; divine causation

I

Some elements of Spinoza’s system are recognized to be integral to it, even if it is unclear what, precisely, those elements are. The modes ‘which exist necessarily and are infinite’ (E1p23), or the ‘things which are infinite by virtue of their cause’ (Ep. 12, G IV.53), are among these elements. Passages explicitly mentioning what have come to be called the ‘infinite modes’ are few, the demonstrations in the Ethics concerning them are some of the most abstruse in a book full of hard-to-follow arguments, and the clarifications Spinoza provides in his correspondence are obscure and exasperatingly brief.

Nevertheless, there is consensus that there are two basic kinds of modes, infinite modes and finite modes, and that the former supply a causal link between the one infinite, eternal, necessarily existing substance and the more familiar world of finite modes. Without the link, it looks like Spinoza’s system is inconsistent. Spinoza says that finite things come to be from other finite things (E1p28), but he also says that the one infinite, eternal, necessarily existing substance causes modes that are infinite, eternal, and necessary (E1p21–23). The one substance, God, is the cause of all things (E1p18). How can that be the case if God causes what is infinite, but what is finite is caused by what is finite?

Scholars have answered this question in a variety of ways. Some propose that infinite modes are features of reality described by laws of nature. Finite things and these infinite modes are each necessary, but only jointly sufficient, for the coming to be of finite things; God is the cause of finite things because God causes

---

1 Where G = Spinoza (1972). Other abbreviations: E = Ethics (references by PartTypeNumber, so E1p15 is Ethics, Part 1, Proposition 15), Ep = Letters, KV = Short Treatise, CM = Cogitata Metaphysica, PPC = Descartes’ Principles of Philosophy, TIE = Treatise on the Emendation of the Intellect. AT = Descartes (1964–74). I have used Curley’s translations of Spinoza’s texts and Cottingham, Stoothoff, and Murdoch’s translations of Descartes’ texts, sometimes with modifications.

2 Spinoza does not use the term ‘modus infinitus.’ For discussion, see Gabbey 2008. Texts taken to concern the infinite modes are E1p21–23, KV I. xiii–ix, Ep. 64, and TIE 101.

3 This is an old question. For an early articulation, see Leibniz’s (1999: 70) comments on Wachter. For a recent overview of responses to the question, see Newlands (2018b).
these infinite modes. Others argue that while some infinite modes are pervasive, general features of reality (and perhaps other infinite modes are the 'formal essences' of finite things), a different infinite mode supplies the needed causal link between God and things: finite things are caused by God in virtue of being parts (or perhaps modes) of the infinite mode that is the entire series of finite things taken together. Some hold that the infinite modes are to be found in a hierarchy of being that goes from the infinite cause, God, through infinite modes, to finite effects.

Besides the view that infinite modes causally link God and finite things, another prevalent assumption about infinite modes is that whatever they are, Spinoza invented them. Yitzhak Melamed, for example, writes that the notion of an infinite mode ‘is probably the only Spinozist concept that has no equivalent among his predecessors or contemporaries’ (2013: 113. Cf. Martin 2008: 500). While Spinoza's concepts attribute, substance, and mode are new models of old concepts, the concept infinite mode is often thought to lack a precursor.

It is undeniable that there is a sense in which these entities are original to Spinoza. That God should have any modes at all is a new claim, since many of Spinoza’s predecessors and contemporaries would not have accepted that God has modes, let alone eternal, necessary modes. Modes were often thought to be impermanent.

Yet in another sense, the infinite modes do have a precursor: namely, Descartes’s concept of an eternal truth freely created by God. Others have pointed out that for Spinoza, essences—at least ‘formal essences’—are eternal, even eternal truths. Since essences are caused by God (E1p25), scholars who think that those formal essences, or eternal truths, are infinite modes might be amenable to the suggestion that the ‘infinite modes’ are descendants of the Cartesian eternal truths. What has not been investigated, however, is how the ‘infinite mode’ propositions E1p21–23 might figure in a critical response to Descartes’s doctrine that God creates eternal, necessary truths (henceforth the Creation Doctrine). I take up that task here and attempt to show that more of the arguments between E1p15 and E1p25 involve criticisms of, as well as corrections to, the Creation Doctrine than has been appreciated. E1p21–23 are central to this response.

---

4 See Curley (1969: 58–62, 1988: 47–48, 1990: 122–126), and Curley and Walski (1999). Curley also argues that the ‘common notions’ central to cognition of the second kind, reason (E2p40s2), are ideas of the infinite modes, or laws of physics (see also Yovel 1989: 161; Bennett 1984: 107; and Miller 2003).

5 According to Nadler, some infinite modes of extension are laws of Euclidean geometry (2012).

6 ‘Formal essences’ is a term Spinoza uses in E2p8 (and also in his description of the best kind of cognition, scientia intuitiva, in E2p40s2). What Spinoza means by ‘formal’ is a point of debate, but it is often thought that a thing’s ‘formal’ essence is an eternal essence. This essence is to be contrasted with a thing’s ‘actual’ essence, its conatus, its striving to persevere in its being [in suo esse] (E3p7). For the view that for the infinite modes, like all and general and specific laws of nature, infinite modes, see Garrett (2009; cf. Martin 2008; Martin 2018; Ward 2011). Scribano holds that the entire series of formal essences is a ‘mediate’ infinite mode that enjoys eternal reality (2008: 55). For the purposes of this paper, I follow many other scholars in assuming that for Spinoza, the statement ‘something exists’ is underspecified: does the thing exist as something concrete and enduring over time, or as something that is not properly thought of in at all? Supposing that there are different formal realities comes with its own questions and difficulties, and elsewhere I explore what, if we assume there are these different realities, the structure of Spinoza’s monist system might have to be (see Primus 2019, unpublished manuscript). I will not address their arguments here, but Klein (2014) and Laerke (2017) hold that Spinoza did not think there are different kinds of reality at work in Spinoza’s system (cf. Deleuze 1968: 44–58).

According to Laerke, grasping the ‘formal essence’ of a thing never involves grasping anything ‘beyond the [actual] thing itself’: grasping the formal essence is ‘grasping the form of the thing itself, its specific structure [i.e., its specific relative configuration of parts], insofar as this thing is contained in the attributes either qua existent, through the causes that makes it exist, or qua non-existent, through the causes that exclude it from existence.’ The form is ‘objectively conceived by the intellect as an eternal truth and the form itself eternally contained in the attribute.’ (2017: 32–33).

7 This is a popular view. See Garrett (1991: 198) for an early statement, and Curley and Walski (1999) for criticism. For a recent position that largely follows Garrett, see Lord (2010: 40–41). Melamed also follows Garrett but adds that Spinoza introduced infinite modes because he needed a divisible, yet infinite, intermediary between the indivisible and infinite cause and finite things (2013: 132).

8 See Gueroult (1968: 1.309) and Miller (2009: 109–110). Melamed’s view, according to which the infinite series of infinite modes is a series of modes decreasing in perfection, has a tinge of neo-Platonism to it (2013: 120–121). An example Spinoza offers in Ep. 64 of an infinite mode, ‘the face of the universe,’ also suggests emanation: Spinoza appears to be appropriating the Kabbalistic term ‘faces’ (partzufim), which refers to the mediate emanations from the Infinite (Ein Sof) through the Shekhim (ten attributes). Cf. Wolfson (1934: 1244–245).

9 Curley, however, sees a precursor of the infinite modes in Plotinus (1993: 127–128).

10 See Descartes’s Principles 1.56 (AT VIIA.26) and Comments on a Certain Broadsheet (AT VIII.B.348).

11 E.g., Brehier (1968), Viljanen (2011), and Ward (2011). See Ep. 10: ‘things [res] or the affections of things [rerum affectiones] are eternal truths [aeternae veritates].’ Cf. KV I.1.

12 E.g., Garrett (2009), Martin (2008, 2018).

13 It is likely Spinoza had access to the correspondence in which Descartes discusses the Creation Doctrine. Although it was not listed in the 1677 inventory of Spinoza’s books, in his exposition of Descartes’s Principles, Spinoza does refer to Letter 118 in the
Before I say more about my aims for this essay, it will be helpful to have the Creation Doctrine in view. According to Descartes, God does not just freely create contingent, durational existents, but also necessary, eternal truths, including ‘true and immutable natures.’ In Descartes’s own words,

You ... ask what necessitated God to create these truths; and I reply that he was free to make it not true at all that the radii of the circle are equal—just as free as he was not to create the world. (Letter to Mersenne, 27 May 1630, AT I.152)

I turn to the difficulty of conceiving how God would have been acting freely and indifferently if he had made it false that the three angles of a triangle were equal to two right angles, or in general that contradistincts could not be true together. It is easy to dispel this difficulty by considering that the power of God cannot have any limits. (Letter to Mesland, 2 May 1644, AT IV.118)

I do not think that we should ever say of anything that it cannot be brought about by God. For since every basis of truth and goodness depends on his omnipotence, I would not dare to say that God cannot make a mountain without a valley, or bring it about that 1 and 2 are not 3. (Letter to Arnauld, 29 July 1648, AT V.224)

That God’s will was free does not prevent these truths from being necessary truths. God did not just will that it be true that triangles have three sides; he also willed—efficaciously—that this truth be necessary. Nevertheless, the truths God wills to be necessary are necessary, although their necessity requires the assumption of God’s free creation of them as necessary. They are thus not absolutely necessary.

Most scholarly literature on Descartes’s doctrine focuses on modal metaphysics. Some commentators have concluded that the necessity of the eternal truths is mere conceptual or epistemic necessity, not metaphysical necessity. However, a view according to which there is no metaphysical necessity—but instead a ‘universal possibilism’—looks to be in tension with some central Cartesian claims, so other scholars have sought alternatives. Curley, for example, suggests the eternal truths are necessary, albeit not necessarily necessary. God’s will is free because it was not necessitated to create the eternal truths. Nevertheless, the truths God wills to be necessary are necessary, although their necessity requires the assumption of God’s free creation of them as necessary. They are thus not absolutely necessary.

What scholarly literature there is on Spinoza’s response to the Creation Doctrine centers on his rejection of Descartes’s views of divine freedom, the divine will, and necessity. That is, for Spinoza, all things necessarily follow from God’s necessarily existing nature (E1p11, E1p16); all things ‘have necessarily flowed ... by the same necessity and in the same way as from the nature of a triangle it follows ... that its three angles

---

11 Descartes identifies essences and eternal truths in the 27 May 1630 letter to Mersenne (AT I.152).
12 Descartes’s Aristotelian predecessors thought that God needed to act in conformity with logical laws, but this was not seen as a limitation of God’s power. See Alanen (1985).
13 See AT VII.432, AT VII.380, and AT IV.118.
14 See, e.g., Plantinga (1980), Marion (1980), and Bouveresse (1983). For discussion, see Bennett (1994: 63–655), Ishiguro (1986: 461–465), and Alanen (2008: 360–363).
15 The basic thought behind the ‘universal possibilism,’ a view often attributed to Frankfurt (1977), is this: because God could have freely made the contradistincts of the eternal truths true (see AT V.224), it cannot be the case that the eternal truths are necessary. In order for God to freely create an eternal truth P, it must be the case that the God could have willed that not-P is true. It seems, however, that God could have only willed that not-P is true if not-P is possible. But if it is the case that for any eternal truth P, it is possible that not-P, then P is not a necessary truth. For a summary of problems with this view, see Kaufman (2002: 27–30). Alanen (1985, 1988) argues that we ought not to seek a modal theory that will apply both to God’s act of creation and to the eternal truths created; we should take Descartes at his word when he says God’s unlimited power is unintelligible.
16 Descartes claims that we sometimes clearly and distinctly perceive the truths of mathematics to be necessary (AT VII.65), and by his truth rule, what is clearly and distinctly perceived is true. Furthermore, Descartes’s ontological argument presupposes true and immutable natures; the meditator’s thought does not impose necessity, but the necessity of the things determines the meditator’s thought. See Curley (1984: 571–574).
17 See Curley (1984); cf. Geach (1973). Support for an approach utilizing iterated modalities can be found in a letter to Mesland, where Descartes appears to make the scope distinction between 1) God wills that necessarily 2 + 2 = 4 and 2) Necessarily, God wills that 2 + 2 = 4 (2 May, 1644, AT IV.118–119).
18 See Curley (1988: 42). For criticism, see Van Cleve (1994).
19 See especially E1p32c.1. For a recent survey of the extant literature, see Schmaltz (2018: 77–80). It should be noted that in earlier works, Spinoza’s views do not seem so different from Descartes’s: God acts from absolute freedom of the will (CM I.12, G I.238), and the essences of created things ‘depend on the decree of God alone’ (CM I.3, G I.241).
are equal to two right angles’ (E1p17s). There is nothing contingent in nature (E1p29). And to suppose that there is a sense in which any of God's effects could have been otherwise is to suppose, absurdly, that God's essence could have been other than it is (E1p29d, E1p33s2). Nevertheless, for Spinoza, God's activity is perfectly free: freedom is to exist and act from the necessity of one's own nature alone (E1d7, E1p17c2). Spinoza also departs from Descartes in insisting that intellect and will cannot be properly attributed to God as the ultimate source of reality.23 An actual intellect, whether finite or infinite, like will, desire, love, and the like, must be referred to natura naturata, not to natura naturans' (E1p31). In other words, intellect and will must be understood as modes, or effects of God's causal activity, and not 'such attributes of substance as express an infinite and eternal essence, that is (by E1p14c1 and E1p17c2), God, insofar as he is considered as a free cause' (E1p29s).

Some scholars have observed that Spinoza's response to Descartes's view of divine activity is not wholly negative: the 'opinion, which subjects all things to a certain indifferrent will of God, and makes all things depend on his good pleasure' (E1p33s) is 'nearer to the truth' than the opinion 'of those who maintain that God does all things for the sake of the good' (E1p32s2). For Descartes, God's infinite will counts as 'indifferent' when nothing determines it to affirm in the way it does.25 For Spinoza, God's action is neither compelled nor prompted (E1p17, E1p17c1). To hold that God acts for the sake of the good would be objectionable to both Descartes and Spinoza because it seems to put an external constraint on the expression of God's power.26

I want to call attention to another point of agreement. Despite differences in their views of God and causation,27 Spinoza and Descartes both hold that some of the things God causes are both eternal and necessary: for Descartes, the eternal truths and true and immutable natures; for Spinoza, the modes that are 'infinite and eternal' and 'exist necessarily' (E1p21–23). As just mentioned, scholars have read stretches of Part I, particularly E1p17s, as involving criticisms of the notions of divine freedom, necessity, intellect, and will figuring in Descartes's Creation Doctrine. My starting question is whether Spinoza could have discerned other shortcomings of the Creation Doctrine. Can the 'infinite mode' propositions be understood as part of Spinoza's attempt to provide a better account of God's causation of eternal and necessary things?

The rest of the essay proceeds as follows. In Section II, I present a series of issues, besides the more familiar issues concerning modality and divine freedom, that are unclear, unresolved, or problematic in Descartes's discussion of God's creation of eternal truths. Some questions that can be asked of Descartes concern the range of the Creation Doctrine: does God freely cause all eternal, necessary truths? Other questions concern the ontology of the eternal truths and true and immutable natures. What sort of reality do these creations enjoy and where are they? I will not say much about whether, or how, Descartes himself might answer these questions. Instead, I argue in Sections III and IV that passages in the Ethics, from E1p16 through the 'infinite mode' propositions E1p21–23, make clear how Spinoza would answer analogous questions in his own system.

