SPINOZA ON DEFINITION AND ESSENCE

by
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The first two chapters of this dissertation address questions concerning Spinoza’s views on the nature of definitions and how they relate to essences. I explain the nature of Spinoza’s distinction between real and stipulative definitions in historical context. I show that the metaphysical assumptions of this distinction explain his criticisms of Giovanni Alfonso Borelli, his unique justification of the notion that stipulative definitions require no defense, and the distinction between definitions and axioms. I also offer a proposal for how this distinction could be further developed in accord with Spinoza’s mature views on ideas and representation in the Ethics. I also construct detailed interpretations and explanations of Spinoza’s criteria for satisfactory definitions, with special attention paid to his adoption of the classical distinction between a thing’s essence and its properties, and to the requirement that definitions include the cause of the thing.

In chapters three and four, I demonstrate that Spinoza is committed to the Principle of Unique Causes (PUC), the thesis that each thing has one and only one possible adequate cause. I show that the PUC is independent of Spinoza’s Parallelism and the Principle of Sufficient Reason, and that it follows from his causal axiom (E1a4) when Spinoza’s conception of “involvement” is properly understood. Through an original interpretation of Spinoza’s modal semantics, I show that the PUC is true in virtue of the nature of essences. I argue that it belongs to the essence of each thing to have the specific
procreative cause that it does. I refute the most prominent alternative to my interpretation as it emerges from the combined works of Edwin Curley, Michael Della Rocca, and Don Garrett. In the process of doing so, I also develop and defend my own interpretation of the relationship between a thing’s eternal essence and its actual existence, the relationship between essences and the laws of nature, and how essences play a key role in Spinoza’s elusive views on empirical methods.

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Introduction

This dissertation offers a substantial and original contribution to the ongoing endeavor to understand Benedictus Spinoza’s (1632–1677) fascinating and challenging philosophical methodology and metaphysics. The central role of God-or-Nature in Spinoza’s metaphysics has granted him a similarly central role in scholarship on Spinoza’s philosophy, but Spinoza’s views on the nature of finite things are equally worthy of attention. In many ways, this dissertation represents a journal of discovery, a series of questions wherein one finds that each answer gives birth to yet more questions still. In this respect it is, like all human endeavors, necessarily incomplete. But I hope that you will find, as I have, that it nevertheless offers a unified and insightful perspective on this very difficult topic. The guiding idea of this inquiry is the nature and role of essences of finite things in Spinoza’s philosophical thought.

A natural starting point for our discussion is Spinoza’s views on the nature of definitions, because, for him, the function of a definition is to explicate or express the essence of a thing, and he discusses the nature of definitions more frequently and thematically than he does essences. In Chapter 1, I examine the representational and metaphysical functions of definitions through the lens of his distinction between real and nominal definitions and his disagreements with philosophers and mathematicians such as Giovanni Alfonso Borelli, Thomas Hobbes, and René Descartes. By examining his distinction between real and nominal definitions in historical context, I am able to show that, although Spinoza abides by many long-standing philosophical traditions, he offers innovative and previously unappreciated grounds for the incontestability of stipulative definitions. His disagreements with Borelli offer further insight into his views on
definitions and how they differ from axioms, a subject of particular interest given Spinoza’s choice to write the *Ethics* in geometrical fashion. Furthermore, because many of these views are sourced from Spinoza’s early works, I consider three major topics where his mature views in the *Ethics* appear to be at odds with these positions on definitions. I show that, although Spinoza’s views on the representational function of ideas evolved over time, his earlier views on definitions can be preserved if they are further explicated in a similar fashion.

Chapter 2 draws the connection between definitions and essences closer through a detailed exposition and explanation of Spinoza’s criteria for definitions that adequately represent their essences. I argue that Spinoza’s requirement that definitions be “intellectually affirmative” reveals interesting discoveries about the particularization of entities and his views on determination and negation. I clarify these views further by showing how Hegel’s famous interpretation of Spinoza in terms of the dictum that “omnis determinatio est negatio” misconstrues his position on particularization and the distinction between being and nonbeing. I also provide a detailed account of Spinoza’s adoption of the traditional distinction between a thing’s essence and properties (*proprietates*) and clarify it through close examination of examples of this distinction in action. I explain Spinoza’s requirement that a definition be “genetic,” i.e., that it include the cause of the thing it defines (definiendum) in the context of similar views found in Borelli, Hobbes, and Descartes. I show that there is no evidence that Spinoza’s views on the genetic requirement changed over his philosophical career, and that, rather surprisingly, some of Spinoza’s contemporaries allowed that a thing may be defined through a variety of causes, or that it may have multiple legitimate genetic definitions.
In Chapter 3, I argue that Spinoza could not have shared the latter stance on genetic definitions, and in particular, that he is committed to what I call the Principle of Unique Causes (PUC), the thesis that each thing has one and only one possible adequate cause. Although this principle has so far gone unnoticed, unnamed, and taken for granted by scholars of Spinoza’s philosophy, the demonstration of Spinoza’s commitment to it is less trivial than it first seems. I show, for example, that it is independent of Spinoza’s doctrine of Parallelism and his famed Principle of Sufficient Reason (PSR). Although a demonstration of the PUC can be constructed on the basis of Spinoza’s Necessitarianism, it does not reveal much about the nature of essences in Spinoza’s system. I develop a more insightful demonstration on the basis of Spinoza’s causal axiom (E1a4), and his claim that the idea of the effect “involves” the idea of the cause. Because this argument depends on Spinoza’s conception of possibility, I develop an interpretation of his modal semantics and reframe the argument using a more detailed conception of possibility. Crucially, this demonstration shows that, for Spinoza, the PUC must be true in virtue of the structure of essences.

Finally, in Chapter 4, I explain the precise manner in which a thing’s cause belongs to its essence. I show that the cause responsible for a thing’s existence is the source both of its identity and its causal activity. The various other ways in which the thing is caused are, in fact, consequences or proprietates of the thing’s procreative cause and essence. In this Chapter, I also refute the most prominent alternative to this view as it is embodied in the works of the scholars Edwin Curley, Michael Della Rocca, and Don Garret. In the process of doing so, I also develop and defend my own interpretation of Spinoza’s stance on the status of eternal essences and their relationship with things in
existence, the so-called infinite modes, and the laws of nature. Lastly, I show how this interpretation explains and is supported by Spinoza’s challenging views on empirical methods.
Chapter 1: Spinoza on the Nature of Definitions in General

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Section 1.1: Introduction

Although Spinoza’s views on definitions have been the subject of much scholarly scrutiny, this subject has so far been approached mostly from the perspective of its
impact on the cogency of Spinoza’s demonstrations in the *Ethics*. In this Chapter, I take a different approach by closely investigating Spinoza’s views on definitions as a subject of intrinsic interest. I pay particularly close attention to the distinction between real definitions, which explicate the nature of a thing, and stipulative definitions, which present some concept for examination, as discussed in his Ninth Letter (1663). Previous studies of Spinoza’s views on definitions have, in contrast, tended to take this distinction at face value in order to investigate its implications for Spinoza’s demonstrations in the *Ethics*. After situating Spinoza’s claims in historical context, I uncover fascinating ways in which his distinction between real and stipulative definitions agrees with and diverges from historical precedents in Section 1.2. I show, in particular, how Spinoza innovates

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1 All references to the *Ethics*, Letters 1–29, the *Treatise on the Emendation of the Intellect* (TIE), the *Short Treatise* (*KV*), including the *Metaphysical Thoughts* (*CM*), and *Descartes’s Principles of Philosophy* (DPP) use are to Curley’s translation (C), unless otherwise indicated. References to the *Theological Political Treatise* (TPP) use an unpublished manuscript of Curley’s translation to be included in the second volume of *The Collected Works of Spinoza*. References Spinoza’s other works, including later correspondence, the *Hebrew Grammar* and the *Political Treatise* (*PT*) are taken from Shirley’s translation (S). I have noted points in the text where I choose to diverge from those translations. Passages from the *Ethics* are cited using the following abbreviations: pref(-ace), a(-xiom), d(-efinition), p(-roposition), dem(-onstration), c(-orollary), s(-cholium), app(-endix). Thus, for example, E2p8c refers to the corollary to proposition 8 of Book II, and E4d3 refers to the third definition of Book IV.