In Section IV, I provide a reconstruction of the hard-to-follow demonstrations of E1p21–23. On my reading, the entities under discussion in E1p21–23 do not constitute a special subclass of God's modes—rather, the point Spinoza seeks to establish in those propositions is that each and every effect of an infinite and eternal God is an infinite and eternal mode. For Spinoza, all of an infinite and eternal God's effects are true and immutable natures or eternal truths, and these effects are modes of God.

---

23 Spinoza agrees with Descartes that if intellect is thought to pertain to the divine nature, then 'the intellect and will which would constitute God's essence would have to differ entirely from our intellect and will, and could not agree with them in anything except the name'—no more, Spinoza continues, than a barking dog resembles Sirius, the Dog Star (E1p17s). See CM II.7 (G.L261) for another echo of Descartes's claim that a divine will cannot be understood in terms of a human will (AT VII.432–433). For discussion of the Sirius passage, see Koyré (1950) and Gueroult (1968: I.272–295). For a study of the lack of univocity in both Descartes and Spinoza, see Schmalzt (2000).

24 See Nadler (2010: 231).

25 See AT VII.431–443.

26 See E1p33s2. For Descartes, eternal truths are not supposed to be external constraints: they are not 'known by God in any way that would imply that they are true independantly of him' (Letter to Mersenne, 6 May 1630, AT I.149). To claim that eternal truths are independent of God would be to talk of God 'as if He were Jupiter or Saturn and to subject Him to the Styx and the Fates' (Letter to Mersenne, 15 April 1630, AT I.145). The thesis that eternal truths are uncreated and independent of God would be objectionable to Descartes for another reason: it would make finite human minds too much like God's mind. Human thinking and divine thinking would be constrained in the same ways, where these ways would be perfectly intelligible to human minds.

27 For example, Spinoza's God can be understood under the attribute of extension (E1p11, E1p15s1), and is—as a non-transcendent God—the immanent cause of all things (E1p18).
Although I think this take on the ‘infinite modes’ makes sense against the backdrop of the Creation Doctrine and its difficulties, I acknowledge that it does raise big questions. Importantly, if we understand E1p21–23 as I do, then there cannot be the kind of special infinite mode (or set of infinite modes) that other interpreters have invoked to rescue Spinoza from inconsistency. No infinite mode can serve as a causal link between the infinite and eternal God and things with ‘finite and determinate existence’ (E1p28). But if the infinite and eternal God cannot be understood as the cause of the finite, non-eternal things of E1p28, then how can Spinoza coherently insist that God is the cause of all things? In the concluding Section V, after addressing one textual worry, I briefly sketch how I think Spinoza avoids inconsistency.

II
When confronted with Descartes’s Creation Doctrine, other questions, besides those concerning modality, come to mind. Does God cause every eternal truth, or are there some uncreated, or uncaused, eternal truths? Are laws of motion created eternal truths? Is the Creation Doctrine consistent with Descartes’s insistence that not all truths are necessary? And how are we to understand the reality these creations enjoy?

II.1. Question 1: Does God cause necessary, eternal truths about God?
In his 15 April 1630 letter to Mersenne, the eternal truths Descartes mentions are those ‘mathematical truths you [Mersenne] call eternal’ (AT I.145). In the next letter to Mersenne, Descartes offers a specific example: the Euclidean common notion, *the whole is greater than its part* (AT I.151). A longer list of eternal truths appears in the *Principles*. In addition to mathematical and geometrical truths, the class of eternal truths includes logical truths like *it is impossible for the same thing to be and not to be at the same time*, conceptual truths like *he who thinks cannot but exist while he thinks*, and (synthetic) *a priori* truths like *what is done cannot be undone* and *nothing comes from nothing*. Descartes does not give more specific examples here, and even says no additional examples need be supplied: so long as one is not blinded by preconceptions [*nullis praejudiciis excaecamur*], one will recognize eternal truths as eternal truths when one reflects on them (AT VIIIA.23–24; cf. AT VII.135).

A first question regarding the range of the Creation Doctrine is whether it is so unrestricted that even truths about God fall under its scope. Sometimes Descartes implies that although truths concerning God’s nature are especially secure and must be true in any alternative scenario, such eternal truths are outside the scope of the Creation Doctrine. As Descartes writes to Mersenne,

> You ask also what necessitated God to create these [eternal] truths; and I reply that he was free to make it not true that all the radii of the circle are equal—just as free as he was not to create the world. And it is certain that these truths are no more necessarily attached to his essence than are other created things. (27 May 1630, AT I.152)

God’s essence is an eternal truth (letter to Mersenne, 6 May 1630, AT I.150). Truths concerning God’s essence are necessarily attached to God’s essence, so these truths are necessary, but not because they are created eternal truths God willed to be necessary.

However, according to other passages, the Creation Doctrine looks completely unrestricted: all truths are the efficient causal effects of God’s free and indifferent will. In the Sixth Replies, Descartes writes,

---

29 As will become clearer later on, I think the eternal ‘formal essences’ (E2p8) are ‘infinite modes,’ but I will part company with others (e.g., Garrett 2009) who also think formal essences are infinite modes on a few points. First, I will suggest that Spinoza thinks that God, considered as the infinite and eternal Spinozistic substance, cannot be coherently cognized as the infinite and eternal cause of two kinds of modes, some infinite and eternal and others non-eternal and finite (or indefinite). Second, I do not think there is an ‘infinite mode’ that is all things enjoying ‘finite and determinate’ reality (i.e., the things described in E1p28) taken together as a whole.
30 Presumably we can also include the other Euclidean common notions, including *if equals are taken from equals, the remainders are equal*. See letter to Plempius, end of December 1637 (AT I.476).
31 For discussion, see Frankfurt (1977) and Bennett (1994) for interpretations according to which all eternal truths are created eternal truths.
it is contradictory [repugnat] to suppose that the will of God was not indifferent from eternity with respect to everything which has happened or will ever happen; for it is impossible to suppose that anything is thought of in the divine intellect as good or true, or worthy of belief or action or omission, prior to the decision of the divine will to make it so. I am not speaking here of temporal priority: I mean that there is not even any priority of order, or nature, or of 'rationally determined reason' as they call it, such that God’s idea of the good impelled him to choose one thing rather than another. (AT VII.431–432)\textsuperscript{32}

God's indifferent will is indifferent because it is not conditioned by any antecedent ideas. The passage just quoted suggests there is no idea, no truth, in the divine intellect prior to God's act of will—perhaps not even an idea, or truth, about God’s own essence and existence.\textsuperscript{33}

\textbf{II.2. Question 2: Are laws of motion eternal truths?}

A second question regarding the range of the Creation Doctrine is whether Descartes’s laws of motion—his law of inertia, law of rectilinear motion, and law governing the transfer of motion at collision—count among the eternal truths created by God.\textsuperscript{34}

Although Descartes does not name the laws of motion on his lists of eternal truths, one might think that he means to include them. For example, in The Treatise on Light, Descartes says the mathematical eternal truths and his laws of motion are such that we 'cannot but judge them to be infallible when we conceive them distinctly, nor doubt that if God had created several worlds, they would be as true in all of them as they are in this one' (AT XI.47. Cf. AT VI.43). The modal status of the mathematical truths and the laws of motion appear to be the same, which might lead one to think that their etiology is the same: they are all eternal truths that are not ‘necessarily attached’ to God's essence, but are rather those created by God. Furthermore, Descartes includes motion in the Fifth Meditation discussion of the 'true and immutable' natures, or 'immutable and eternal' essences: 'There are countless particular features regarding shape, number, motion, and so on, which I perceive when I give them my attention' (AT VII.63–64, my emphasis). Fundamental laws describing how motion must be appear to be grouped with eternal truths about geometry and mathematics (see also Principles II, article 64, AT VIII.A.78–79).

But there is also evidence to suggest that we should not classify the laws of motion as created eternal truths.\textsuperscript{35} In the Principles, Descartes elucidates the nature or essence of motion before he 'proves' the laws of motion. The nature of motion is 'the transfer of one piece of matter, or one body, from the vicinity of the other bodies which are in immediate contact with it, and which are regarded as being at rest, to the vicinity of other bodies' (AT VIII.A.53). According to Descartes, the essences of things are eternal truths (letter to Mersenne, 27 May 1630, AT I.152).\textsuperscript{36} This suggests that the eternal truths concerning motion are not the laws of motion (which are presented as part of a discussion of the primary cause of motion, God), but rather truths like there is no motion without translation or there is no motion in a universe with only one body.\textsuperscript{37}

There is another apparent difference between the eternal truths and the laws of motion. Consider Descartes’s proof of the law that if a moving body A collides with another body B, and A’s power of continuing in a straight line is greater than the resistance of B, then A carries B along with it and loses a quantity of motion equal to what it imparts to B (AT VIII.A.65). This is proven not by appealing to a timeless divine decree, but rather by appealing to the ‘immutability of the workings of God,’ God’s conservation of the world ‘by the selfsame activity by which he once created it’.\textsuperscript{38}

\textsuperscript{32} Cf. the 29 July 1648 letter to Arnauld (AT V.224): ‘every reason [ratio] for truth and goodness depends on [God’s] omnipotence.’

\textsuperscript{33} Problems arise for Descartes, however, if the doctrine is completely unrestricted. For example, if truths about God are created truths, then the truth God exists has a cause: namely, God’s own free and indifferent will. This, however, appears to conflict with Descartes’s claim that although all things have a cause or reason (causa sive ratio) for existence, God needs no cause to exist. Given such problems, it seems that Descartes probably did not mean for the doctrine to apply to truths about God’s nature. For discussion, see Wells (1982) and Schmalz (2002: 90–92).

\textsuperscript{34} See Principles II, articles 37, 39, and 40. For the assumption that the Creation Doctrine applies to these laws, see Curley (1984: 573), Osler (1985: 353–354), Wilson (1978: 136), Kenny (1968: 178) and (1970: 698–699).

\textsuperscript{35} Kemp Smith (1952), Williams (1978), and Ishiguro (1986) leave room for the possibility that the laws of motion are not eternal truths; although Ishiguro holds that the laws of motion are not necessary Broughton (1987) argues that before the Meditations, Descartes thought the laws of motion were eternal truths, but changed his view afterwards (cf. Dutton 1996).

\textsuperscript{36} For discussion, see Chappell (1997: 124–125) and Schmalz (1991).

\textsuperscript{37} Broughton (1987) makes this point.

\textsuperscript{38} That is, the distinction between initial creation and subsequent conservation is a distinction of reason. See also AT VII.49 and AT VIII.A.30.
... since he conserves the world by the selfsame activity and in accordance with the selfsame laws as when he created it, he conserve[s] motion as something which is mutually transferred when collisions occur. (AT VIII.A.66)

Bodies always have moved and always will move in certain ways because God continually acts in the same way. The mathematical eternal truths, in contrast, are not true because God is conserving anything: it is sufficient for God to simply create the eternal truths. 39

It also seems the eternal truths are truths about essential properties of extension, while laws of motion are not. 40 One cannot conceive of a wooden block unless one conceives of it as six-sided and as capable of motion, but one need not conceive of the block as actually in motion, or indeed as moving in ways required by Cartesian laws of motion. 41

II.3. Question 3: Are any truths not necessary?

One can also ask a third question: can Descartes even treat the eternal, necessary truths created by God as a special subclass of truths? Descartes does not want all truths to be eternal, necessary truths, but on one (at least initially attractive) way of reading the Creation Doctrine, it is hard to see how he can avoid saying that all truths are necessary.

In his 15 April 1630 letter to Mersenne, Descartes writes,

It will be said that if God had established these truths he could change them as a king changes his laws. To this the answer is: Yes, he can, if his will can change. ‘But I understand them to be eternal and immutable.’ —I make the same judgment about God. ‘But his will is free.’ —Yes, but his power is incomprehensible. (AT I.145–146; cf. AT V.166, AT VII.380)

Here we seem to get an explanation of the necessity of the eternal truths: they are necessarily true because they are created by God’s immutable will. 42 As Menn puts it, ‘because God is immutable in his actions as well as his being, what he establishes as true at any moment he will establish as true at every moment’ (2002: 352).

Kaufman (2005) has dubbed this common interpretation the ‘Immutability Interpretation,’ and observes that the premises 1) God wills the eternal truths and 2) God’s will is immutable only yield the conclusion 3) the eternal truths are immutable if we assume that if God’s omnipotent will is immutable, effects of that will are also immutable. 44 Immutability is not equivalent to necessity, however, so yet another principle linking immutability to necessity needs to be assumed: for any x, if x is immutable, then x is necessary (2005: 7). Although this explains the necessity of the eternal truths, Kaufman argues that it only does so at the cost of necessitarianism.

The following is why necessitarianism is a risk. For Descartes, all things are effects of the immutable divine will: ‘there is always a single identical and perfectly simple act by means of which [God] simultaneously understands, wills, and accomplishes everything. When I say “everything” I mean all things’ (Principles I.23, AT VIII.A.14). Indeed, God

---

39 But see Della Rocca (1999) for the suggestion that there is a closer analogy between God’s creation of the eternal truths and God’s causation of motion: there are eternal essences created by God that ground the laws of motion, just as there are eternal essences created by God that ground the eternal truths. As Della Rocca notes, however, this is in tension with the Cartesian thesis that the essence of body is extension alone (1999: 69).

40 For discussion, see Broughton (1987).

41 It may seem that the modal status of the laws of motion is explained by the immutability of God’s activity, but this may not be the case. See Kaufman (2005: 15) for an argument that immutability explains why there are the laws of motion there are, but not why they are necessary. Dutton (1996) claims that while God has perfect freedom of indifference to create or not create laws of motion, given the creation of the laws, God must create only those laws that are consistent with God’s immutability. The content of the eternal truths, in contrast, is not tied to God’s immutability.

42 Descartes explains the necessity of the laws of nature in terms of the immutability of divine action (see AT XI.43). If we think the laws of nature are eternal truths, and we note that the laws of nature are necessary because of the immutability of God’s will, then we may think that immutability could also be the ground of the other eternal truths.

43 Cf. Curley (1984: 588); Nadler (1987: 176).

44 See AT XI.43 and AT VIII.A.61 for some textual support. Kaufman admits that it is not entirely clear from these passages that Descartes subscribes to this ‘Transfer of Immutability Principle.’
would not be supremely perfect if anything could happen in the world without coming entirely from him … philosophy by itself is able to discover that the slightest thought could not enter into a person's mind without God's willing, and having willed from all eternity, that it should so enter.\footnote{Letter to Elisabeth, 6 October 1645, AT IV.314}

Furthermore, God does not change his immutable will in response to petitionary prayers: we pray simply to obtain whatever he has, from all eternity, willed to be obtained by our prayers (AT IV 315–316; cf. Conversation with Burman, AT V.66).

The truths concerning particular human actions, thoughts, and prayers could be immutable effects of an immutable will if they are indexed or ordered: God's providence would then be God's eternally and immutably willing an infinity of, say, temporally indexed truths. If, however, we assume the principle that immutable truths are necessary truths, then those indexed immutable truths turn out to be necessary truths.\footnote{See Kaufman (2005: 10–11).}

And so a potential tension in the Cartesian system shows itself. If we adopt an (at least initially plausible) interpretation of the foundations of the necessity of the eternal truths, then it looks like Descartes is committed to all truths being necessary truths, a conclusion that conflicts with his assertions that some truths are contingent.\footnote{Kaufman's own account of the necessity of the eternal truths does not go via God's immutability: 'the eternal truths are necessary precisely because God wills that they are necessary' (2005: 17).}

II.4. Question 4: What—and where—are eternal truths?

In the Fifth Meditation, Descartes points to two kinds of eternal entities. First, there is essentially eternally existing God: 'it is quite evident that existence can no more be separated from the essence of God than the fact that its three angles equal two right angles can be separated from the essence of a triangle (AT VII.66). And, the Meditator says later, 'after supposing that one God exists, I plainly see that it is necessary that he has existed from eternity and will remain [sit mansurus] for eternity' (AT VII.68). Second, there are true and immutable natures:

... I find within me innumerable ideas of things that even though they may not exist anywhere outside me, nonetheless cannot be called nothing; and although they can be thought in some manner at will, nonetheless they are not made by me [a me figuntur], but have their own true and immutable natures. Thus when, for example, I imagine a triangle, even if perhaps no such figure exists, or has ever existed, anywhere outside my thought, there is still some determinate nature, or essence, or form, immutable and eternal, which is not produced by me [a me non effecta est], nor depends on my mind [nec a mente mea dependet]. (AT VII.64)

Here Descartes distinguishes the true and immutable nature of a triangle and actual triangles in the world; the true and immutable nature is still something, even if there are no actual triangles (or no extra-mental extended world at all). But it also seems the nature does not exist only in the Meditator's mind: this true and immutable nature is not produced by or dependent on his mind. True and immutable natures are eternal truths (AT I.152). One could read this passage as evidence that Descartes was a sort of Platonist: God's eternal, necessary effects reside in a kind of (created) Platonic realm.\footnote{The passage from E1p17s concerning God's omnipotence discussed above seems to echo these passages. Spinoza combines the point about God's necessary existence with the point about properties following with necessity from the essence of a triangle: if God's essence is necessarily eternally real, and all things follow from God's essence with necessity (as propria follow from the essence of a triangle), then all things will be eternally real. It is, then, not just that God exists 'from eternity and will remain for eternity—all of God's effects also exist from eternity and will remain for eternity. That is, God's omnipotence has 'been actual from eternity and will remain in the same actuality to eternity.'}

The exchange with Gassendi might also be taken as evidence of Descartes's Platonism. In the Fifth Objections, Gassendi reveals that he takes the Fifth Meditation to concern entities with reality apart from human minds, as he objects to there being any true and immutable natures apart from God (AT VII.319). Descartes does not contest this reading of the Fifth Meditation. That Descartes does not correct Gassendi...
suggests that Descartes was thinking of the true and immutable natures as having reality outside of human minds (AT VII.380).\footnote{See Rozemond (2008). Hattab (2016) proposes that Descartes’s view of eternal truths is indebted to Proclus’s (Neoplatonic) view of universals.} Elsewhere, however, Descartes’s view looks less Platonic.\footnote{In the *Principles*, Descartes advances a view according to which eternal truths, essences, and all universals do not enjoy reality outside of thought. See AT VIII.A.27–30; cf. AT IV.349–50.} Consider *Principles* I.49:

> When we recognize that it is not possible that something come from nothing, this proposition, *nothing comes from nothing*, is considered not as some existing thing, nor also as a mode of a thing, but as some eternal truth, which resides in our mind. (AT VIII.A.23–24; cf. *Principles* I.59, AT VIII.A.27–28)

Here Descartes could be read as implying that eternal truths exist *only* in human minds.\footnote{See Gueroult (1974: II.277) and Nolan (1997).} They are not things enjoying either eternal or non-eternal extra-mental existence, nor are they modes of extra-mental things.

Indeed, it is possible to read the Fifth Meditation passage quoted above differently so that it does not sound so Platonic. Perhaps eternal truths and true and immutable natures are just the objectively real representational contents of *innate* ideas that only exist in human minds. Granted, there is a sense in which an innate idea does depend on the Meditator’s mind: anything that is objectively real depends on a mind in that objective reality is the reality ‘by which a thing exists in the intellect by way of an idea’ (AT VII.41). However, there is a distinction between ideas whose contents can be constructed and altered by the Meditator’s mind—‘factitious’ ideas like those of hippogriffs and sirens—and innate ideas whose contents are unalterable by the Meditator (AT VII.37–38). Both factitious and innate ideas can be thought of ‘in some way at will,’ but innate ideas cannot be modified at will.\footnote{See AT VII.A.27–28. Cf. AT IV.349–50.} So the true and immutable nature of a triangle, as the content of an innate idea, can be thought of at will and is, as an objectively real object, ‘not nothing’ (AT VII.A.41, AT VII.65), but it is not dependent on the Meditator’s mind in the sense that the Meditator did not construct that content.

However, it cannot be that *all* true and immutable natures are such that they are only the objectively real contents of innate ideas: the true and immutable nature of God is an objectively real object of an innate idea in the Meditator’s mind, but it is also a formally real something—that is, God himself—existing outside of the Meditator’s mind.\footnote{See Gueroult (1974: II.277) and Nolan (1997).}

Some commentators, recognizing that Descartes’s texts pull in different directions, have suggested that perhaps Descartes subscribed to a ‘moderate’ Platonism: the eternal truths are created by God and external to human minds, but these truths are not external to God. These eternal truths can be understood as *in* the divine mind as objectively real contents of divine decrees.\footnote{See Carriero (2009: 314–315) and Schmaltz (2014) for discussion.} They can still count as products of God’s causal activity, as a formally real mind can cause the objective reality of ideas within that mind (see AT VII.43–45).

But such moderate Platonic readings might not fit with Descartes’s claims that eternal truths are *distinct* from God.\footnote{See Rozemond (2008). Schmaltz (1991) also gives a ‘moderate’ reading but suggests that the natures and truths are to be identified with the divine decrees.} Descartes says the eternal truths ‘are no more necessarily attached to [God’s] essence than are other created things’ (AT I.152); if eternal truths and true and immutable natures are in the divine mind, then they *do* seem more attached to God than other created things.’

### III

According to Descartes, God’s effects are diversified: some effects are non-eternal and non-necessary, others are eternal and necessary. But with diversification come questions. Questions of *which* eternal truths are to be explained by the Creation Doctrine arise because it seems not everything that is eternal and necessary is eternal and necessary for the same reason. As I explained above, even if some eternal, necessary truths

\footnote{Moderate Platonism may also conflict with divine simplicity (see Nolan 1997: esp. fn. 13; Kaufman 2003). For discussion of the idea that there is a *distinction of reason* between the objectively real eternal truths in God’s mind and God’s essence, see Rozemond (2008). In discussing the Creation Doctrine, Descartes often emphasizes the incomprehensibility of God and God’s activity (see AT I.146, AT IV.118, AT VII.436). Given this incomprehensibility, it may be that moderate Platonic readings do fit with Descartes’s claims that eternal truths are distinct from God—it is just that we cannot grasp the nature of this distinction (thanks to Michael Della Rocca for this point).}
depend on the creative activity of God’s free and indifferent will, it looks like truths about God’s nature are eternal and necessary because they are propria following with necessity from the divine essence. And laws of nature might seem to presuppose, in a way other eternal, necessary truths do not, the immutability of divine causation. However, there is a worry that if immutability is the source of all necessity, then all truths are necessary. Questions about ontological status also arise: if one emphasizes the eternality of eternal truths, then it becomes harder to understand the sense in which they are distinct from God, but if one emphasizes their distinctness from God, it becomes harder to understand the sense in which they are eternal (and not just part of the non-eternal world).

It is accepted that the Creation Doctrine is in the background of what Spinoza says in E1p17 and its scholium. In the next two sections, I suggest that other texts in that same stretch of the Ethics can also be read as composed with Descartes’s Creation Doctrine—and the questions it raises—in mind. I argue that Spinoza offers a radically simple alternative account of God’s free causal activity: an eternal and infinite God’s effects cannot be diversified in the ways Descartes thought they could be.

To begin, consider E1p16: ‘From the necessity of the divine nature there must follow infinitely many things in infinitely many modes [modus] (i.e., everything which can fall under an infinite intellect).’ Setting aside the terminology of mode, it is first worth noting that this proposition echoes a passage in Descartes’s 6 May 1630 letter to Mersenne: ‘The existence of God is the first and the most eternal of all possible truths and the one from which alone all others proceed’ (AT I.150, my emphasis). Descartes goes on to say that ‘the eternal truths are no more necessarily attached to [God’s] essence than are other created things’ (27 May 1630), a statement which, as I sketched in Section II.1, can be taken to indicate that certain eternal truths—that is, truths that are necessary consequences of God’s necessarily existing essence—are not caused by God.

E1p16 removes any question of where Spinoza might stand on the issue. Everything is necessarily attached to God’s essence: everything follows with necessity from God’s essence as propria of God’s essence. But that there is such necessary attachment does not mean that God is not a cause of these things (E1p16c1–3). It also does not mean that God’s causation is not free—rather, for Spinoza, having all of one’s effects necessitated by one’s own nature alone is the epitome of free action (E1def7, E1p17c2). So it is clear that necessary truths about God’s own nature are, for Spinoza, caused by God. Indeed, all truths—whatever can fall under an infinite intellect—are caused by God. We thus have Spinoza’s answer to Question 1.

All truths includes necessary truths concerning the motion of bodies (e.g., the lemmata in the ‘Physical Digression’ after E2p13), so these truths are also caused by God. And so we have Spinoza’s answer to Question 2. In E1p33s2, Spinoza even says that the non-Spinozistic (presumably Cartesian) freedom others attribute to God is a great ‘obstacle’ [obstaculum] to scientia. It is not clear what sort of obstacle Spinoza has in mind here, or whether scientia is to be taken to be demonstrative knowledge from first principles or the kind of certain knowledge Descartes thinks we can have once we know that a benevolent God is the creator of our nature.

Perhaps the obstacle is an obstacle to scientia taken in the first sense. Descartes sometimes appears to suggest that mathematical laws are freely created eternal truths but laws of physics are not; the laws of physics are necessary consequences of God’s immutable, necessarily existing nature, but God could have created different mathematical laws—God was free to make it not true at all that the radii of the circle are equal (AT I.152). Depending on one’s understanding of the modal status of Cartesian eternal truths, one could think that laws of physics are thus more necessary than laws of mathematics. But one might also think that this is a mistake: if there are grades of necessity, the laws of mathematics are the more necessary laws. Or one could think it is a mistake to think there are grades of necessity: all laws of physics and laws of mathematics are equally inexorable. Perhaps the hope of systematic, demonstrative science based on first principles is dashed if physics is thought to be more necessary than math, or if it is thought that there are grades of necessity. Perhaps these mistaken thoughts lead to more mistaken thoughts about which principles are the ‘first principles,’ or how demonstrations are to proceed.

---

58 See De Rosa (2011) for discussion and Schmaltz (2017) for elaboration of how this tension is handled by Malebranche, Arnauld, and Régis.
59 See, e.g., Schmaltz (2018).
60 Descartes held that the eternal truths were created ‘from eternity’ (ab aeterno). See AT I.152 and AT VII.436. Yet creation and ‘from eternity’ seem to be in tension: how could something have been created if it is created from eternity? Descartes is comfortable with this tension: our finite human minds simply cannot understand how to square creation and eternity (see, e.g., AT VII.380).
61 By the Physical Digression, I think Spinoza has shifted to discussing what is not eternal; the bodies under discussion in the digression are not conceived to be true and immutable natures, but rather to be actual things enduring over time. See the conclusion.
62 For more discussion of this point regarding the Creation Doctrine and laws of physics, see Broughton (1987) and Nadler (1987).
We can also see why Spinoza might have thought Descartes’s take on divine freedom is an obstacle to *scientia*, taken in the second (Cartesian) sense as the greatest certainty. Descartes argued that once a person knows a benevolent God exists and is the creator of her nature, she can be certain that she is not deceived in the things that seem most evident to her; she can know that her clear and distinct ideas are true. A *benevolent* God would not have created her with a deceptive nature. But if the essences of things—including the essence of the human mind—are eternal truths created by the *perfectly indifferent* will of God (letter to Mersenne, 27 May 1630, AT I.152), then it seems there is no antecedent reason why God created human minds with one kind of nature rather than another. How, then, can Descartes consistently say that considerations of goodness guided God’s creation of human nature?

Spinoza is concerned to argue that all of God’s effects are necessary. It is not controversial to attribute this argumentative aim to Spinoza, since most scholars take Spinoza’s statements that ‘in nature there is nothing contingent’ (E1p29) and ‘things could have been produced by God in no other way, and in no other order than they have been produced’ (E1p33) to be avowals of necessitarianism: if all things follow with necessity from the necessarily existing divine nature, then there cannot be a bifurcation of divine effects into some that are necessary and some that are not. So the answer to Question 3 is an easy one: Spinoza thinks all truths are necessary.

However, I do not think Spinoza merely wants to establish that there are no contingent truths and no unactualized possibilia. That is a thesis merely about the modal status of effects, and is consistent with some of an eternal God’s necessary effects being non-eternal. I think Spinoza also wants to conclude that all of an eternal God’s effects are real in the non-temporal way eternal truths or true and immutable natures are real.

A first passage to consider is E1p17s:

I have shown clearly enough (E1p16) that from God’s supreme power, that is, infinite nature, infinitely many things in infinitely many ways [modis], that is, *all things*, have necessarily flowed, or always follow, by the same necessity and in the same way as from the nature of a triangle it follows, from eternity and to eternity, that its three angles are equal to two right angles. So God’s omnipotence has been actual from eternity and will remain in the same actuality to eternity. And in this way, at least in my opinion, God’s omnipotence is maintained far more perfectly. (G II.62, my emphasis)

Spinoza is drawing a parallel here between the essence of a triangle and the essence of God. Of course, it is only God’s nature that exists by nature (E1p11). But the cases are otherwise alike. God’s 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’ (E1de8). The essence of the triangle is also conceived as an eternal truth. Spinoza can expect his readers to readily agree that given the essence of a thing, is conceived as an eternal truth, and on that account cannot be explained by duration or time, then there cannot be a bifurcation of divine effects into some that are necessary and some that are not. So the answer to Question 3 is an easy one: Spinoza thinks all truths are necessary.

Commentators tend to emphasize the necessity of what follows from these natures. Note, however, that Spinoza does not just say that the necessity is the same: things follow ‘by the same necessity and in the same way.’ The italicized phrase might be argumentatively inert—but it is also possible that it is not. If not, what other feature of the following-from in the triangle case might Spinoza be pointing to?

Here is a simple answer. In the triangle case, what follows from the true and immutable nature of the triangle is also an eternal truth; whatever reality the essence of the triangle enjoys is the same reality that these necessary consequences enjoy. Likewise, the reality the essence of God enjoys—existence itself, conceived
'as an eternal truth'—is the reality that everything that follows from God's essence enjoys. The reality of all of God's effects is reality conceived as an eternal truth.'