2 For discussion of Spinoza’s use of definitions from the standpoint of philosophical methodology, see for example, Bennett’s *A Study of Spinoza’s Ethics*, pp. 20–25; Curley’s “Spinoza’s Geometric Method” (especially pp. 158–166); Chapter 6 of Aaron Garrett’s *Meaning in Spinoza’s Method*; Chapter 1 of Gueroult’s *Spinoza: Dieu* (especially pp. 20–27); Chapter 2 of Nadler’s *Spinoza’s Ethics: An Introduction* (especially pp. 44–48); and Parkinson’s “Definition, Essence, and Understanding in Spinoza.”
upon traditional conceptions of this distinction in his justification of the incontestability of stipulative definitions.

In the context of explaining this distinction, Spinoza also expresses disagreement with the seventeenth century Italian mathematician Giovanni Alfonso Borelli (1608–1679) on several key issues concerning the nature of definitions. Through close analysis of important passages from Borelli’s then popular geometry textbook, *Euclides Restitutus* (1658), I elucidate in Section 1.3 the precise manner in which Spinoza and Borelli agree and disagree on these issues. Throughout Sections 1.2 and 1.3, I emphasize the manner in which Spinoza’s underlying metaphysical and epistemological convictions about the nature of definitions motivates his distinction between real and stipulative definitions and his critique of Borelli.

In Section 1.4, I further investigate Spinoza’s puzzling claim against Borelli that axioms “extend more widely” than definitions with the goal of clarifying Spinoza’s implicit views concerning the underlying metaphysical differences between definitions and axioms. In the process of doing so, I develop an explanation for Spinoza’s mysterious choice to omit definitions altogether from an early geometric draft of the *Ethics*. I argue in this section that Spinoza would eventually come to understand the distinction between definitions and axioms in terms of the distinction between essences and properties (as *proprietates*).

Finally, because the Ninth Letter is generally included among Spinoza’s early writings and was composed at a time when he was especially influenced by Descartes, I consider in Section 1.5 several ways in which the views he expresses in this letter may be incompatible with doctrines later articulated in the *Ethics*. I show that there are three
major issues where the consistency of the Ninth Letter with Spinoza’s mature views comes into question: firstly, the distinction between merely conceiving an idea and conceiving an idea as true; secondly, the claim that some ideas (stipulative definitions) can be non-representational; and thirdly (and relatedly) the claim that stipulative definitions require no defense due to the epistemic certainty of mental content. After careful consideration of these issues, I conclude that, if given further elaboration, the views expressed in the Ninth Letter can, in fact, be understood in a manner compatible with what Spinoza later argues in the *Ethics*.

**Section 1.2: Real and Nominal Definitions**

**Section 1.2.1: De Vries’s Inquiry**

In 1663, Spinoza was already circulating drafts among his close friends of what would eventually become the *Ethics*. Although these drafts represented an early stage of development of Spinoza’s philosophical system, they did not fail to inspire questions that would continue to puzzle readers of Spinoza’s writings up to the present day. In particular, it is clear that at this stage Spinoza was already composing his thoughts in the geometrical style, modeled on Euclid’s *Elements*, and most likely inspired by Descartes’s synthetic presentation of his views in the Second Set of Replies appended to his *Meditations*. The centrality of definitions in this approach naturally makes them an object of close scrutiny, and readers of Spinoza’s philosophical works will be familiar with his sometimes less than pellucid panoply of definitions. Spinoza’s own friend, Simon De Vries (c. 1633–1677), wrote to him in Letter 8 (Feb. 24, 1663) complaining

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3 CSM II 113–120 | AT 160–170.
that “when we first read through and explained the definitions, they did not all seem clear to us” (IV/39/19–20). De Vries appears to suggest that the study group’s confusion was due at least partly to the fact that “we did not agree about the nature of definition,” and that he is writing to inquire about Spinoza’s views on the subject (IV/39/20–21).

De Vries pursues this line of inquiry by presenting Spinoza with two contrasting views of definitions and asking which he prefers, if either. The first view is that of Italian mathematician and author of the popular geometry textbook, *Euclides Restitutus*, Giovanni Alfonso Borelli (1608–1679).⁴ De Vries quotes the following passage from Borelli:

[d]efinitions are used in a demonstration as premises. So it is necessary for them to be known evidently [evidenter cognitae], otherwise scientific, or very evident, knowledge [cognitio scientifica, seu evidentissima] cannot be acquired from them.

(Ep. 8 | IV/39/25–27)

On the other hand, De Vries also presents the view of the famous German mathematician and astronomer, Christoph Clavius (1537–1612),⁵ who maintains that:

[d]efinitions are technical terms [artis vocabula], and it is not necessary to give a reason why a thing is defined in this way or that way. It is enough if one never asserts that the thing defined agrees [convenire] with something unless one has first demonstrated that the definition given agrees with it. (Ep. 8 | IV/40/5–10)

⁴ For biographical information on Borelli see, Boschiero’s *Experiment and Natural Philosophy in 17th Century Tuscany*, pp. 59–92.

⁵ For biographical information on Clavius see, Lattis’s, *Between Copernicus and Galileo*, pp. 1–30.
The choice thus presented to Spinoza very much resembles the classic distinction between real and nominal definitions (which I will discuss shortly), reflecting (in this case) two rather different approaches to the philosophy of mathematics. Borelli construes definitions as embodying substantial knowledge-claims, which should therefore be both true and known to be true, “for conclusions drawn from what is unknown and doubtful will also be uncertain and doubtful” (Ep. 8 | IV/40/1–2). It would follow that one must therefore be prepared to defend or justify the definitions that one employs accordingly. As truth-apt knowledge-claims, these definitions are accountable to some aspect of reality independent of the mathematical practice itself. But Clavius prefers to conceive of mathematics as an ontologically neutral endeavor. Not unlike early 20th Century formalist approaches to mathematics, which take the objects of mathematics to be mere strings of uninterpreted symbols, Clavius presents definitions as merely introducing technical terms. The mathematician need not worry about whether those definitions represent or agree with any independent reality, provided that she simply refrains from such unnecessary commitments or interpretations. So, one way of thinking about the choice thus presented to Spinoza is as one between definitions as knowledge-claims that are accountable to some sort of independent reality and definitions as ontologically neutral introductions of technical terms that are not similarly accountable.

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6 For further information on formalism in mathematics, see Chapter 6 of Shapiro’s *Thinking about Mathematics*.