On the one hand, this makes sense: all of substance's modes are modifications of substance's eternal reality. A wrinkle in the carpet is carpet, so a mode of eternal reality is eternal reality. But on the other hand, one might complain that it cannot be right that all of an eternal God's effects are eternal. After all, the things with 'finite and determinate' existence that Spinoza will mention in E1p28 are not eternal yet are still called 'modes.' All modes are caused by God. So Spinoza could not have meant that all of God's effects are eternal.

I will return to the question of how the entities described in E1p28 fit into Spinoza's system at the end of the essay. For now, I want to see what happens if we do not adjust our understanding of E1p17s in light of this later passage.

The first thing to note is that if we think Spinoza's theorizing is guided by the Principle of Sufficient Reason, then we can expect Spinoza to argue that all of an eternal God's effects must be eternally real. If the one and only substance, properly considered under any attribute, exists in a timelessly eternal way, what reason could there be for this eternal substance to cause some effects that are eternal and some effects that are non-eternal?68

Also note that if all of God's effects are eternal truths, then a straightforward reading of Spinoza's statement in E1p17s that God's omnipotence has been 'actual from eternity' and will 'remain in the same actuality to eternity' becomes available. The 'same actuality' can be read as literally the same actuality: the infinity of God's effects—everything that is possible—are all always actual.69

God's omnipotence is maintained 'far more perfectly' if God's essence—and all that follows from God's essence—are all always fully actual.70 If some of God's effects were non-eternal and only existed for some limited time, then there would be times at which it is true that God has not (yet) created things that are in his power to create; this is so, even if it is necessary that God (eventually) cause those non-eternal effects. But if God's effects are all real in the way eternal truths are real, then there is no such time at which this is true.71

One might complain that this is to misunderstand eternal truths. One might say that it follows from the nature of an eternal God that some thing x will come to be at some time and enjoy non-eternal reality for a period of time. It is always true that x is non-eternally, durationally actual; an infinite intellect always has an idea representing x as durationally actual, and this idea is true because x does, for a time, enjoy durational actuality. The truth-maker for an eternal truth need not exist as something eternal.

I think Spinoza would resist this model, however, since it conflicts with his doctrine of parallelism.72 For the infinite intellect's idea of x to be true, it must agree with its object ideatum (see E1a6 and E2p32). But a true idea of x (a representation of x, which is x as objectively real) and x (the formally real ideatum) are one...

---

68 Although my conclusions may differ from theirs, I agree with other scholars in thinking that Spinoza rejects bifurcations of reality that threaten intelligibility. See, for example, Della Rocca (2007), Melamed (2013: 95–104), and Perler (2018: 232). For the role(s) of the PSR in Spinoza's Ethics, see Della Rocca (2003, 2008, 2015), Garber (2015), Lin (2007, 2012, 2018), Newlands (2018a).

69 Actual here is actuality sub specie aeternitatis. When one conceives of things as actual, or real, in this way, one conceives them 'to be contained in God and to follow from the necessity of the divine nature' (E5p29s).

70 If this is right, then Spinoza can be read as defending the thesis that the entirety of God's being—God and all of God's modes—is immutable (cf. G I.178–179, G I.255–256). More traditional theologians held that if God had modes, God would be mutable, but if God's modes are all eternal, then the presence of modes does not entail mutability. For discussion of the issue of divine immutability in Spinoza and the tradition, see Carriero (1995: 263–267).

71 Descartes had said that there is always a single identical and perfectly simple act by means of which [God] simultaneously understands, wills, and accomplishes everything. When I say everything 'I mean all things' (AT VIII:14. Cf. Spinoza's mention in E1p17s of those who assert that 'God's intellect, will, and power are one and the same.' Cf. G I.261–263). A human being may have reasons to believe that this is true (e.g., perhaps because it is a tenet of faith), but it seems there is an irreconcilable mystery here. As mentioned in note 60, it is hard to see how an eternal God could create effects that are also eternal. Furthermore, one can wonder how a timelessly eternal God creates eternal effects and effects that only endure for some period of time by a single identical and perfectly simple act.' God's causation is seemingly more intelligible if all of God's effects are eternally real and follow as proposa follow from an essence.

72 I read E2p7, 'the order and connection of ideas is the same as the order and connection of things,' to be a thesis about true ideas. Yet there is a difference between a true representation of, say, a circle with specific dimensions Q as something eternal (the "true and immutable nature" of a circle) and a true representation of circle with specific dimensions Q as something enduring (that which came to be on a certain page at a certain time). While I cannot defend it here, I think Spinoza makes this point in E2p8–E2p9: the order and connection of ideas of eternal truths is the same as the order and connection of eternal truths, and the order and connection of ideas of enduring things is the same as the order and connection of enduring things. In each case, the representational parallelism is due to the 'one and the sameness' of objecta and ideata. In the conclusion, I return to the question of how eternal truths and enduring things fit into Spinoza's monist framework.
and the same thing considered in different ways (see E2p7c and E2p7d). If there is no formally real ideatum, then there is no true idea. So if x is not always formally real, then it seems there cannot always be a true idea of it. If the ideatum x has eternal formal reality, however, then it will always be the case that an (adequate) idea of x is true. And there will always be a true idea of x in the infinite intellect.\(^\text{73}\)

To take stock, Descartes held that many necessary truths are not necessarily attached to God's necessarily existing nature and are, along with contingent truths, products of God's perfectly free creative activity. Spinoza argues that all of God's effects are necessarily attached to God's necessarily existing nature—and thus freely caused by God. We can understand this argument as part of a criticism of the Creation Doctrine. Read in this context, I have suggested that perhaps Spinoza did not just mean for us to recognize the necessity of all the effects necessarily attached to God's nature—he also wanted us to recognize that what is necessarily attached to God's nature is also eternally formally real.

Notice that the next few propositions do put us in a position to see that all of God's effects are necessary as well as eternal. God is the immanent cause of all things (E1p18). If 'God is eternal, or all of God's attributes are eternal' (E1p19), and attributes are 'what the intellect perceives of a substance, as constituting its essence' (E1def4), and God's existence and essence are 'one and the same' (E1p20, E1p20c2), then we can see that God's essence is necessarily eternally formally real. All the things necessarily following from the divine essence (E1p16) are modes in and immanently caused by the free causal activity of God (E1p15, E1p17, E1p18). As modes of a necessarily eternally formally real substance, God's effects are not only necessary, but also enjoy eternal formal reality; each mode is a way that eternal formal reality is.

In the next section, I argue that the point of propositions E1p21–23 is to establish the conclusion that all of an eternal, necessarily existing God's effects are eternal and necessary modes of God.\(^\text{74}\) But Spinoza also draws further conclusions regarding the ontology of God's eternal and necessary effects (and thus fleshes out an answer to Question 4). Not only are all of God's effects eternal, necessary modes of God (and so are not in some created Platonic realm separate from God, as Descartes sometimes seems to suggest); each and every one of God's effects is infinite (where this infinite reality is not indefinite). Indeed, an infinite and eternal God cannot cause anything non-eternal and finite. If this is so, then God's eternal and necessary effects cannot (as Descartes sometimes seems to suggest) reside as innate ideas in finite, non-eternal minds—for the simple reason that an infinite and eternal God cannot cause finite, non-eternal minds.\(^\text{75}\) At the end of Section IV, I briefly point out how a new reading of E1p21-23 might clarify some of Spinoza's perplexing claims in Part V of the Ethics.

**IV**

**IV.1. E1p21**

To begin, here is E1p21 and the beginning of its famously baroque demonstration:

1p21: All the things which follow from the absolute nature of any of God's attributes have always had to exist and be infinite, that is, are, through the same attribute, infinite and eternal.

If you deny [that all things following from the absolute nature of any of God's attributes are infinite and eternal], then conceive (if you can) that in some attribute of God there follows from its absolute nature something that is finite and has a determinate existence, that is, [determinate] duration, for example, an idea of God in thought.

At the beginning of the demonstration, we are asked to conceive that from the eternal attribute of thought there follows an idea that is 1) finite and 2) 'has a determinate existence, that is, duration, for example, an idea of God in thought' (idea Dei in cogitatione).

---

\(^{73}\) Each eternal nature and truth presupposes and implies others; each truth will occupy a distinct node in an infinitely complex ordering of all eternal truths. It will thus not be the case that God is both P and not-P at once and in the same respect.

\(^{74}\) The things discussed in E1p15–18 are all things (that are not God). Propositions E1p19–20 concern God. Note that Spinoza does not indicate that E1p21–23 only concern a subclass of God's effects.

\(^{75}\) The 'moderate' Platonic readings described in Section II.4, according to which eternal truths are merely objectively real representations in God's mind, are also ruled out, but not until the doctrine of parallelism is introduced in Part II. The infinite intellect's adequate representation of, say, the true and immutable nature of a circle (i.e., the nature as objectively real) and the true and immutable nature of the circle (i.e., the nature as formally real) are one and the same mode considered under different attributes. See Section IV.4 below.
I propose that the ‘idea Dei in cogitatione’ assumed for reductio in E1p21d is the idea representing the true and immutable nature of God (under some attribute) *in a finite, non-eternal thinking mind.*\(^76\) Note that this would have been a natural example for Spinoza to put forward: read this way, the idea assumed for reductio is an idea very much like that which plays a crucial role in Descartes’s *Meditations.* In the Third Meditation, the Meditator uses his idea of God to prove God’s existence: the idea of God has infinite objective reality, and such infinite objective reality could only have been caused by a being with infinite formal reality—that is, God, an infinite, eternal, necessarily existing being (AT VII.47). Once the Meditator proves that God exists, the Meditator proves, from reflection on his own mind’s limited formal reality, that God must be the creator and sustainer of that limited formal reality (AT VII.48–50). The Meditator realizes that the idea of God—an idea of what Descartes says elsewhere is the ‘most eternal’ of eternal truths (AT I.150)—is innate, and remarks that it is ‘no surprise that God, in creating me, should have placed this idea in me to be, as it were, the mark of the craftsman stamped on his work’ (AT VII.51).

So, according to Descartes, God, who enjoys infinite, eternal formal reality, causes something infinite and eternal: an eternal truth with infinite objective reality. Yet Descartes’s God also causes something finite and non-eternal: the finite, non-eternal formal reality of the Meditator’s mind, in which there is a finite, non-eternal formally real idea that represents God.

Spinoza clearly thinks Descartes is wrong to believe God is transcendent (since God’s effects are modes of God). In this section, I suggest that Spinoza also thinks Descartes is wrong to believe that an infinite, eternal God causes anything with finite and non-eternal formal reality. Spinoza argues that if we cognize God properly, as the one and only substance, we will see that all of God’s effects are infinite and eternal modes. So Descartes’s contention that the Meditator’s finite formally real mind is caused by God must be rejected. Spinoza can also rule out the possibility, mentioned in Section II.4 above, that eternal truths caused by God reside solely in the finite and non-eternal minds caused by God, since such finite and non-eternal minds cannot be caused by an infinite and eternal God. At the end of the section, I explain why the possibility, also mentioned in II.4, that true and immutable natures and eternal truths reside solely as objectively real contents in a divine mind is also untenable, as well as why Spinoza might have said that ‘E1p21 and other things’ enable us to see that our mind ‘insofar as it understands, is an eternal mode of thinking’ (E5p40s).

E1p21d is broken into two main parts: the first part is supposed to establish that whatever ‘follows from the necessity of the absolute nature of an attribute itself must be infinite’; the second part is supposed to establish that what follows must be eternal. I take up each in turn.

---

*...what follows must be infinite*

After asking us to conceive of the finite *idea Dei,* the demonstration continues:

[1.a] Now since thought is supposed to be an attribute of God, it is necessarily (by E1p11) infinite by its nature. But insofar as it is the idea of God, [thought] is supposed to be finite.

Spinoza reiterates that thought, as an attribute of God, is infinite by nature. Being infinite is ‘an absolute affirmation of the existence of some nature’ (E1p8s1); thinking substance is infinite reality, or existence itself (E1p7, E1d8), conceived as thinking. Importantly, it does not make sense to conceive of thinking substance’s reality being diminished, nor does it make sense to conceive of thinking substance’s reality as admitting of augmentation or amplification. To do so would require thinking of substance’s reality in terms of units, but this would make substance posterior in nature to the constituent units and would render the infinity of substance mere indefinite infinity. Finite reality, in contrast, is that which can be limited by something of the same nature (E1d2), and it does make sense to think of such reality in terms of units: we can think that some existing finite thing would enjoy more or less reality if other things were there (or not there).

[1.b] But (by E1d2) [thought] cannot be conceived to be finite unless it is determined through thought itself.

We have assumed for reductio that there is a finite formally real idea of God. As Spinoza reminds us in [1.b], to be conceived as finite, its reality must be limited or determined by something that is also thought (E1d2). In this demonstration, we are assuming that the only things that exist or are formally real are the infinite

\[^76\] From E1p20c1, we know that God’s existence, like his essence, is an eternal truth (see also E1p8s2), and from E1p20c2, we know that considered under any attribute, God is immutable. In other words, God’s nature—the one substance considered under some attribute—is an immutable nature and an eternal truth.
thinking substance and the finite idea of God. These are the only things available to do any limiting, so in order for the finite idea of God to be conceived as finite, it must be limited either by itself or by thinking substance.

[1.c] But [thought can] not [be determined] through thought itself, insofar as it constitutes the idea of God (for to that extent [thought] is supposed to be finite). Therefore, [thought must be determined] through thought insofar as it does not constitute the idea of God, which nevertheless (by E1p11) must necessarily exist.

‘Thought itself, insofar as it constitutes the idea of God’ can be taken to be thinking substance only insofar as it is the idea of God, the mode we are assuming enjoys finite formal reality. So understood, ‘thought itself, insofar as it constitutes the idea of God’ cannot determine the idea of God for a simple reason: the finite mode cannot determine itself to be finite. So it must be determined by something else, or ‘through thought insofar as it does not constitute the idea of God’:

[1.d] Therefore, there is thought which does not constitute the idea of God, and on that account the idea of God does not follow necessarily from the nature of thought (for thought is conceived as constituting the idea of God and as not constituting it). This is contrary to the hypothesis. So if the idea of God in thought, or anything else in any attribute of God (for it does not matter what example is taken, since the demonstration is universal), follows from the necessity of the absolute nature of the attribute itself, it must necessarily be infinite. This was the first thing to be proven.

Here is one reconstruction of Spinoza’s reasoning in [1.c] and [1.d]. The entity that limits the finite idea of God must 1) not be the finite idea of God itself (because the idea cannot limit itself), 2) be understood under the attribute of thought (from E1d2), and 3) be finite (since, in limiting the idea of God, it will also be limited by the idea of God, and so is finite, by E1d2). Since we are assuming that the finite idea follows from thinking substance alone (without the assumption of any other modes), the only candidate entity that could do any limiting would be thinking substance (since again, the finite idea cannot limit itself). But if thinking substance limits the finite idea, then thinking substance would have to be finite, which is absurd. So something that is finite cannot follow from the absolute nature of a divine attribute; what follows must be infinite.

So reconstructed, this demonstration generalizes to other attributes. The demonstration does not hinge on anything particular to the attribute of thought, but just requires that we consider the idea of God as a finite, formally real mode of substance considered under an attribute. However, this reconstruction does not clearly explain why Spinoza adds that the thought that does not constitute the idea of God nevertheless ‘must necessarily exist’ (by E1p11) at the end of [1.c]. This, somewhat perplexingly, is a common oversight, so common that I have not yet found a reconstruction of E1p21d that explains why Spinoza brings in E1p11 here.

Another potential difficulty with this reconstruction is that the absurdity is that substance is both finite and infinite; it is not clear how this maps onto Spinoza’s claim that thought is conceived both ‘constituting’ and ‘not constituting’ the idea of God. But perhaps we can accommodate this language in the following way: thought is conceived as constituting the idea of God when we conceive of the finite idea of God, and conceived as not constituting it when we conceive of what must be posited to limit that idea so that it is finite. However, this is not, in itself, absurd. It is only absurd if we supplement this claim with the claims that only what is finite can do the limiting, that the only potential limiter of the finite idea is substance, and that that substance is necessarily infinite. The text, however, suggests the argument to absurdity is more direct: the

77 We have assumed that some finite formal reality (the idea of God) follows from the ‘absolute nature’ of some attribute of God. I am taking this to mean that there is no other formally real entity assumed to be in play; we are supposed to focus on substance just as ‘existence itself.’
78 For reconstructions along these lines, see Schmaltz (1997: 214) and Donagan (1988: 103).
79 Alternatively, for there to be a finite idea, we must already have assumed a finite thing, and so a finite idea cannot follow from the substance alone (i.e., from the absolute nature of substance). See Melamed (2013: 117–118) for this reconstruction.
80 Granted, it is possible that E1p11 does not do much work here. This citation might just be Spinoza’s way of signaling that if the finite idea does not limit itself, the only other option is that it is limited by the necessarily existing thinking substance. However, as I show below, there is a way of understanding the demonstration according to which this mention of E1p11 does real work.
assumption leads us to conceive of (the same) thought both as constituting and not constituting the idea of God.

I would like to propose an alternative reconstruction, one that generalizes to other attributes, incorporates E1p11, and gets to the absurdity directly. Return to this portion of the demonstration:

\[1.c.i\] But [thought can] not [be determined] through thought itself, insofar as \([\textit{quatenus}]\) it constitutes the idea of God (for to that extent [thought] is supposed to be finite).

Above we interpreted ‘thought itself, insofar as it constitutes the idea of God’ to be the assumed finite formally real idea of God: the ‘insofar as’ was supposed to focus our attention on the mode of substance. But a mode cannot limit itself, so must be limited by something else. The reconstruction above emphasizes that this limiting thing must also be finite; absurdity results because substance, which is infinite, cannot play that role.

Yet it is also possible to read ‘thought itself, insofar as it constitutes the idea of God’ not as the finite formally real idea of God, but rather as the substance on whose formal reality the mode depends for its formal reality. On this reading, thinking substance constitutes, in the sense of \(\textit{makes} or \textit{causes}\), the mode; the ‘insofar as’ focuses attention on thought as the immanent cause of its own mode. While it is true that a finite thing cannot limit itself, that is not the reason we must appeal to something else. The problem, rather, is that to say that thought is determined through the thinking substance insofar as it constitutes, or causes, the finite mode is just to restate what we have already supposed for reductio.

\[1.c.ii\] Therefore, [thought must be determined] through thought insofar as it does not constitute the idea of God, which nevertheless (by E1p11) must necessarily exist.

Again, thought can only be limited by thought (by E1d2), so the assumed idea of God must be limited by something that is also thought. We have already ruled out the possibilities a) that the idea of God limits itself and b) that what does the limiting is the thinking substance on which the idea of God depends for its formal reality (‘thought itself, insofar as it constitutes the idea of God’).\(^\text{82}\) So what is doing the limiting must be thought that is external to both the assumed finite mode and the substance that constitutes that mode. However, this is just to posit another thinking substance: thought that ‘nevertheless (by E1p11) must necessarily exist.’ There is just one infinite, necessarily existing thinking substance.\(^\text{83}\) So the one thinking substance is conceived both as constituting the idea of God and as not constituting it.’ This is absurd, and so we can assert the contrary of our hypothesis. Only a non-finite idea, a thing whose formal reality does not require positing an external limiter, can follow from thinking substance; such a non-finite idea is, of course, just an infinite idea.

So reconstructed, the demonstration incorporates the mention of E1p11 in \[1.c.iii\] and gets to the absurdity directly. It also generalizes to other attributes: we could run the demonstration with a finite body, but we would again be forced to posit more than one formally real substance (this time under the attribute of extension).

\[\ldots\textit{what follows must be eternal}\]

I will quote the second stage of the demonstration in full:

\[\[2.a\] Next, what follows in this way from the necessity of the nature of any attribute cannot have a determinate [NS: existence, or] duration. For if you deny this, then suppose there is, in some attribute of God, a thing which follows from the necessity of the nature of that attribute—for example, \textit{idea Dei in cogitatione}—and suppose that at some time [this idea] did not exist or will not exist.\]

\(^\text{82}\) We can also rule out that it is another mode of the same substance that is doing the limiting; positing another finite idea that is doing the limiting merely pushes the question back to what has limited that limiting idea, and that just amounts to restating what we have assumed for reductio.

\(^\text{83}\) Although Spinoza does not cite it, I think we are supposed to recall E1p5, ‘in nature there cannot be two or more substances of the same attribute.’ Other reconstructions neglect to incorporate the second occurrence of E1p11 in the demonstration; my reconstruction supposes that Spinoza neglected to cite something he was, in fact, assuming. I am not entirely sure how to weigh these tradeoffs. However, I think it is likely that if Spinoza takes the care to cite a proposition, it’s likely he meant it to do important work in the proof and should not be discounted. I think he can be excused for sometimes failing to make explicit all the propositions required for a proof to work.
[2.b] But since thought is supposed to be an attribute of God, it must exist necessarily and be immutable (by E1p11 and E1p20c2). [2.c] So beyond the limits of the duration of the idea of God (for it is supposed that at some time [this idea] did not exist or will not exist) thought will have to exist without the idea of God.

[2.d] But this is contrary to the hypothesis, for it is supposed that the idea of God follows necessarily from the given thought. Therefore, the idea of God in thought, or anything else which follows necessarily from the absolute nature of some attribute of God, cannot have a determinate duration, but through the same attribute is eternal. This was the second thing [NS: to be proven]. Note that the same is to be affirmed of anything which, in some attribute of God, follows necessarily from God’s absolute nature.

Spinoza reintroduces the reductio assumption: namely, that the idea of God exists for some limited time [2.a]. Spinoza reminds us that the attribute of thought exists necessarily (E1p11) and is immutable (E1p20c2) [2.b]. The situation we are assuming, then, is one in which we have a necessarily existing, immutable substance and a mode that only endures for some time. This means that there are times at which the mode does not exist [2.c].

However, this leads to absurdity. Spinoza does not make his reasoning explicit, but I think we are supposed to remember E1p20c2’s point that it is absurd to suppose that the essence of substance could change. Spinoza reminds us that it is supposed that the mode follows with necessity from the necessarily existing essence of thinking substance [2.d]. For the mode to not follow, which is the case at all of those times at which the mode does not exist, we would have to suppose that the essence of substance is different at those times.

We can thus deny our assumption: the idea of God cannot exist for some limited time. Its existence is necessary (in virtue of substance’s essence being necessary), and thus eternal. This will apply to anything following with necessity from the absolute nature of God.

It is sometimes argued that this second stage establishes the everlastingness of (certain) modes. While this is a possible reading of the language of E1p21—’all the things which follow from the absolute nature of any of God’s attributes always had to exist’ (semper existere debuerunt)—I do not think this language forces us to conclude that the things enjoy sempiternal reality, rather than reality that is timelessly eternal. In E1p19, Spinoza said that God’s existence, like his essence, is an eternal truth. In E1p17s, Spinoza had drawn a parallel between the infinity of things following from the divine nature and what follows from the essence of a triangle. Such a geometric essence is a paradigm case of a true and immutable nature, an eternal truth. In this context, it is reasonable to suppose that Spinoza is arguing that the propria following from the divine essence (whether that essence, or attribute, is extension, thought, or some other attribute), like the propria following from the true and immutable nature of a triangle, also enjoy the reality of eternal truths or true and immutable natures. From the perspective of someone reasoning in time, the true and immutable nature of a triangle always exists, even if the nature’s eternal reality is not reality that can properly be said to be enduring. Perhaps in saying that the things which follow from the absolute nature of God’s attributes always had to exist, Spinoza is just making a similar point. If a substantial essence (attribute) is eternally real, then, from the perspective of someone reasoning in time, that essence, as well as all of that essence’s propria, always exists, but this does not mean that it is apt to say that the eternally real entities themselves endure over time.

One might protest that making the effects timelessly eternal makes modes too much like substance, and that this is reason enough to suppose that the effects under discussion in E1p21 are sempiternal. But had Spinoza wanted to signal that God’s nature is the only nature that is timelessly eternal, we should expect him to announce this. Furthermore, even if both substance and modes enjoy the timelessly eternal reality of eternal truths, this does not mean that we cannot identify a key difference between them. In E1p24, Spinoza points to just such a difference: unlike God’s own essence, the ‘essence of things produced by God does not

---

84 See E1d8 for the equation of necessary existence and eternity.
85 See Curley (1969: 107, 116); Gueroult 1968: I.309; Melamed 2013: 122–126; Wolfson 1934: I.376–377).
86 See the beginning of the Fifth Meditation, AT VII.64.
87 Cf. Melamed (2012). Spinoza makes such an announcement in the Cogitata Metaphysica: ‘I call this infinite existence eternity, which is to be attributed to God alone, and not to any created thing, even though its duration should be without beginning or end’ (G I.252). I am not so sure we can assume this much continuity between the CM and the Ethics.
involve existence’ (E1p24). There is, just as we expect from modes, ontological dependence: modes have the reality they because they inhere in their immanent cause, the eternal substance.

Before I turn to E1p22, I want to point to one upshot of the reconstruction of E1p21d I have provided. On most reconstructions of E1p21d, Spinoza employs the same strategy for reductio twice: that is, in order for the idea Dei to be limited either in reality (i.e., be finite) or be limited in duration (i.e., be non-eternal), we must already assume that there is already some limited (and limiting) thing; but in that case, what follows does not follow from the absolute nature of substance, because it does not follow from substance alone, and that is contrary to hypothesis. So interpreted, it seems Spinoza has been confusingly prolix. The demonstration can be streamlined without distortion.

On my view, the demonstration cannot be condensed because the strategy in each stage’s reductio is different. In the first stage, the absurd consequence is that the same thing—substance—is both P (constituting the idea of God) and not-P (not constituting it). In the second stage, the absurdity is that we must posit a change in a necessarily existing essence (viz., substance’s). If this is how the demonstration goes, then, although we might complain that Spinoza could have made his reasoning more perspicuous, we cannot complain that he has repeated himself unnecessarily.

**IV.2. E1p22**

E1p22 is an extension of E1p21:

\[
\text{E1p22: Whatever follows from some attribute of God insofar as it is modified by a modification which, through the same attribute, exists necessarily and is infinite, must also exist necessarily and be infinite.}
\]

E1p22’s demonstration is short: it ‘proceeds in the same way as the demonstration of the preceding one [E1p21d].’

This demonstration does not usually get attention, but I will propose a reconstruction of it here. Like E1p21d, it proceeds in two stages. For the first stage, assume that something finite, N, follows from an infinite mode M. Again, the reality of finite things is such that it is limited and limiting (E1d2). Infinite, or non-finite, reality is different: it cannot do any limiting or be limited. The infinite mode M cannot limit N, ensuring its finitude, unless M is itself finite. So if N does follow from the infinite mode M, M is finite. As was the case in the first stage of E1p21d, the absurdity is that the same thing (M) is both P (infinite) and not-P (finite).

For the second stage, note that Spinoza equates eternal existence and necessary existence (E1d8). For reductio, assume that a non-necessary non-eternal thing K follows from a necessary, eternal mode J. There are times at which K does not exist. However, J exists necessarily and is eternal; that is, J is immutable. But J cannot cause K to be or not to be unless J itself exists in one way at one time and then in another way at another time. There cannot be a change in what follows from J’s essence unless there is a change in J’s essence. But J’s essence exists necessarily and is eternal, and so is immutable. In order for J’s essence to be different, God’s essence (whence J follows) must be different. But this is absurd, and is the same absurdity seen in the second stage of E1p21d.

From E1p21 and E1p22, we can conclude that what is non-eternal and non-infinite cannot follow from what is infinite and eternal; all the things following either immediately or mediately from the infinite and

---

88 In E2p10s, Spinoza explains that even though all modes must be in and conceived through the essence of substance, this does not mean that existence follows from the essence of any mode. God’s essence exists necessarily, but it is not the case that ‘anything without which a thing can neither be nor be conceived pertains to its essence.’

89 In addition to the passage cited in note 87, this passage from Ep. 12 has been read as implying that the eternity of modes cannot be the timeless eternity of substance: ‘… we conceive the existence of substance as of an entirely different kind from the existence of modes. This is the source of the difference between eternity and duration. It is to the existence of modes alone that we can apply the term duration …’ (G IV.54–55). For recent defense of the thesis that no modes are timeless eternal, see Melamed (2013: ch. 4) and Schmaltz (2015). I do not think this passage conclusively establishes that modes cannot be timeless eternal, since we can read Spinoza as saying that substance can only be properly understood as enjoying eternal existence, while we can apply the term duration’ as well as the term ‘eternity’ to that which is not substance. See my “Spinoza’s Monism” (2019, unpublished manuscript) and the concluding section of this paper.