7 It seems worth noting that, at least with regard to mathematics, Clavius apparently holds the more popular view of today. Thus, for example, Richard Robinson takes it as given that “[a]bove all, the mathematicians, ever since Euclid at latest, have been making their own meanings for words” (*Definition*, 59). Similarly, Frege argues in “Logic in Mathematics” that only stipulative definitions should be used in mathematics.
Section 1.2.2: Previous Examples of the Distinction between Real and Stipulative Definitions

Before discussing Spinoza’s response to De Vries, I will consider several manifestations of the distinction between real and nominal definitions in the history of philosophy in order to better frame Spinoza’s views on the subject.

The distinction between real and nominal definitions has a long and illustrious history, going back at least to the thought of Aristotle. Aristotle introduces the distinction in Book II of the *Posterior Analytics*, where he writes that

> since a definition is said to be an account of what a thing is, it is evident that one type will be an account of what the name, or a different name-like account, signifies—e.g. what triangle signifies. And when we grasp that this is, we seek why it is … Hence the former type of definition signifies but does not prove, whereas the latter evidently will be a sort of demonstration of what a thing is, differing in position from the demonstration. For there is a difference between saying why it thunders and what thunder is; for in the one case you will say: Because fire is extinguished in the clouds. What is thunder? —A noise of fire being extinguished in the clouds. Hence the same account is put in a different position.

(207–212). De Vries states, however, that the study group finds Borelli’s position more convincing (Ep.8 | IV/40/15).

way, and *this* way is a continuous demonstration, in *this* way, a definition.

(93b29–94a1–7)

While Aristotle’s views on definitions are complex and controversial, it is clear that what he is referring to as a definition of a name, or a *nominal definition*, tells us what some term signifies without revealing the underlying nature of the definiendum. Aristotle claims that, “to know what something is and to know the explanation of the fact that it is are the same” (*Post. An.* 93a4–5). At best, however, a nominal definition only provides us with the information we need to determine whether a thing is, not why it is. Demoss and Devereux provide a helpful explanation:

[nominal definitions] are accounts of what such terms as ‘thunder’ and ‘eclipse’ *mean* insofar as they capture those features that ordinary speakers have in mind when they use and understand the terms. They do not include reference to explanatory features discovered through scientific investigation, features that are not the ‘common property’ of ordinary speakers of the language.⁹

Thus, the definition of “thunder” as “a noise in the clouds” is a nominal definition providing enough information to fix the reference of the term as used by ordinary speakers, which may be contrasted with the definition of thunder as “the noise of fire being extinguished in the clouds” providing an explanation of the nature of the phenomenon through its cause (*Post. An.* 93a7–9).

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This distinction, or some version of it, may also have been familiar to Spinoza by way of Franco Burgersdijck’s (1590–1635)\textsuperscript{10} popular logic textbook, the *Institutionum Logicarum* (1626). Burgersdijck writes, for example, claims that “[a] definition is either of a name or a thing,”\textsuperscript{11} “[a] definition of a name is that which declares what a thing is called, or what is signified by a name,”\textsuperscript{12} “[a] definition of a thing is that which explains what the thing itself is,”\textsuperscript{13} and “[a] definition is perfect which perfectly explicates the essence of a thing by its essential attributes.”\textsuperscript{14} It also attributes this distinction explicitly to Aristotle.\textsuperscript{15}

It is also notable that, in the *Port-Royal Logic* (1662),\textsuperscript{16} Antoine Arnauld (1612–1694) and Pierre Nicole (1625–1695) distinguish between the definition of a name (*definitio nominis*) and the definition of a thing (*definitio rei*) (Part 1, Ch. 12, p. 61). The definition of a name corresponds essentially to Clavius’s conception of definition; such a definition is arbitrary, designating whatever the speaker wishes (Part 1, Ch. 12, p. 61); it

\begin{itemize}
\item \textsuperscript{10} For information on Burgersdijck’s possible influence on Spinoza, see Edwin Curley’s discussion of the subject in C223.
\item \textsuperscript{11} “*Definitio alia est nominis, alia rei*” (Book II, Chapter I, Theorem IV).
\item \textsuperscript{12} “*Definitio nominis est, quae declarat, quid sid illud quod dicitur, vel quid significet nomen*” (Book II, Chapter I, Theorem V).
\item \textsuperscript{13} “*Definitio rei est, quae explicat quid res ipsa est*” (Book II, Chapter II, Theorem I).
\item \textsuperscript{14} “*Definitio perfecta est, quae rei essentiam attributis essentialibus explicat perfecte*” (Book II, Chapter I, Theorem IV).
\item \textsuperscript{15} “*Aristoteles distribuit definitionem in nominalem et essentalem*” (Book II, Chapter I, Theorem VI, Section 1).
\item \textsuperscript{16} A work also known to be contained in Spinoza’s library, although it is unknown whether Spinoza could read French. See Sluis p. 71 and Rooijen p. 187.
\end{itemize}
therefore cannot be contested (Part 1, Ch. 12, p. 61); and it may thus be taken for granted as a principle in demonstrations (Part 1, Ch. 12, pp. 61–62). In contrast, definitions of things must be proved (or as we might be inclined to put it today, they must be shown to be correct), unless they are “in themselves clear as axioms” (Part 1, Ch. 12, p. 62). Arnauld and Nicole suggest that the failure to distinguish between these two kinds of definition is responsible for all sorts of philosophical folly, and that philosophy would benefit greatly from more widespread and deliberate use of definitions of names (Part 1, Ch. 12, pp. 62–63).\textsuperscript{17}

The distinction between nominal and real definitions is perhaps most familiar to us through the form it was given by John Locke (1632–1704) in his Essay (1690). Locke defines the “nominal essence” of a thing as “nothing but that abstract idea to which the name [of the thing] is annexed” (Essay, III.vi.2). The nominal essence of gold might thus be an abstract idea, including being a yellow metal of such-and-such a weight, for example. The “real essence” of the thing is defined as, “the constitution of the insensible parts of that body, on which those qualities [belonging to the nominal essence], and all other properties … depend” (Essay, III.vi.2). The real essence of gold is thus some microscopic structure of the material that explains why gold has the features that it does. This version of the distinction is perhaps also the closest to Aristotle’s insofar as the focus of real definitions is the underlying cause of the thing’s features.\textsuperscript{18}

\textsuperscript{17} For discussion of some possible disagreements between Spinoza and the Port-Royal authors on definitions not covered in this paper, see Curley’s \textit{Spinoza’s Metaphysics}, pp. 108–113.

\textsuperscript{18} Interestingly, the distinction also appears in the very work of Borelli, \textit{Euclides Restitutus}, quoted by De Vries. He refers to it as the distinction between \textit{definitiones quid nominis} and \textit{definitiones quid rei} (15). He says little about the distinction other than to attribute it to Aristotle (apparently taking it for granted that the
To consult a more recent author, however, Richard Robinson (1902–1996) points out (1950) that nominal definitions may be further divided into lexical and stipulative definitions (19). Lexical definitions, like nominal definitions as described by Aristotle, aim to state the meaning of a term as established by a community of speakers. Like the definitions provided by contemporary writers of dictionaries, lexical definitions report rather than establish the meaning of a term, and are therefore subject to norms of accuracy. Lexical definitions can be true or false insofar as they succeed or fail to accurately represent the meaning of a term as it is used by a linguistic community.

Stipulative definitions, on the other hand, like the nominal definitions of the *Port-Royal Logic* and the conception of definition suggested by Clavius, establish the meaning of a term according to the manner in which the definer intends to use it. Thus, as Clavius claims, stipulative definitions may be regarded as technical terms, and because they do not purport to represent any pre-established use, they are not subject to norms of accuracy, and they do not, in general, require any defense.