90 Again, this can be eternal or necessary existence in virtue of essence (this is the eternal and necessary existence of substance) or eternal and necessary existence in virtue of substance’s immanent causation (this is the eternal and necessary existence of modes).
eternal essence of God—that is, each and every one of the infinity of things following from the divine nature (E1p16)—are infinite and eternal. The infinity of things may differ in their essences, as the essence of a triangle differs from the essence of a circle, but their eternal reality is, as what is non-finite, such that it cannot limit or be limited by anything else.\footnote{I think 'what is common to all things and is equally in the part and the whole' (see E2lemma2, E2p37), as well as the properties of things mentioned in E2p39, follow with necessity from the divine nature (while I cannot say more here, I suspect that the essences of singular things can be adequately understood in terms of these properties). I think the more 'immediate' modes are the more general common notions (e.g., Euclidean common notions); more 'mediate' modes presuppose what is more common. So the essence rectangle is a more immediate eternal, infinite mode than the essence cube, which is in turn more immediate than the essence of some particular cube. What I want to emphasize here is that the immediacy and mediacy is not a matter of some modes serving as causal intermediaries between God and other modes. While one may need to understand many other properties or essences to have an adequate idea of some particular essence, when that essence is conceived as enjoying infinite and eternal reality, it can, by itself, be cognized as immanently caused by and inhering in the infinite and eternal substance. I discuss this further in “Spinoza’s Monism” (2019, unpublished manuscript) and “Finding oneself in God: scientia intuitiva as a metaphysically self-locating thought” (forthcoming-a).}

\footnote{I thereby disagree with views according to which 'immediate' infinite modes (i.e., those described in E1p21) are timeless eternal while 'mediate' infinite modes (i.e., those described in E1p22) are not. Gueroult (1968: I.321–322) holds such a view, as does Nadler, who argues that an infinite series of finite modes understood as formal essences makes up an immediate infinite mode under each attribute, while an infinite series of finite modes understood as durationally existing entities makes up a mediate infinite mode under each attribute' (2012: 228).} Sub specie aeternitatis, everything following from the divine nature is on ontological par: any essence, conceived to be eternally real, 'contained in God and to follow from the necessity of the divine nature' (E5p29s), is as eternally real as any other.\footnote{This is important for the Third Meditation proof of God's existence. If the idea of the infinite were posterior to the idea of the finite, then one could construct that idea starting from the idea of the finite. But in that case, the presence of an idea with 'infinite' objective reality could not be used to prove the formal reality of an infinite being, God; that idea could have simply been generated from the Mediator's idea of his own finite reality as a thinking thing.}

Before turning to E1p23, I want to briefly point out that on my reconstruction, E1p21–22 can be taken to target a claim Descartes makes about the idea of reality that is finite and limited (either in time or in space). For Descartes, the idea of the infinite—that is, God's infinite reality—is not generated by starting with the idea of our own finite reality and then just removing limits on that reality: that only gives us the indefinite. Instead, the idea of the infinite is prior to the idea of the finite or limited.\footnote{The propositions immediately following E1p23 clarify that the fact that all of God's effects are infinite and eternal does not imply that modes are in fact substances. The difference between the essences of things that are not God and God (considered under any attribute) is that the former are essences that do not include existence (E1p24). Everything that is eternally, infinitely real is real because God is the cause of that reality. That everything that is not substance depends on God for both essence and existence (E1p25) might be taken to be a 'limitation': modes' infinite, eternal reality is 'limited' because it is not the self-causing infinite, eternal reality of substance. This is not the same sense of 'limitation' that is at work in E1p21–22. Any immanent effect of substance can be understood as 'limited' in the sense that it is not also a substance, but it cannot be understood as limited in the sense of being prevented from having some 'amount' of reality that it is conceivable for it to have—as a mode of substance, it cannot be conceived to be any more real (or less real) than it is.}

I say that the notion I have of the infinite is in me before that of the finite because, by the mere fact that I conceive being, or that which is, without thinking whether it is finite or infinite, what I conceive is infinite being; but in order to conceive a finite being, I have to take away something from this general notion of being, which must accordingly be there first. (Letter to Clerselier, 23 April 1649, AT V.356)

As I have read E1p21–22, Spinoza would say that we need to be more careful. Spinoza agrees with Descartes on the general point that the idea of the infinite is the idea of the reality that must be presupposed whenever we consider the reality of any of God's effects, but he will insist that the reality of these posterior effects is also infinite and eternal reality—as he will point out later, each mode has its infinite and eternal reality in virtue of its cause (substance), not in virtue of its own essence.\footnote{This raises the question of how Spinoza does understand finite, limited reality. I will not be able to venture into this topic here, although I return to the question of where finite, limited reality fits into Spinoza's system in the conclusion.} For Spinoza, to think that substance's reality could admit of limits is to misapprehend substance's reality; properly understood, that reality cannot be understood as limiting or limited. A finite, non-eternal thing cannot be understood as substance's reality with limits imposed, or something 'taken away.'\footnote{I thereby disagree with views according to which 'immediate' infinite modes (i.e., those described in E1p21) are timeless eternal while 'mediate' infinite modes (i.e., those described in E1p22) are not. Gueroult (1968: I.321–322) holds such a view, as does Nadler, who argues that an infinite series of finite modes understood as formal essences makes up an immediate infinite mode under each attribute, while an infinite series of finite modes understood as durationally existing entities makes up a mediate infinite mode under each attribute' (2012: 228).}
IV.3. *E1p23*
Where *E1p21* and *E1p22* can be read as *a priori* arguments—given what the cause is like, we know what its effects must be like—*E1p23* can be read as an *a posteriori* argument. That is, given an effect, we know what the cause must be like:

\[ E1p23: \text{Every mode which exists necessarily and is infinite has necessarily had to follow either from the absolute nature of some attribute of God, or from some attribute, modified by a modification which exists necessarily and is infinite [and eternal].} \]

The reasoning of the demonstration appears to be this. Whatever is, is a mode inhering in God, the one and only substance, and nothing can be or be conceived without God (*E1d5, E1p15*). If something is conceived to enjoy infinite and necessary [i.e., eternal, by *E1d8*] formal reality or existence, it is an infinite and necessary [eternal] mode of a substance. A mode is a way its substance is modified, so this mode conceived to have infinite and necessary [eternal] reality is a mode inhering in the infinite and necessary [eternal] substance; the mode is a way eternal formal reality, or ‘existence itself’ (understood under an attribute) is modified (*E1d6, E1p19*). We know from *E1p21* and *E1p22* that whether a thing follows immediately or mediately from the divine nature, it will enjoy infinite, eternal reality; *all* the things following from the divine nature are infinite and eternal. So if we have an infinite and eternal mode, we know that it either followed immediately or mediately from the divine nature.

IV.4. A Spinozan Meditator
According to my reconstruction of *E1p21d*, the idea assumed for reductio is the kind of idea Dei that would have been familiar to Cartesian readers: it is the idea of God at the center of Descartes’s *Meditations*, the idea a finite, limited human mind has of the true and immutable nature of God. From reflection on this idea, Descartes’s Meditator proves the existence of God, which in turn enables the Meditator to secure other important conclusions, including that God is the creator and sustainer of his being and that all his clear and distinct ideas are true. Spinoza agrees with Descartes that human minds have an idea of the ‘most eternal’ of eternal truths: ‘the human mind has an adequate cognition of God’s infinite and eternal essence’ (*E2p47*). Of course, Spinoza disagrees with Descartes on the nature of God and God’s relation to creation. To draw out the implications of reading *E1p21–23* as I have, it helps to consider what careful reflection on the Spinozan idea Dei secures.

If one has an adequate idea of God’s infinite and eternal essence, one understands that God is the one and only infinite, eternal, immutable, necessarily existing substance in which everything else inheres as modes and which can be conceived through different attributes (*E1p1–15, E1p19–20*). One sees that divine causation does not involve a will that is free by being perfectly indifferent, since the essences of all things simply follow with necessity from the divine essence (*E1p16–17*). One sees that God’s effects are not modally diverse: all of God’s effects are necessary.

Furthermore, given what God’s formal reality is (infinite and eternal), one sees that the formal reality of all of God’s effects must enjoy reality that cannot be understood as either limiting or being limited (*E1p21–22*). While some essences following from the divine nature (as in *E1p16*) presuppose other essences, as eternal truths presuppose other eternal truths, all of these essences enjoy infinite and eternal reality, albeit only because God causes them to have that reality (*E1p24*). Furthermore, there cannot be some other cause, besides God, of some necessary, eternal, infinite thing: any such thing is a mode caused by and inhering in the one and only infinite and eternal substance, God (*E1p23*). One sees that an infinite and eternal God’s effects are not ontologically diverse.

One sees that God is the cause of the essence of things (*E1p25*; see *E1p16*), and, since all essences follow with necessity from God’s necessarily existing nature, in causing himself to have eternal, infinite reality, God immanently causes all things to have eternal, infinite reality as modes. One perceives, then, that God is the cause of all things ‘in the same sense in which he is called the cause of himself’ (since *Deus dicitur causa sui, etiam omnium rerum causa dicendus est, E1p25s, my emphasis*).

---

96 See Schechtman (2014) for discussion of how the Meditator arrives at the requisite idea for the first causal proof of God’s existence in the Third Meditation.

97 See notes 91 and 92. One might think that since an essence *E* presupposes essence *F*, *E* is in that sense “limited” (cf. note 94). Again, I do not think such presupposition results in *E*’s *eternal reality* being limited.
By Spinoza’s lights, Descartes’s Meditator got it wrong: had the Meditator had the right conception of God, then reflection on his idea Dei would have revealed that his own mind is causally sustained as a mode of God enjoying infinite and eternal formal reality (considered under the attribute of thought), not as a finite formally real thinking thing created and conserved over time and existing apart from God. Once the Meditator understands that (a Spinozan) God must exist, he can see that all of God’s effects are infinite and eternal modes of God.88

There is more that the Meditator can grasp. If the Meditator sees that there is no true and immutable nature that is not in, conceived through, and caused by God (E1p23), then he will see that an idea of any true and immutable nature is an idea of an infinite and eternal mode of God. Since cognition of an effect depends on and involves cognition of its cause (E1a4), he will see that an idea of any true and immutable nature is a cognition of God; all of God’s effects are, in this sense, eternal and necessary ideas about God.99

Importantly, with the right Spinozan idea of God, the Meditator will also see that the true and immutable nature of some body (e.g., of a circle), considered as an objectively real content of an adequate idea, and that true and immutable nature, as something formally real, are one and the same thing considered under different attributes (E2p7). Furthermore, he understands that the objectively real content of his idea and his idea, considered as a formally real idea, are one and the same thing considered under the attribute of thought (E2p20–21). So, if he is able to adequately represent a true and immutable nature, like that of a circle, that means that what is doing the representing—his formally real idea—is also a true and immutable nature.

The Meditator will realize, that is, that his having an idea of a true and immutable nature—an idea of any eternal, infinite mode—indicates his mind, insofar as it has this idea, is a mode of God with infinite, eternal formal reality.

The Meditator thus recognizes that his experiences of contemplating true and immutable natures and eternal truths are experiences of his own status as an eternally real thing: he ‘feel[s] and know[s] by experience’ that he is eternal; ‘for the mind feels those things that it conceives in understanding no less than those it has in the memory’ (E5p23s). He comprehends that ‘insofar as [his mind] understands,’ or has adequate ideas of properties of things, eternal truths, or true and immutable natures, his mind ‘is an eternal mode of thinking’ (E5p40s). He realizes his understanding mind is part of the infinite intellect of God, which is all of the essences following from the divine essence (E1p16), conceived as infinite and eternal modes under the attribute of thought, or natura naturata (E1p29, E2p11c, E2p43s, E5p40s).101

Perhaps the Meditator had thought that true and immutable natures and eternal truths created by God were merely objectively real in the divine mind.102 Now he can see that such a view is mistaken. These effects are not merely objectively real contents in God’s infinite intellect, since they are also formally real. And these effects are not merely in God’s infinite intellect, if that intellect is understood to be ontologically distinct from human minds: the adequate idea of a true and immutable nature or eternal truth in a human mind is the adequate idea of that true and immutable nature or eternal truth in God’s infinite intellect.103

---

88 Once the Meditator properly understands God’s formal reality, he can properly understand the formal reality of all things, and it seems this is something that could be understood in a flash. Elsewhere I have argued that scientia intuitiva, cognition which ‘proceeds from an adequate idea of the formal essence of certain attributes of God to the adequate cognition of the [NS: formal] essence of things,’ delivers this insight. I have also argued that this insight enables a cognizer to be certain that all of their adequate ideas correspond to extra mental reality. See my “Scientia intuitiva in the Ethics” (2017) and “Finding oneself in God: scientia intuitiva as a metaphysically self-locating thought” (forthcoming-a). In my “Spinoza’s Monism” (2019, unpublished manuscript), I propose that for Spinoza, things conceived as enjoying the formal reality of enduring, finite things cannot be coherently cognized as inhering in and caused by an infinite and eternal God; in my (forthcoming-a), I argue that an inability to make sense of God’s causal relation to things conceived as they ordinarily are (i.e., as finite, enduring things) explains both why scientia intuitiva is difficult as well as why it is so transformative.

89 Cf. Question 1 in Section I. The Spinozan Meditator recognizes that he was able to have his adequate idea of the infinite and eternal essence of God in virtue of his having adequate ideas of infinite and eternal modes caused by God (note that one can “follow the proper order of philosophizing” and begin with the contemplation of the divine nature [E2p10s] without realizing how one is able to have the right idea of the divine nature in the first place).

90 In other work, I argue that E2p8 and E2p9 extend the thought introduced in E2p7: a true idea does not just represent the properties of something, but also represents the kind of formal reality (infinite and eternal or non-eternal and finite) that something enjoys.

91 In E5p40s, Spinoza says that it is clear from ‘E1p21 and other things’ that our mind, insofar as it understands, is an eternal mode of thinking. I have offered one way of understanding why Spinoza cites E1p21 in this scholium. Note that E5p40s does not say that the mind, insofar as it understands, is an eternal and infinite mode of thinking; if E1p21 is to be read as I have suggested, then this omission is, admittedly, puzzling. This is speculative, but perhaps the talk of “perfection” in the corollary immediately preceding the scholium is supposed to indicate that the reality of this eternal mode is non-finite.

92 See Section II.4 above.

93 According to E5p40s, insofar as our mind understands, it is an eternal mode of thinking (determined by another mode of thinking,
V

Most commentators hold that Spinoza’s infinite and eternal God immanently causes two kinds of modes, some of which are infinite and eternal (or perhaps indefinite and sempiternal) and others of which are finite and non-eternal. I have suggested that Spinoza has argued for a very different conclusion: if we conceive of the one and only substance as a cause with infinite and eternal reality, then we must conceive of all of substance’s modes as infinite (not merely indefinite and eternal (and not sempiternal). Substance, properly conceived, cannot be the immanent cause of formal reality that can be coherently thought of as consisting of parts or as limiting or being limited. So the infinite and eternal substance does not immanently cause the familiar world of enduring, striving bodies that are of variable sizes, divisible into parts, and capable of being imagined as larger or smaller than they in fact are. It also does not immanently cause the individual comprised of all such bodies taken together, or the whole of nature as an individual (E2lemma7s). This individual’s reality can be understood in terms of limits: its reality is characterized as that which does not admit of a stable limit or bound, since any is surpassed.

On the one hand, my interpretation has the benefit of bringing Spinoza’s mode-substance relation closer to a more workaday, familiar notion of mode and substance. That is, the reality of a mode is simply a way that the reality of substance is: as each wave in water is water, so each mode of an infinite and eternal substance is infinite and eternal. On the prevailing view in Spinoza scholarship, according to which at least some modes’ reality is not just substance’s infinite and eternal reality modified, it is hard to see how to retain the workaday notion without changing one’s conception of substance’s reality.

For example, take a view according to which there are ‘infinite modes’ of an eternal and infinite substance that are sempiternal and indefinite. If we retain the workaday notion of mode, these modes are not ways that substance’s eternal, infinite reality is modified, but rather ways sempiternal, indefinite reality is modified. In order to conceive of such modes as just ways that substance’s reality is modified, it seems we must reconceive substance either as sempiternal or as just that which exists. I do not think either option is tenable. Spinoza emphasizes that substance’s existence is indivisible and cannot be explicited in terms of duration or time (E1d8exp., E1p15s). This suggests that substance’s reality is not to be understood as sempiternal, since such reality can be explicited in terms of duration and temporal units—everlasting reality is reality that endures, but is never limited in its duration (and so its duration does not admit of a final determinate temporal measure). I think it also indicates that substance’s reality is not just that which exists (so that if something exists, regardless of the character of the formal reality it enjoys as an existing thing, it is a mode of substance).

On the other hand, however, my proposal that all of God’s immanent effects are infinite and eternal modes appears to face two major objections.