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reader is familiar with the distinction), and to point out that sometimes the *definitio quid rei* is the principle of the demonstration, and sometimes it is the conclusion of the demonstration.

19 Arnauld and Nicole discuss lexical definitions in Part 1 Chapter 14 of the *Port-Royal Logic*: “[W]henever we not only intend to explain the sense in which we take a word, but claim to explain the way it is commonly used, our definitions are not at all arbitrary, but are bound and constrained to represent the truth of usage, rather than the truth of things. Such definitions should be considered false if they do not genuinely express that usage, that is, if they do not connect the sounds to the same ideas to which those who use them in ordinary speech connect them” (p. 66).

20 It would seem inaccurate to claim, however, that stipulative definitions are not subject to any norms at all. We may reasonably expect them to be clear, non-circular and non-contradictory (except perhaps in very special cases), and to obey the ordinary grammatical rules of their language.
To summarize what we have seen so far, then, real and lexical definitions can be said to have truth-values insofar as they succeed or fail in some representational capacity, whether it be, say, the nature of the thing defined or the meaning of a term as used by a linguistic community. Stipulative definitions, on the other hand, do not purport to represent anything, but are used instead to establish the meaning of some term, and therefore cannot be said to have truth-values. These distinctions were most likely familiar to Spinoza due to their longstanding prevalence in philosophical writings, and particularly writings that we know he possessed.

Section 1.2.3: Spinoza’s Agreement with Tradition

It would appear, then, that De Vries is asking Spinoza whether definitions should be, and in particular, whether his definitions are, real or stipulative in nature. In response, Spinoza tells De Vries that he is confused, because

you [De Vries and the study group] do not distinguish between two different kinds of definition—between one which serves to explain a thing whose essence only is sought, as the only thing there is doubt about, and one which is proposed only to be examined. For because the former has a determinate object, it ought to be true. But the latter does not require this.

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21 Compare Robinson: “[t]he distinction between lexical and stipulative definition explains the disagreement over the question whether definitions have a truth-value. Lexical definitions have a truth-value but stipulative definitions have not. A lexical definition is an assertion that certain people use a certain word in a certain way, and is therefore either true or false. A stipulative definition, however, is not an assertion at all” (Definition, 62).
For example, if someone asks me for a description \textit{[descriptio]} of the Temple of Solomon, I ought to give him a true description of the temple [NS: as it was] unless I want to talk nonsense to him. But if I have constructed in my mind some temple which I want to build, and if I infer from its description that I must buy land of such a kind and so many thousand stones and other materials, will anyone in his right mind tell me that I have drawn a bad conclusion because I have perhaps used a false definition? Or will anyone require me to prove my definition? To do so would be to tell me that I have not conceived what I have conceived \textit{[quam quod id, quod conceperam, non conceperim]}, or to require me to prove that I have conceived what I have conceived, surely this is trifling.

So, a definition either explains a thing as it is [NS: in itself] outside the intellect … or else it explains a thing as we conceive it or can conceive it … (Ep. 9 \textit{| IV/42/30–43/30})

Spinoza’s reply thus seems to be that Borelli and Clavius have not presented competing understandings of some univocal notion of “definition,” but rather that each of them has only described different kinds of definitions which are appropriate for different contexts. Sadly, this reply seems somewhat uncharitable toward De Vries, and it also seems to miss the point of his question. It appears to miss the point, because, given the context of the conversation, the question was not merely which conception of definition is \textit{the} correct one, but rather, which conception of definition best describes those definitions of Spinoza’s about which the study group is in disagreement. It seems uncharitable toward
De Vries, because, as a person of learning and given the pervasiveness of distinctions similar to the one Spinoza introduces (especially as it appears in the relevant text of Borelli), it could be expected that he would be familiar with some variant of it.

Nevertheless, Spinoza’s response provides interesting information about his views on definitions and the distinction between real and stipulative definitions. One important respect in which Spinoza agrees with previous conceptions of real and nominal definitions is that, like Aristotle, he believes that real definitions aim to explain the essence or nature of some object. He agrees, moreover, that the method by which a definition successfully explains the essence of some object is by including the object’s cause. Although he does not claim, in this context, that the explanation of the thing’s nature is achieved by the inclusion of the thing’s cause in the definition, he does make explicit claims to this effect in the *Treatise on the Emendation of the Intellect*:

> [i]f the thing is created, the definition, as we have said, will have to include the proximate cause. E.g., according to this law, a circle would have to be defined as follows: it is a figure that is described by any line of which one end is fixed and

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22 Spinoza himself addresses De Vries as “doctissimo juvent” or “a very learned young man,” although De Vries was only about a year younger than Spinoza, having been born in 1633.

23 At this point, I anticipate that the reader will naturally share De Vries’s curiosity concerning how Spinoza himself would understand the nature of the definitions contained in what would eventually become the *Ethics*. As noted at the beginning of this chapter, that question is not the intended topic of the present discussion, and I refer the reader to the materials cited in footnote 2 above. However, I offer a few of my own observations on this topic in the conclusion of this Chapter.
the other movable. This definition clearly includes the proximate cause.  

Similarly, Spinoza would claim much later in his career (1675, just two years before his death) that

in order that I may know which of the many ideas will enable all the properties of the object to be deduced, I follow this one rule, that the idea or definition of the thing should express its efficient cause. For example, in order to investigate the properties of a circle, I ask whether the following idea of a circle, namely, that it consists of an infinite number of rectangles, I can deduce all its properties; that is to say I ask whether this idea involves the efficient cause of a circle. Since this is not so, I look for another cause, namely, that a circle is the space described by a line of which one point is fixed and the other moveable. Since this idea now expresses the efficient cause, I know that I can deduce all the properties of a circle, etc. (Ep. 60 | IV/270)

As further inquiry throughout this dissertation will repeatedly evince, the relationship between a thing’s essence and its cause is a central feature of Spinoza’s metaphysics.

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24 The context of this passage makes it clear that Spinoza is discussing real definitions, since such a definition aims to “explain the inmost essence of the thing” (TIE §95 | II/34/29–30).

25 In Chapter 2, Section 2.4.1 of this dissertation, I investigate the significance of Spinoza’s shift in terminology from” including the proximate cause” to “expressing the efficient cause.”

26 It is also worth noting, if only in passing, the similarity between Spinoza’s insistence that an object’s properties be deducible from its real definition and Locke’s claim discussed above that all an object’s other qualities “depend” on its real essence.
Furthermore, in agreement with previous conceptions of real and nominal definitions, Spinoza maintains that a real definition must have a determinate object outside the intellect, and such a definition ought to be true. In contrast, a stipulative definition is merely “proposed to be examined,” need not have a determinate object outside the intellect, need not be true (i.e., its truth-value, if any, is irrelevant), and therefore requires no defense.

This conception of stipulative definitions clearly has much in common with Clavius’s recommended definitions and the definitiones nominarum of the Port-Royal authors. As pointed out in the above discussion of stipulative nominal definitions in Arnauld and Nicole, Clavius, and Robinson, the key feature of stipulative definitions is that they leverage an interlocutor’s right to introduce technical terms and assign them a specific meaning at liberty, thereby avoiding commitment to truth-apt claims requiring defense, and providing an uncontroversial starting point for discussion and disagreement. Spinoza appears to stop short, however, of explicitly recommending stipulative definitions as the basis of systematic endeavors in mathematics and metaphysics, as Arnauld, Nicole, and Clavius do, although such definitions are evidently fine for architecture.