V.1. Letter 64

A first objection is that my interpretation is incompatible with what Spinoza writes to Schuller in his 1675 letter (Ep. 64). Schuller asked for some examples of the entities Spinoza discusses in E1p21 and E1p22, and Spinoza replies,

_... the examples for which you ask are of the first kind [the kind discussed in E1p21] in Thought, absolutely infinite intellect; in Extension however motion and rest; of the second kind [discussed in E1p22], the face of the whole Universe [facies totius Universi], which although varying in infinite ways, remains however always the same, on which see scholium of lemma 7..._ (G IV.278; cf. KV I.ix.2–3, G 1.48)

This is obscure, and Spinoza does not offer further clarification beyond the reference to the ‘Physical Digression,’ the short treatise on body and motion in Part II of the Ethics.

This letter is often cited to defend a view of the infinite modes according to which they are laws of nature; this is suggested by ‘motion and rest.’ More generally, it is cited in support of the view that the infinite modes
are just a subclass of God's modes. If Spinoza had wanted to say that all modes are, in fact, infinite modes, he would have just said so here.

However, I do not think the examples are incompatible with what I've suggested above.

The essence of any body is a *ratio of motion and rest* (E2Lemma5). Now, to understand a ratio of motion and rest, one need not conceive of anything determined to be what it is by anything actually in motion. However, to understand any *ratio* of motion and rest, one does need to conceive of extension as that which can always be conceived in terms of "motion and rest," regardless of what the specific terms might be. This, I take it, is a basic eternal truth concerning the nature of extension, or what follows "from the absolute nature" of extension (E1p21).105

The scholium of lemma 7 makes the point that there is an unchanging—that is, immutable—ratio of the infinity of individual bodies' ratios of motion and rest. In other words, there is a true and immutable nature of the system of all things, of all the essences following from the divine nature (E1p16). Granted, Spinoza does not say that any particular ratio is also a true and immutable nature enjoying eternal and infinite reality as a mode of substance, but I do not think what he does say is incompatible with this being so.

I also do not think what Spinoza says about thought in Letter 64 is incompatible with my interpretation. The 'absolutely' in 'absolutely infinite intellect' is, I think, just a way of signaling that this 'intellect' is the most basic eternal truth about thought, or the most basic property of substance considered under the attribute of thought: whatever else characterizes ideas, they are *representations*. Here, in using the word 'intellect,' Spinoza also means to signal the *truth* of whatever this intellect represents. So *truly representing* is prior in nature to any particular true idea; it is a way that thinking reality must be in order for there to be any particular true ideas at all. The (true and immutable) nature of thinking reality is such that it can always be conceived in terms of true representations.

As Spinoza explains in the first half of *Ethics* Part II, true ideas represent properties of bodies—and some true ideas represent the essences of bodies, or ratios of motion and rest. A longstanding puzzle in Spinoza interpretation is why Spinoza does not list a 'mediate infinite mode' for the attribute of thought.106 Here is a suggestion: Spinoza did not think he needed to because he was confident Schuller would see the parallel. What corresponds to the 'face of the whole universe'—the ratio of all ratios—is the true representation of that true and immutable nature. It is the ratio considered not as enjoying the formal reality of bodies, but as enjoying the objective reality of objects of thought.107

Again, nothing Spinoza says here is obviously incompatible with my proposal that all the modes immanently caused by God are eternal, infinite modes.

**V.2. A more serious problem?**

As I mentioned in Section I, other scholars, seeing that E1p21–23 commits Spinoza to the view that God's effects are infinite, have invoked one or more 'infinite modes' to explain God's causation of the limited, actual things described in E1p28. Perhaps God causes finite things by causing infinite modes that are pervasive features of the enduring world required for any finite thing to come into being. Or perhaps God causes finite things by causing the infinite mode that is the sempiternal individual that is the entire transitive causal nexus of finite things considered as a whole. According to my reading, these strategies for making sense of Spinoza's system cannot work: the reality of such pervasive features, or the sempiternal individual, is not the kind of unlimited, infinite, eternal reality that God, properly conceived as the one Spinozan substance, causes.

Much of the *Ethics*—arguably much of Part II and most of Parts III and IV—concerns what is manifestly not eternal or infinite: things that are affected—even destroyed—by other things. One could complain that my reading renders Spinoza's system inconsistent. *All there is* is the one substance and its modes; if *all modes*

105 In other work, I clarify how the essences of modes differ from the attributes, which are just what the 'intellect perceives to be the essence of substance' (E1d4).

106 See Schmaltz (1997) for discussion of Spinoza's 'missing' mediate infinite mode of thought.

107 This idea of all things conceived as eternal truths (i.e., as infinite and eternal modes of substance) is an 'infinite intellect' (see E1p16c1, E1p31). Spinoza calls this infinite intellect the *idea Dei* (see E2p4). Insofar as the mind understands, or 'perceives things truly,' it is part of the infinite intellect of God (see E2p11c, E2p43s, E5p40s). See Section IV.4 above. In V.2, I suggest that any essence (that is not the essence of substance, or an attribute) can be considered either as real as an infinite, eternal mode or as a non-infinite, non-eternal thing. The set of essences that is the "infinite intellect" can be conceived either way; a human mind considered as enduring over time is part of the infinite intellect conceived *sub specie durationis*, while a human mind considered as an eternal and infinite mode is part of the infinite intellect conceived *sub specie aeternitatis*.
are infinite and eternal, then everything that is actual, or real, in the way familiar non-eternal and finite things are actual, does not have a place in the system. God is the cause of all things, but if each and every one of God’s effects is real as an infinite and eternal mode, then God does not cause the reality of ordinary things—the actual, always-in-some-respect limited (and limiting) reality in which we and other actual things strive to endure (E3p6–7).

I do not think my reading renders Spinoza’s system inconsistent, but I do think we need to reexamine the fundamental structure of that system.

Spinoza holds that in order for causation to be intelligible, it must be within an attribute. This is a causal-explanatory ‘barrier’ between attributes. I do not think this is the only such barrier in the system: 1) an infinite and eternal God’s immanent causation of infinite and eternal modes and 2) transitive causation of things with ‘finite and determinate existence’ (E1p28) are similarly sequestered, even when the causal relata are considered under the same attribute. Properly conceived under any of its attributes, substance enjoys infinite, eternal formal reality, and can only be coherently cognized as immanently causing effects that also enjoy infinite, eternal formal reality; what enjoys infinite, eternal formal reality can only be coherently cognized as immanently caused by substance. These are conclusions I understand to be established in E1p21–23. Finite and non-eternal things can only be coherently cognized as transitively causing (and caused by) finite and non-eternal things. I understand this to be the main point of E1p28. As I read Spinoza, neither finite, non-eternal things nor indefinite, sempiternal things can be cognized both as enjoying the kind of formal reality they do and as immanently caused by and inhering in substance.

God’s essence can only be properly conceived as enjoying, necessarily infinite and eternal formal reality. Importantly, however, the infinity of essences following from the divine essence do not involve existence. One and the same essence can be considered either as enjoying formal reality as an infinite and eternal mode, in which case its reality can be understood to be immanently caused by an infinite and eternal God, or as enjoying formal reality as a non-eternal and finite thing, in which case its reality cannot be understood as immanently caused by an infinite and eternal God. So, God is the cause of all things and all things are modes; it is just that we cannot coherently cognize things as modes of God when we consider them as real in the way the jostling bodies and impermanent minds of ordinary experience are taken to be real.

I cannot provide more defense of this proposal here. I will just end by noting that if this is the basic structure of Spinoza’s monist system, then it can be understood as providing alternatives to three Cartesian views concerning causation. The first is the view I focused on in this essay: the doctrine of God’s creation of the eternal truths. The second is the view, alluded to in Section IV.4, that an infinite, eternal God can be understood as creating and conserving finite (or indefinite) non-eternal (or sempiternal) things. The third is the view that minds and bodies causally interact. That Spinoza replaces the third view with what he sees as a more intelligible monist alternative is universally accepted, although there are—as with anything Spinoza—a variety of ways to understand the alternative Spinoza furnishes. However, the extent of Spinoza’s departure from the other two views has not, to my mind at least, received enough attention.

I work out more details in my “Spinoza’s Monism” (2019, unpublished manuscript).

See E1d2, E1p10, E2p4–5. See Della Rocca (1996). Cf. Jarrett (1982).

The distinction between durational and formal realities crosscuts the distinction between the attributes of extension and thought (and, presumably, all the other attributes that are inaccessible to human minds). One and the same essence can be considered as a) an eternal, infinite mode under the attribute of extension, b) an eternal, infinite mode under the attribute of thought, c) an enduring, actual body, or d) an enduring, actual mind. Importantly, durational formal reality can be thought of in terms of “amounts,” and not all things, conceived sub specie durationis, are on ontological par. We can thus begin to see why realizing that one and the same essence can be considered either as some limited enduring thing or as an infinite eternal mode of God is such a powerful realization—a realization I think scientia intuitiva delivers (see my “Finding oneself in God: scientia intuitiva as a metaphysically self-locating thought” [forthcoming-a]). While one will continue to cognize actual, non-eternal, finite things as transitively caused by other such things (and as necessary given its transitive causes), once one has the intuition of scientia intuitiva, one’s experience is nevertheless transformed: for example, one sees that on another way of conceiving the same essences, they are absolutely necessary—not just necessary given other transitive causes (recall the equation of eternity and necessity in E1d8. See also note 90). One also realizes that the kind of reality we expend so much energy worrying about—actual, durational reality—is not fully real. If things’ durational formal reality cannot be coherently cognized as caused by God, then it is not fully intelligible; if intelligibility tracks reality, then durational reality is not fully real (cf. Della Rocca 2012).

See E5p29c: “We conceive things as actual [i.e., as formally real. Cf. Descartes’s use of the term ‘actual’ in AT VIII.11 and AT VII.41] in two ways: either insofar as we conceive them to exist in relation to a certain time and place, or insofar as we conceive them to be contained in God and to follow from the necessity of the divine nature. But the things we conceive in this second way as true, that is, real, we conceive sub specie aeternitatis, and their ideas involve the infinite and eternal essence of God.”

See my “Spinoza’s Monism” (2019, unpublished manuscript) for more discussion.

As I read him, Spinoza can acknowledge that we can conceive of durational reality and eternal reality as really distinct, just as we
here why we may want to pay more attention: once we do, we may realize that common ways of reading certain propositions—or understanding Spinoza’s system as a whole—need to be reconsidered.

Competing Interests
The author has no competing interests to declare.

References
Alanen, Lilli. 1985. “Descartes, Duns Scotus and Ockham on Omnipotence and Possibility.” Franciscan Studies 45: 157–188. DOI: https://doi.org/10.1353/frc.1985.0016

Alanen, Lilli. 1988. “The Foundations of Modality and Conceivability in Descartes and His Predecessors.” In Modern Modalities: Studies of the History of Modal Theories From Medieval Nominalism to Logical Positivism, edited by Simo Knuuttila, 1–69. Dordrecht: Kluwer Academic Publishers. DOI: https://doi.org/10.1007/978-94-009-2915-9_1

Alanen, Lilli. 2008. “Omnipotence, Modality, and Conceivability.” In A Companion to Descartes, edited by Janet Broughton and John Carriero, 353–371. Malden, MA: Blackwell. DOI: https://doi.org/10.1002/9780470696439.ch21

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

Bennett, Jonathan. 1994. “Descartes’s Theory of Modality.” The Philosophical Review 103 (4): 639–667. DOI: https://doi.org/10.2307/2186100

Bouveresse, Jacques. 1983. “La Théorie Du Possible Chez Descartes.” Revue Internationale de Philosophie 37, no. 146 (3): 293–310.

Bréhier, Émile. 1968. “The Creation of the Eternal Truths in Descartes’s System.” In Descartes: A Collection of Critical Essays, edited by Willis Doney, 192–208. South Bend, IN: University of Notre Dame Press. DOI: https://doi.org/10.1007/978-1-349-15265-0_9

Broughton, Janet. 1987. “Necessity and Physical Laws in Descartes’s Philosophy.” Pacific Philosophical Quarterly 68 (3–4): 205–221. DOI: https://doi.org/10.1111/j.1468-0114.1987.tb00293.x

Carriero, John. 1995. “On the Relationship between Mode and Substance in Spinoza’s Metaphysics.” Journal of the History of Philosophy 33 (2): 245–273. DOI: https://doi.org/10.1353/hph.1995.0026

Carriero, John. 2009. Between Two Worlds: A Reading of Descartes’s Meditations. Princeton, NJ: Princeton University Press. DOI: https://doi.org/10.1515/9781400833191

Chappell, Vere. 1997. “Descartes’s Ontology.” Topoi 16 (2): 111–127. DOI: https://doi.org/10.1023/A:1005847612397

Cunning, David. 2010. Argument and Persuasion in Descartes’ Meditations. Oxford: Oxford University Press. DOI: https://doi.org/10.1093/acprof:oso/9780195399608.001.0001

Curley, Edwin. 1969. Spinoza’s Metaphysics: An Essay in Interpretation. Cambridge, MA: Harvard University Press. DOI: https://doi.org/10.4159/harvard.9780674330450

Curley, Edwin. 1984. “Descartes on the Creation of the Eternal Truths.” Philosophical Review 93 (4): 569–597. DOI: https://doi.org/10.2307/2184828

Curley, Edwin. 1988. Behind the Geometrical Method. Princeton: Princeton University Press.

Curley, Edwin. 1990. “On Bennett’s Spinoza: The Issue of Teleology.” In Spinoza: Issues and Directions, edited by Edwin Curley and Pierre-François Moreau, 39–52. New York: Brill. DOI: https://doi.org/10.1163/9789004246638_005

Curley, Edwin. 1993. “Donagan’s Spinoza.” Ethics 104 (1): 114–134. DOI: https://doi.org/10.1086/293578

Curley, Edwin, and Gregory Walski. 1999. “Spinoza’s Necessitarianism Reconsidered.” In New Essays on the Rationalists, edited by R. J. Gennaro and C. Huenemann, 241–262. New York: Oxford University Press. DOI: https://doi.org/10.1093/0195165411.003.0011

Deleuze, Gilles. 1968. Spinoza et le problème de l’expression. Paris: Minuit.

can conceive of thinking reality as really distinct from extended reality (E1p10c). Spinoza can thus acknowledge the temptation to theorize along Cartesian lines and hold that there are multiple kinds of substances as well as a transcendent God. However, one might object that we need not read Spinoza as so concessive. For a recent interpretation that does not attribute to Spinoza the view that there are different formal realities at work in the system, see Laerke (2017).