Finally, I would like to make the case that the plausible grounds for the just mentioned interlocutor’s right to introduce stipulative definitions without challenge are found in a broad, traditional understanding of the representational nature of language. The core notion is that the meanings of terms are established by way of social convention. More specifically, it has been traditionally believed that meanings are mental/psychological contents or ideas shared among speakers; that these mental contents
or ideas represent things in the world outside of the mind or soul, often through some form of likeness or similarity; that terms such as sounds or inscribed symbols are used by speakers to signify meanings (as mental contents) in order to indirectly represent things in the world; that communication is possible in virtue of the fact that these mental contents are shared (though often imperfectly) among speakers, and in this important sense, meanings are non-arbitrary; and that the conventional nature of language is manifested primarily in the fact that the signifying association between particular terms and particular mental contents is arbitrary, established by social practice or agreement. The fact that, in the general case, the association between terms and meanings is arbitrary and established by convention grants speakers the right, in more specific cases, to arbitrarily stipulate a signifying relation between some term and some meaning.

Important aspects of such a view are presented fairly explicitly in Aristotle’s De Interpretatione:

[n]ow spoken sounds are symbols of affections in the soul, and written marks symbols of spoken sounds. And just as written marks are not the same for all men, neither are spoken sounds. But what these are in the first place signs of—affections of the soul—are the same for all; and what these affections are likenesses of—actual things—are also the same. (16a4–8)

A name is a sound that is significant by convention (16a19).

I say, ‘by convention,’ because no name is a name naturally but only when it has become a symbol (16a27).²⁷

²⁷ For in-depth discussion of these passages, see Mordrak’s Aristotle’s Theory of Language and Meaning, pp. 19–27.
And furthermore, Arnauld and Nicole maintain in the *Port-Royal Logic* that:

[t]he third classification is between natural signs, which do not depend on human fancy, as an image appears in a mirror is a natural sign of what it represents, and others that are only instituted or conventional, whether they bear some distant relation to the thing symbolized or none at all. *Thus words are conventional signs of thoughts, and characters are conventional signs of words.* (Part 1, Ch. 4, pp. 36–37; emphasis added)

in a nominal definition … we consider only a sound, and then determine this sound to be the sign of an idea we designate by other words. (Part 1, Ch. 11, p. 61)

For it is true that it is purely arbitrary to connect a certain idea to one particular sound rather than another. But ideas—at least those that are clear and distinct—are not at all arbitrary things depending on our fancy. (Part 1, Ch. 1, p. 28)

Second, it follows from their arbitrariness that nominal definitions cannot be contested. For you cannot deny that people have given a sound the meaning they said they gave it, nor that the sound has this meaning only in their use of it, once they have warned us about it. (Part 1, Ch. 12, p. 61)

Similarly, it will come as little surprise that, according to Locke:

words … came to be made use of by men, as the signs of their ideas; not by any natural connexion that there is between particular articulate sounds and certain ideas, for then there would be but one language amongst all men; but by a voluntary imposition, whereby such a word is made arbitrarily the mark of such
an idea. The use then of words is to be sensible marks of ideas; and the ideas they stand for are their proper and immediate signification. (*Essay*, III.2.1)

And from the fact that meanings are assigned by “arbitrary imposition,” it follows, according to Locke, that each has an “inviolable liberty” to “make words stand for what ideas he pleases” (*Essay*, III.2.8).²⁸

Spinoza’s own views on the signifying relationships between words, ideas, and things share much in common with those described above. Firstly, we should note that Spinoza’s response to De Vries implies that definitions are mental, rather than sentences or linguistic entities, and as such, he construes mental contents or ideas as the primary bearers of semantic content. He continues his discussion of real and stipulative definitions:

[s]o a definition either explicates a thing as it is [NS: in itself] outside the intellect [*prout est extra intellectum*]—and then it ought to be true and to differ from a proposition or axiom only in that a definition is concerned solely with the essences of things or of their affections, whereas an axiom or a proposition extends more widely, to eternal truths as well—or else it explicates a thing as we conceive it or can conceive it—and then it also differs from an axiom and a proposition in that it need only be conceived, without any further condition, and need not, like an axiom [NS: and a proposition] be conceived as true. So a bad

²⁸Locke is careful to point out in this context that injudicious use of this liberty can result in unintelligible speech, and later recommends in a spirit similar to that of Arnauld and Nicole that we should strive to “annex” our words to “clear and distinct” ideas (*Essay*, III.9.9).
definition is one that is not conceived \textit{Quare mala definitio illa est, quae non concipitur}. (Ep. 9 \textit{IV}/43/29–36; emphasis added)

In this portion of Spinoza’s response, he indicates that real definitions represent or explicate \textit{explicatio} the nature or essence of some object, thereby making it subject to the norms of truth and falsity, whereas a stipulative definition explicates a thing merely as we conceive it or can conceive it. This claim, together with Spinoza’s insistence that a bad definition is one that is not conceived drives home the point that \textit{at a minimum} a definition must be conceived, suggesting that words or sentences alone, in the absence of mental content, fail in any semantic capacity.\textsuperscript{29} The capacity of words to signify things is therefore indirect and dependent upon the representational role of mental content.\textsuperscript{30}

\textsuperscript{29} Other passages in which Spinoza treats definitions as ideas (i.e., mental entities) are the following: “[n]ext, in order that I may know which out of the many ideas of a thing will enable all the properties of an object to be deduced, I follow this one rule, that the idea or definition \textit{idea sive definitio} of the thing should express its efficient cause” (Ep. 60 \textit{IV}/270). Also, in the TIE, having presented the requirement in §96 that “every definition must be affirmative” (II/25/23–24), Spinoza writes that, “I have also said that the best conclusion will have to be drawn from a particular affirmative essence. For the more particular an idea is, the more distinct, and therefore the clearer it is” (TIE §98 \textit{II}/36/3–5).

\textsuperscript{30} Other passages in which Spinoza emphasizes the semantic role of ideas over that of words include the following: "if I understand what I say, I cannot express anything in words, without its being certain from this that there is in me an idea of what is signified by those words" (DPP1d2 \textit{I}/149/27–29); "I do not wonder that Philosophers preoccupied with words, or grammar, should fall into … errors. For they judge the things from the words, not the words from the things" (CM I, 1 \textit{I}/235/6–9); "[f]irst it should be noted that we may properly call a Chimera a verbal being because it is neither in the intellect nor the imagination. For it cannot be expressed except in words. E.g., we can, indeed, express a square circle in words, but we cannot imagine it in any way, much less understand it" (CM I, 3 \textit{I}/241/9–14); "[a]nd indeed, most errors consist only in our not rightly applying names to things. For when someone says that the lines which are
Spinoza therefore casts the distinction between real and stipulative definitions not in terms of their intrinsic features, but in terms of an extrinsic relationship of representation or explication of some external object. Stipulative definitions need only be conceived, while real definitions are conceived as true.

Finally, though importantly, Spinoza acknowledges the conventional nature of language insofar as he claims that the meanings of words are fixed by the manner in which those words are used by a community of speakers: “Words have a definite meaning only from their use” (TTP Ch. 12, Par. 11 | III/160); “[words (verba)] are established according to the pleasure and power of understanding of ordinary people, so that they are only signs [signa] of things as they are in the imagination, but not as they are in the intellect” (TIE, §89 | II/33/13–15); and he maintains that to appropriately interpret scripture, we must “find out all the meanings which each utterance can admit in ordinary conversational usage” (TTP Ch. 7, Par. 15 | III/100). In spite of Spinoza’s

drawn from the center of a circle to its circumference are unequal, he surely understands [intelligit] (then at least) by a circle something different from what Mathematicians understand. Similarly, when men err in calculating, they have certain numbers in their Mind [in mente] and different ones on paper. So, if you consider what they have in Mind, they really do not err, though they seem to err because we think they have in their mind the numbers which are on paper… And most controversies have arisen from this, that men do not rightly explicate [explicant] their own mind, or interpret the mind of other men badly” (E2p47s | II/128/25–129/5); “[f]or a thing is understood with a pure mind, without words or images” (TTP Ch. 4, Par. 32 | III/64).

31 My use of the term ‘extrinsic’ here is inspired by Spinoza’s use of it in E2d4: “[b]y adequate idea I understand an idea which, insofar as it is considered in itself, without relation to an object, has all the properties, or intrinsic denominations of a true idea. Exp.: I say intrinsic to exclude what is extrinsic, viz. the agreement of the idea with its object” (emphasis added).
agreement with tradition on the signifying relationships between things, words, and ideas, he diverges in subtle and interesting ways from that tradition when it comes to the grounds for the incontestability of stipulative definitions.

Section 1.2.4: Spinoza’s Innovation: The Metaphysics of Definitions and the Grounds for the Incontestability of Stipulative Definitions

As I have argued in the previous section, according to a certain traditional approach, stipulative definitions enjoy a status of unassailability on the basis of a conventional nature of language. The meanings of words are established by social convention, and those conventions also allow individuals some freedom to arbitrarily assign meanings to terms when it suits their purposes. In spite of Spinoza’s apparent sympathy with the underlying view of language, he relies on a different explanation of the incontestability of stipulative definitions than the authors of the Port-Royal Logic. He argues instead that demanding a defense of a stipulative definition “would be to tell me that I have not conceived what I have conceived [quam quod id, quod conceperam, non conceperim], or to require me to prove that I have conceived what I have conceived, surely this is trifling” (Ep. 9 | IV/43/26–28). This unique and surprising response seems to invoke at least two important assumptions about the nature of mental content.

First, by suggesting that it is absurd to “tell me that I have not conceived what I have conceived,” Spinoza seems to be relying on the epistemic certainty of mental content, the notion that one cannot be mistaken regarding the contents of one’s own mind, insofar as they are merely contents of the mind and not taken to represent anything outside of the mind. Often, the epistemic certainty of mental content is applied to
phenomenal content in particular.\textsuperscript{32} For example, if I were walking through a desert and seemed to see a temple in the distance, it would be uncertain whether I was actually seeing a temple, since I could be hallucinating. Even so, I could at least be certain that I was having an experience of such-and-such a character, regardless of whether there is any object corresponding to it outside of my mind.\textsuperscript{33} In this case, Spinoza appears to take it for granted that the epistemic certainty of mental content applies not exclusively to phenomenal content. The ideas in question in this instance are perhaps best described as consciously formed concepts of hypothetical or possible entities. Such ideas only have features that are intentionally attributed to them (and perhaps also features necessarily entailed by those so attributed), and unlike real definitions, there is no question of whether they succeed in representing objects outside of the mind.

It is not surprising that Spinoza’s conviction that our grasp of such mental content is immediate and certain should be shared by others. Paul Boghossian seems to find a similar view, applied to meanings in particular, in the following quotation from Michael Dummett:

\begin{quote}
[i]t is an undeniable feature of the notion of meaning—obscure as that notion is—that meaning is \textit{transparent} in the sense that, if someone attaches a meaning to each of two words, he must know whether these meanings are the same.\textsuperscript{34}
\end{quote}

\textsuperscript{32} On this restriction, see §1.1.1 of Gertler, “Self-Knowledge.”

\textsuperscript{33} Descartes seems to advocate such a view in passages like \textit{Principles} I §66 (CSM I 216 | AT 32). Descartes maintains here that sensations, emotions, and appetites, taken strictly as items of perception without relation to objects outside of the mind, are clearly perceived.

Boghossian himself proceeds to argue that this thesis is incompatible with externalist conceptions of mental content, and that dispensing with the transparency of meanings would require quite a bit of work.

The second assumption invoked in Spinoza’s response is contained in his claim that it would be absurd to require me to prove to another that I have conceived what I have conceived. Here, Spinoza appears to be relying on the view that one possesses exclusive access to one’s own mental content. Independently of whether I have the first-person authority about the content of my ideas, as entailed by the epistemic certainty of mental content, it is impossible for a third party to investigate or verify the contents of my mind. It is impossible for me to prove to another that I am presently entertaining the idea of a certain temple, and so it is absurd for anyone to demand such a proof.

By defending the incontestability of stipulative definitions on the basis of the epistemic certainty and exclusivity of mental content, Spinoza makes a natural extension of the view that definitions are (more or less Cartesian) ideas and he demonstrates a sensitivity to concerns overlooked by others. Spinoza’s defense of stipulative definitions should draw our attention to the fact that, even if we grant that the rules of language allow speakers to arbitrarily associate a term with a particular meaning, and that the use of a stipulative definition amounts to a proposal rather than an assertion, granting a speaker the authority to introduce a stipulative definition depends, more fundamentally, on the speaker’s presumed competence with meanings. When we take the view that words have meaning in virtue of signifying ideas, that competence is established on the basis of the epistemic certainty of mental content. The immediate and veridical grasp of mental content as (non-representational) mental content entails that each thinker has the
capacity to distinguish between distinct ideas and that there can be no doubt about whether one has conceived what one has conceived. Similarly, once it is assumed that definitions are ideas and not extra-mental linguistic entities, such as sentences, the exclusivity of mental content renders the possibility of challenging the introduction of a stipulative definition otiose, at least from the standpoint of meaning-competence. Spinoza’s defense of the unassailability of stipulative definitions reminds us that, without the underlying presumption of meaning-competence, appeals to the linguistic norms of term-introduction alone would fail to establish that, as Arnauld and Nicole put it, “you cannot deny that people have given a sound the meaning they said they gave it” (Part 1, Ch. 12, p. 61).

Section 1.3: Spinoza’s Metaphysics of Definitions and His Critique of Borelli

Section 1.3.1: Views Shared with Borelli

As we have seen, Spinoza’s views on the metaphysical nature of definitions sets his approach to real and stipulative definitions apart from tradition and provides a unique and interesting justification for the incontestability of stipulative definitions. These same views can also elucidate Spinoza’s seemingly obscure criticisms of Borelli’s views on definitions presented in his response to De Vries. To see how Spinoza’s views on definitions compare and contrast with Borelli’s, it is useful to begin with some of Spinoza’s own remarks on the subject:

[s]o a definition either explices a thing as it is [NS: in itself] outside the intellect [prout est extra intellectum]—and then it ought to be true and to differ from a proposition or axiom only in that a definition is concerned solely with the
essences of things or of their affections, whereas an axiom or a proposition extends more widely, to eternal truths as well—or else it explicates a thing as we conceived it or can conceive it—and then it also differs from an axiom and a proposition in that it need only be conceived, without any further condition, and need not, like an axiom [NS: and a proposition] be conceived as true. So a bad definition is one that is not conceived [Quare mala definitio illa est, quae non concipitur].