114 Earlier versions of this essay were presented at the 2018 conference on infinity at the University of Toronto, the spring 2018 meeting of the North American Spinoza Society in San Diego, the 2018 Lake Tahoe Workshop in Early Modern Philosophy, and a work-in-progress lunch at UC Berkeley in 2019. Thanks to everyone who attended those events for your questions and objections. Thanks also to Michael Della Rocca, Colin Garretson, and two anonymous referees for their helpful feedback.
Della Rocca, Michael. 1999. “If a Body Meets a Body: Descartes on Body–Body Causation.” In New Essays on the Rationalists, edited by R. J. Gennaro and C. Huenemann, 48–81. New York: Oxford University Press. DOI: https://doi.org/10.1093/0195165411.003.0003

Della Rocca, Michael. 2003. “A Rationalist Manifesto: Spinoza and the Principle of Sufficient Reason.” Philosophical Topics 31 (1/2): 75–93. DOI: https://doi.org/10.5840/philtopics200331/215

Della Rocca, Michael. 2007. “Spinoza and the Metaphysics of Scepticism.” Mind 116 (464): 851–874. DOI: https://doi.org/10.1093/mind/fzm851

Della Rocca, Michael. 2008. Spinoza. New York: Routledge. DOI: https://doi.org/10.4324/9780203894583

Della Rocca, Michael. 2012. “Rationalism, Idealism, Monism, and Beyond.” In Spinoza and German Idealism, edited by E. Förster and Y. Melamed, 7–26. Cambridge: Cambridge University Press. DOI: https://doi.org/10.1017/CBO9781139135139.002

Della Rocca, Michael. 2015. “Interpreting Spinoza: The Real Is the Rational.” Journal of the History of Philosophy 53 (3): 525–535. DOI: https://doi.org/10.1353/hph.2015.0049

De Rosa, Raffaella. 2011. “Rethinking the Ontology of Cartesian Essences.” British Journal for the History of Philosophy 19 (4): 605–622. DOI: https://doi.org/10.1080/09608788.2011.583414

Descartes, René. 1964–74. Œuvres. Paris: Vrin.

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

Dutton, Blake. 1996. “Indifference, Necessity, and Descartes’s Derivation of the Laws of Motion.” Journal of the History of Philosophy 34 (2): 193–212. DOI: https://doi.org/10.1353/hph.1996.0037

Frankfurt, Harry. 1977. “Descartes on the Creation of the Eternal Truths.” The Philosophical Review 86 (1): 36–57. DOI: https://doi.org/10.2307/2184161

Funkenstein, Amos. 1975. “Descartes, Eternal Truths, and the Divine Omnipotence.” Studies in History and Philosophy of Science Part A 6 (3): 185–199. DOI: https://doi.org/10.1016/0039-3681(75)90022-9

Gabbey, Alan. 2008. “Spinoza, Infinite Modes, and the Infinitive Mood.” Studia Spinoziana 16: 41–65.

Garber, Daniel. 2015. “Superheroes in the History of Philosophy: Spinoza, Super-Rationalist.” Journal of the History of Philosophy 53 (3): 507–521. DOI: https://doi.org/10.1353/hph.2015.0045

Garrett, Don. 1991. “Spinoza’s Necessitarianism.” In God and Nature in Spinoza’s Metaphysics, edited by Y. Yovel, 97–118. Leiden: Brill.

Garrett, Don. 2009. “Spinoza on the Essence of the Human Body and the Part of the Mind That Is Eternal.” In The Cambridge Companion to Spinoza’s Ethics, edited by Olli Koistinen, 284–302. Cambridge: Cambridge University Press. DOI: https://doi.org/10.1017/COL9780521853392.014

Gech, P. T. 1973. “Omnipotence.” Philosophy 48 (183): 7–20. DOI: https://doi.org/10.1017/S0031819100060381

Gewirth, Alan. 1970. “The Cartesian Circle Reconsidered.” The Journal of Philosophy 67 (19): 668–685. DOI: https://doi.org/10.2307/2024587

Gueroult, Martial. 1968. Spinoza I: Dieu. Paris: Aubier-Montaigne.

Gueroult, Martial. 1974. Spinoza II: L’âme. Paris: Aubier-Montaigne.

Hattab, Helen. 2016. “Descartes on the Eternal Truths and Essences of Mathematics: An Alternative Reading.” Vivarium 52 (2–3): 204–249. DOI: https://doi.org/10.1163/15685349-12341319

Ishiguro, Hišé. 1986. “The Status of Necessity and Impossibility in Descartes.” In Essays on Descartes’ Meditations, edited by A. O. Rorty, 459–472. Berkeley: University of California Press.

Jarrett, Charles. 1982. “On the Rejection of Spinozistic Dualism in the Ethics.” Southern Journal of Philosophy 20 (2): 153–175. DOI: https://doi.org/10.1111/j.2041-6962.1982.tb00286.x

Jayasekera, Marie. 2014. “Descartes on Human Freedom.” Philosophy Compass 9 (8): 527–539. DOI: https://doi.org/10.1111/phc3.12146

Kaufman, Dan. 2002. “Descartes’s Creation Doctrine and Modality.” Australasian Journal of Philosophy 80 (1): 24–41.

Kaufman, Dan. 2003. “Divine Simplicity and the Eternal Truths in Descartes.” British Journal for the History of Philosophy 11 (4): 553–579. DOI: https://doi.org/10.1080/0960878032000160235

Kaufman, Dan. 2005. “God’s Immutability and the Necessity of Descartes’s Eternal Truths.” Journal of the History of Philosophy 43 (1): 1–19. DOI: https://doi.org/10.1353/hph.2005.0009

Kemp Smith, Norman. 1952. New Studies in the Philosophy of Descartes. London: Maximillan.
Kenny, Anthony. 1968. *Descartes: A Study of His Philosophy*. New York: Random House.

Kenny, Anthony. 1970. "The Cartesian Circle and the Eternal Truths." *The Journal of Philosophy* 67 (19): 685–700. DOI: https://doi.org/10.1007/90237/202458

Klein, Julie. 2014. "Something of it Remains: Spinoza and Gersonides on Intellectual Eternity." In *Spinoza and Medieval Jewish Philosophy*, edited by S. Nadler, 177–203. Cambridge: Cambridge University Press. DOI: https://doi.org/10.1017/CBO9781139795395.010

Kneale, Martha. 1973. "Eternity and Sempiternity." In *Spinoza: A Collection of Critical Essays*, edited by M. Grene, 227–240. New York: Anchor Books.

Koyré, Alexandre. 1950. "Le Chien, Constellation Céleste, et Le Chien, Animal Aboyant." *Revue de Métaphysique et de Morale* 55 (1): 50–59.

Laerke, Mogens. 2017. "Aspects of Spinoza’s Theory of Essence. Formal Essence, Non-existence and Two Types of Actuality." *The Actual and The Possible*, edited by M. Sinclair, 11–42. Oxford: Oxford University Press. DOI: https://doi.org/10.1093/oso/9780198786436.003.0002

Leibniz. 1999. *Réfutation inédite de Spinoza*. Edited by M. de Gaudemar and Translated by L.A. Foucher de Careil. Paris: Actes Sud.

Lin, Martin. 2007. "Spinoza’s Arguments for the Existence of God." *Philosophy and Phenomenological Research* 75 (2): 269–297. DOI: https://doi.org/10.1111/j.1933-1592.2007.00076.x

Lin, Martin. 2012. "Rationalism and Necessitarianism." *Noûs* 46 (3): 418–448. DOI: https://doi.org/10.1111/j.1468-0068.2011.00832.x

Lin, Martin. 2018. "The Principle of Sufficient Reason in Spinoza." In *The Oxford Handbook of Spinoza*, edited by Michael Della Rocca, 133–154. Oxford: Oxford University Press.

Lord, Beth. 2010. *Spinoza’s Ethics: An Edinburgh Philosophical Guide*. Edinburgh Philosophical Guides Series. Edinburgh: Edinburgh University Press.

Marion, J.-L. 1980. *Sur La Théologie Blanche de Descartes*. Paris: Presses Universitaires de France.

Martin, Christopher. 2008. "The Framework of Essences in Spinoza’s Ethics." *British Journal for the History of Philosophy* 16 (3): 489–509. DOI: https://doi.org/10.1080/0960787802200489

Martin, Christopher. 2018. "Spinoza’s Formal Mechanism." *Pacific Philosophical Quarterly* 99 (S1): 151–181. DOI: https://doi.org/10.1111/papq.12209

Melamed, Yitzhak. 2012. "Spinoza’s Deification of Existence." *Oxford Studies in Early Modern Philosophy* VI:75–104. DOI: https://doi.org/10.1093/acprof:oso/9780199659593.003.0003

Melamed, Yitzhak. 2013. *Spinoza’s Metaphysics: Substance and Thought*. Oxford: Oxford University Press. DOI: https://doi.org/10.1093/acprof:oso/9780195394054.001.0001

Menn, Stephen. 2002. *Descartes and Augustine*. Cambridge: Cambridge University Press.

Miller, Jon. 2003. "Spinoza and the Concept of a Law of Nature." *History of Philosophy Quarterly* 20 (3): 257–276.

Miller, Jon. 2009. "Spinoza and the Stoics on Substance Monism." In *The Cambridge Companion to Spinoza’s Ethics*, edited by Olli Koistinen, 99–117. Cambridge: Cambridge University Press. DOI: https://doi.org/10.1017/COL9780521853392.006

Nadler, Steven M. 1987. "Scientific Certainty and the Creation of the Eternal Truths: A Problem in Descartes." *The Southern Journal of Philosophy* 25 (2): 175–192. DOI: https://doi.org/10.1111/j.2041-6962.1987.tb01615.x

Nadler, Steven M. 2010. *The Best of All Possible Worlds: A Story of Philosophers, God, and Evil in the Age of Reason*. Princeton: Princeton University Press.

Nadler, Steven M. 2012. "Spinoza’s Monism and the Reality Of The Finite." In *Spinoza on Monism*, edited by Philip Goff, 223–243. Houndmills, Basingstoke, Hampshire: Palgrave-Macmillan.

Newlands, Samuel. 2018a. *Reconceiving Spinoza*. Oxford: Oxford University Press. DOI: https://doi.org/10.1093/acprof:oso/9780198817260.001.0001

Newlands, Samuel. 2018b. "Spinoza’s Modal Metaphysics." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta. Fall 2018 ed. https://plato.stanford.edu/archives/fall2018/entries/spinoza-modal/

Nolan, Lawrence. 1997. "The Ontological Status of Cartesian Natures." *Pacific Philosophical Quarterly* 78 (2): 169–194. DOI: https://doi.org/10.1111/1468-0114.00034

Osler, Margaret. 1985. "Eternal Truths and the Laws of Nature: The Theological Foundations of Descartes’ Philosophy of Nature." *Journal of the History of Ideas* 46 (3): 349–362. DOI: https://doi.org/10.2307/2709472

Perler, Dominik. 2018. "Spinoza on Skepticism." In *The Oxford Handbook of Spinoza*, edited by Michael Della Rocca, 220–239. Oxford: Oxford University Press.

Plantinga, Alvin. 1980. *Does God Have a Nature?* Milwaukee, WI: Marquette University Press.
Primus, Kristin. 2017. “Scientia intuitiva in the Ethics.” In The Critical Guide to Spinoza’s Ethics, edited by Yitzhak Melamed, 169–186. Cambridge: Cambridge University Press. DOI: https://doi.org/10.1017/9781131639213.009

Primus, Kristin. 2019. “Spinoza’s Monism.” Unpublished manuscript.

Primus, Kristin. Forthcoming-a. “Finding oneself in God: scientia intuitiva as a metaphysically self-locating thought.” In Spinoza’s Ethics and Theological-Political Treatise, edited by Daniel Garber, Mogens Laerke, Pierre-François Moreau, and Pina Totaro. Oxford: Oxford University Press.

Primus, Kristin. Forthcoming-b. “Ideas of Ideas and Knowing that one Knows.” In The Blackwell Guide to Spinoza’s Ethics, edited by Yitzhak Melamed. Oxford: Blackwell.

Rozemond, Marleen. 2008. “Descartes Ontology of Eternal Truths.” In Contemporary Perspectives on Early Modern Philosophy: Essays in Honor of Vere Chappell, edited by David Owen, Gideon Yaffe, and Paul Hoffman, 41–63. Peterborough, Ontario: Broadview.

Schechtman, Anat. 2014. “Descartes’s Argument for the Existence of the Idea of an Infinite Being.” Journal of the History of Philosophy 52 (3): 487–517. DOI: https://doi.org/10.1353/hph.2014.0061

Schmaltz, Tad M. 1991. “Platonism and Descartes’ View of Immutable Essences.” Archiv Fur Geschichte Der Philosophie 73 (2): 129–170. DOI: https://doi.org/10.1515/agph.1991.73.2.129

Schmaltz, Tad M. 1997. “Spinoza’s Mediate Infinite Mode.” Journal of the History of Philosophy 35 (2): 199–235. DOI: https://doi.org/10.1353/hph.1997.0024

Schmaltz, Tad M. 2000. “The Disappearance Of Analogy in Descartes, Spinoza, and Regis.” Canadian Journal of Philosophy 30 (1): 85–114. DOI: https://doi.org/10.1080/00455091.2000.10717526

Schmaltz, Tad M. 2002. Radical Cartesianism: The French Reception of Descartes. Cambridge: Cambridge University Press. DOI: https://doi.org/10.1017/CBO9780511498312

Schmaltz, Tad M. 2014. “The Fifth Meditation: Descartes’ Doctrine of True and Immutable Natures.” In The Cambridge Companion to: Descartes’ Meditations, edited by David Cunning, 205–222. Cambridge: Cambridge University Press. DOI: https://doi.org/10.1017/CCO9781139088220.011

Schmaltz, Tad M. 2015. “Spinoza on Eternity and Duration.” In The Young Spinoza: A Metaphysician in the Making, edited by Yitzhak Melamed, 205–220. Oxford: Oxford University Press. DOI: https://doi.org/10.1039/acprof:oso/9780199971657.003.0014

Schmaltz, Tad M. 2017. “Platonism and Conceptualism among the Cartesians.” In The Problem of Universals in Early Modern Philosophy, edited by Stefano di Bella and Tad Schmaltz, 117–141. Oxford: Oxford University Press. DOI: https://doi.org/10.1093/acprof:oso/9780190608040.003.0006

Schmaltz, Tad M. 2018. “Spinoza and Descartes.” In The Oxford Handbook of Spinoza, edited by Michael Della Rocca, 63–83. Oxford: Oxford University Press.

Scribano, Emanuela. 2008. Guida alla lettura dell’Etica di Spinoza. Rome-Bari: Editori Laterza.

Spinoza, Benedict. 1972. Spinoza Opera. 4 vols. Edited by Carl Gebhardt. Carl Winters.

Spinoza, Benedict. 1985–2016. The Collected Works of Spinoza. 2 vols. Edited and translated by Edwin Curley. Princeton: Princeton University Press. DOI: https://doi.org/10.1515/9781400873609

Van Cleve, James. 1994. “Descartes and the Destruction of the Eternal Truths.” Ratio 7: 58–62. DOI: https://doi.org/10.1111/j.1467-9329.1994.tb00153.x

Viljanen, Valtteri. 2011. Spinoza’s Geometry of Power. Cambridge: Cambridge University Press. DOI: https://doi.org/10.1017/CBO9781139005210

Ward, Thomas M. 2011. “Spinoza on the Essentials of Modes.” British Journal for the History of Philosophy 19 (1): 19–46. DOI: https://doi.org/10.1080/09608788.2011.533010

Wells, Norman J. 1982. “Descartes’ Uncreated Eternal Truths.” New Scholasticism 56 (2): 185–199. DOI: https://doi.org/10.5840/newscholas198256227

Williams, Bernard. 1978. Descartes: The Project of Pure Enquiry. New York: Routledge.

Wilson, Margaret Dauler. 1978. Descartes. New York: Routledge.

Wolfson, Harry. 1934. Philosophy of Spinoza. Cambridge, MA: Harvard University Press.

Yovel, Yirmiyahu. 1989. Spinoza and Other Heretics. Princeton: Princeton University Press.