To help you understand this, I shall take Borelli’s example. Suppose that someone says ‘Let two straight lines enclosing a space be called figurals.’ If he understands by a straight line what everyone understands by a curved line, then this definition will be a good one, provided he does not subsequently understand [by it] squares and other figures. (By that definition would be understood figures like \( \mathcal{C} \) and the like.) But if by a straight line he understands what we commonly understand, the thing is completely inconceivable. So it is no definition [ideoque nulla est definitio]. Borelli, whose opinion you are inclined to embrace, confuses all these things completely. (Ep. 9 | IV/43/30–44/28)

Spinoza clearly intends to express disagreement with Borelli, but when he claims that Borelli “confuses all these things completely,” it is not immediately evident precisely what “all these things” are. To clarify the nature of this disagreement, let us begin by considering what their views have in common.

The first thing to note is that Borelli’s conception of definitions shares much in common with Spinoza’s account of real definitions. Borelli and Spinoza both hold, for example, that such definitions represent the essences of their definienda:
it is circumscribed in the soul what each thing is through its own proper formation, or through its essential affection, or property, which agrees with all, only, and always that thing. For example, all triangles, and only triangles, are contained by three straight lines, but other figures are not—and this is always the case. For no triangle ever lacks three sides (Euclides Restitutus, 15).35

whenever definitions are sought, which are the principles of a demonstration, that is, that which produces certain and evident scientific cognition, the basis for a construction must be the essential, first, and best known property of some subject. (Euclides Restitutus, 17; emphasis added)36

In addition, we have already seen above that Spinoza’s conception of real definitions agrees with Borelli’s general account of definitions insofar as they ought to be true. Spinoza maintains that, “because [a real definition] has a determinate object, it ought to be true” (Ep. 9 | IV/42/32–33), and according to Borelli, definitions must be both true and known to be true, for “if the construction, or named property, is possible, and true, but unknown to us, or in doubt, then it will not be a good definition. For conclusions drawn

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35 Unless otherwise noted, all translations of Borelli’s works are my own. Original Latin of the quoted passage: Tertio circumscribetur in animo id, quod unaquaeque res est per suam propriam efformationem, aut per eius essentialem affectionem, vel proprietatem, omni, soli, et semper conuenientem. Ut omnes trianguli a tribus rectis lineis continentur, et soli trianguli, non autem reliquae figuraae; et semper. Non enim aliquando triangulus caret tribus lateribus.

36 quotiescunq; perquiri debent definitiones, quae sint principia demonstrationis, id est quae producant certam et evidentem cognitionem scientificam, licet laborandum non sit in electione nominis, nam ad libitum quodcumque nomen illi attribui potest: tamen non temere, sed maxima cautione eligi debet ratio structurae, aut essentialis passio prima, et notissima alicuius subiecti
from an unknown or dubious principle are likewise uncertain, and they will be doubtful” (Euclides Restitutus, 17). Further investigation of Borelli’s requirement that a definition must be known to be true reveals that it must be possible to determine whether such an object can be found in nature:

[for conclusions drawn from an unknown or dubious principle are likewise uncertain, and they will be doubtful. And therefore, they will produce suspicion or opinion, but not certain knowledge. For example, it is commonly said that by the definition of parallels: Two straight lines which are in the same plane and which have no part in common, are called parallel. It is not known whether there are two straight lines satisfying this condition. Similarly, it is not known whether there can be found in nature a quadrilateral figure in which all angles are right and the four sides are equal to each other, which is called a square. (Euclides Resitutus, 17; emphasis added)]

This condition on definitions is similar to Spinoza’s claim that real definitions have determinate objects outside the intellect (extra intellectum).

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37 si constructio, aut passio nominata, sit quidem possibilis, et vera, sed nobis ignota, aut dubia; tunc bona definitio non erit: Nam conclusiones ab ignota, et dubio principio ortae, incertae quoque, et dubie erunt; et ideo suspicem, aut opinem, non autem scientiam certam afferent.

38 Nam conclusiones ab ignota, et dubio principio ortae, incertae quoque, et dubie erunt; et ideo suspicem, aut opinem, non autem scientiam certam afferent. Ut cum dicitur in vulgata definitione parallelarum: Duae rectae lineae in eodem plano ex utraque parte non concurrentes, vocentur parallele. Ignoratur an dari possint duae rectae lineae, habentes hanc conditionem. Similiter ignoratur, an reperiri possit in natura a figura quadrilateral, in qua omnes anguli sint recti, et quatuor latera sint inter se aequalia, quae vocatur quadratum.
Finally, perhaps the most interesting similarity between Spinoza and Borelli’s views is that they seem to have a similar ontology of definitions insofar as they identify them with mental entities and distinguish them sharply from the words used to express them. In *Euclides Restitutus*, Borelli refers to definitions as “anticipations” or “pre-existent cognitions” in the soul, which allow us to clearly and distinctly distinguish things from one another:

> definitions, secondly, which must be the principles of science, are anticipations, or pre-existent cognitions in the soul, like a model or idea, by which it is clearly and distinctly circumscribed in the soul why and how each thing is what it is and is distinguished from every other thing. As, [for example,] the boundary of that plane figure, which is contained by three straight lines, is a precognition, or idea, which we consider whenever we clearly perceive its essence and distinguish it from every other thing. (15)\(^{39}\)

In the following passage, Borelli takes care to distinguish between the words which are used to signify a definition and the mental content which is identical with the definition:

> fourthly, names are signs imposed arbitrarily in order to signify a precognition existing in the soul, that is, a formation, or essential property of some subject. For example, the name of a circle is a sign imposed in order to indicate a formation, made by a straight line revolved, etc. Or it is a sign indicating an essential

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\(^{39}\) Secundo definitiones, quae debent esse scientiae principia, sunt anticipationes, seu praeeistentes in animo cognitiones, vel effigies, sive ideae, a quibus in animo clare, et distincte circumsscribitur, quare et quomodo tale quid est unaquaque res, et diversificatur a qualibet alia; ut circumscriptio illius figurai plane, quae a tribus rectis lineis continentur; est praeognitio, seu idea, ad quam respicientes, perspicue eius naturam percipimus, et distinguimus a qualibet alia.
property of the said figure, which is the equality of all straight lines having been extended from the center to the circumference. (15)

Having examined the substantial ways in which Spinoza and Borelli agree about the nature of definitions, we are now in a better position to understand Spinoza’s criticisms.

Section 1.3.2: Spinoza’s Criticisms of Borelli

Given the preponderance of common ground between Spinoza and Borelli’s views on definitions, it is surprising that Borelli did not, like Spinoza and the Port-Royal authors, choose to distinguish between real and stipulative definitions. Borelli was certainly aware that others chose to conceive of definitions in stipulative terms. De Vries’s description of Clavius’s conception of definitions as technical terms is, in fact, taken directly from Borelli’s Euclides Resitutus (15). Because Spinoza faults De Vries and the study group for thinking that definitions admit of only a single type, rather than distinguishing between real and stipulative definitions, it seems likely that he would criticize Borelli on the same grounds. Even if Borelli believes that mathematicians should, as a matter of methodological principle, employ only real definitions, Spinoza might say, he need not therefore deny that there are stipulative definitions or that they are sometimes useful. I thus find it plausible that Borelli’s failure to distinguish between real

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Quarto, nomina sunt signa, ad placitum imposita, ad significandam praecognitionem, in animo existentem; id est efformationem, aut essentialem passionem alicuius subiecti. Ut nomen circuli est signum impositum ad indicandam efformationem, factam a recta linea, reuoluta, etc. Vel est signum indicans passionem essentialem dictae figurae, quae est aequalitas omnium rectarum linearum, a centro ad circumferentiam extensarum.
and stipulative definitions is one of those matters that Spinoza takes him to have “confused completely.”

A second topic on which I believe Spinoza takes issue with Borelli is the question of “bad” definitions. Recall the example used by Borelli and Spinoza to discuss definitions of impossible beings: two straight lines enclosing a space are a figural. Both agree that such a being cannot possibly exist (Euclides Restitutus, 17; Ep. 9 | IV/44/26). Borelli thereby infers that “ignorance, rather than knowledge [scientia] would be deduced” from such a definition, and that it would not be a ‘scientific definition [definitio scientifica]’ (ER, 17). However, Spinoza seems to press this point one step further and claim that the definition of an impossible being is, in fact, no definition at all: “if by a straight line he understands what we commonly understand, the thing is completely inconceivable [planè inconceptibilis]. So it is no definition [ideoque nulla est definitio]” (Ep. 9 | IV/44/25-26).

We can understand why Spinoza draws this conclusion by considering his identification of definitions with ideas discussed earlier. If the definiendum is inconceivable, there can be no idea of the thing and no definition of it, even if the words strung together as a putative definition have a superficial semblance of meaning. Given

41 On this matter, consider the following passages from Spinoza's writings: “if I understand what I say, I cannot express anything in words, without its being certain from this that there is in me an idea of what is signified by those words” (DPP1d2 | 1/149/27–29); “I do not wonder that Philosophers preoccupied with words, or grammar, should fall into … errors. For they judge the things from the words, not the words from the things” (CM I, 1 | 1/235/6–9); “[f]irst it should be noted that we may properly call a Chimera a verbal being because it is neither in the intellect nor the imagination. For it cannot be expressed except in words.
that Borelli shares Spinoza’s conviction that definitions are mental entities, or pre-existent cognitions in the soul, Spinoza is right to press him on this issue. Perhaps Borelli could evade this criticism by denying Spinoza’s assumption that impossible beings are inconceivable. This move, however, would come at a high cost, as it would preclude arguments from a scenario’s conceivability to that scenario’s possibility. Borelli appears to make just such an argument in the fourth scholium of Theorem XIX, Proposition XXI, Book I of *Euclides Resitutus*: “[c]an it not be conceived that a point should flow in the path of a curve and then direct its course without any break or cut?” (93).\(^42\) I believe, therefore, that Spinoza is right to consider Borelli confused on the question of definitions of impossible beings.

The third disagreement between Spinoza and Borelli I would like to discuss concerns the distinction between definitions and axioms. A look at Borelli’s *Euclides Restitutus* reveals that there are indeed clear differences between Borelli’s conception of the distinction between axioms and definitions and that put forth by Spinoza in Letter 9. According to Borelli, there is only a conventional distinction between definitions and axioms, or as he puts it, they differ only “in name.”\(^43\) The difference consists in the fact that axioms assign a name to a construction or property which is already commonly

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\(^{42}\) *Nonne concipi potest punctum fluere itinere curuo, et postea dirigere suum cursum absque ulla fractione, aut sectione?*

\(^{43}\) “*Patet ergo, quod definitio non differt a pronunciato nisi in nomine*” (16). Borelli treats “axioma” and “pronunciato” equivalently, as he introduces his axioms with the heading, “*Axiomata, seu Pronunciata*” (16).
accepted as signifying that kind of thing, whereas in definitions, the name is “imposed anew” (*de novo imponitur*) (16). Borelli explains this distinction by means of the following example:

> From this we conclude that any definition whatsoever may be an axiom, if the name has been accepted. And, on the other hand, any axiom may be a definition, if the name has not been accepted. For example, the name of a triangle has already been imposed, and according to the accepted use, it should be said: Every triangle is contained by three straight lines. And this would be an axiom, not a definition. On the other hand, if the name for equality had not already been imposed, it could be said: ‘Those things which are mutually congruent with one another shall be called equal,’ and this would be a definition, not an axiom. (16)

For Borelli, then, whether some first principle is a definition or an axiom depends solely on whether the terms in question are being used according to their commonly accepted meanings or instead according to some newly stipulated meanings.

From what Borelli has said concerning definitions we can thus infer that axioms (like definitions) concern the essences of things, which are represented by pre-existent

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44 *Unde colligitur, quod quaelibet definitio esse posset Axioma, si nomen iam esset receptum. Et e contra quodlibet axioma esset definitio, si nomen non esset receptum. Ut si nomen trianguli esset iam impositum, et usu receptum, dici posset: Omne triangulum a tribus rectis lineis continentur. Et istud esset axioma, non definitio. E contra si nomen aequalitatis non esset adhuc impositum, dici potest: Quae sibi mutuo congruant vocentur aequalia, et haec esset definitio, non pronunciatum.*

45 In one way, this brings Borelli’s position closer to that of Clavius, who thought that all definitions were purely stipulative, but Borelli’s view still differs in that only the name of the thing defined is stipulated, and the definition still must pick out some precognition in the soul.
cognitions in the soul by which we distinguish things from one another. Spinoza, on the other hand, indicates in Letter 9 that axioms and definitions are distinguished not by mere convention, but rather by their subject matter: “a definition is concerned solely with the essences of things or of their affections, whereas an axiom or a proposition extends more widely, to eternal truths as well” (IV/43/31–33). As with the previous disagreement, Spinoza bases this criticism of Borelli’s methodological views on substantive metaphysical issues. In this case, the issue concerns the basis of eternal truths. By claiming that axioms extend more widely than definitions, Spinoza seems to imply that definitions may be included among the eternal truths, but that there are others as well, which do not pertain to the essence of any particular thing.46

Section 1.4: Definitions and Axioms

Section 1.4.1: The Mystery of Missing Definitions in the Geometrical Appendix of the Short Treatise

Spinoza’s disagreement with Borelli on the distinction between definitions and axioms leaves the reader in a puzzling position, since he says so little about his own understanding of this distinction. A clue as to the metaphysical foundation of axioms, and what might also be regarded as a fascinating anomaly, lies in the first appendix to the Short Treatise. In this appendix, Spinoza presents an early geometric draft, containing axioms and propositions which would later find their way into the Ethics, albeit in a

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46 Spinoza would later claim that essences are eternal truths in E1d8exp and E1p17s.
modified form.\textsuperscript{47} What is perhaps most peculiar about this draft is the fact that, in spite of being presented in the geometrical style, it altogether lacks definitions, and bases all of its demonstrations upon axioms alone. The absence of definitions might lead one to suspect that the four propositions contained in this draft are intended to elucidate truths of a general nature, rather than anything concerning any particular individual. Indeed, a brief review of these propositions shows that they are intended to apply to any substance whatsoever, and it is not until the corollary of the last proposition is reached that Spinoza infers, without a great deal of argument, that Nature and God are identical. The fact that the definition of God appears to be the first definition that Spinoza chose to add to this draft\textsuperscript{48} may indicate that Spinoza recognized the necessity of defining God (a particular) in order to draw any conclusions about him.

Section 1.4.2: Spinoza on Axioms and Common Notions

Another probable motive for Spinoza’s choice to add definitions was the manner in which Henry Oldenburg challenged several of his axioms.\textsuperscript{49} In response, Spinoza seems to grant that these axioms are not really axioms in the proper sense, or what he would refer to as “common notions” (\textit{notiones communes}) in reference to Oldenburg’s question of whether they are truly “indemonstrable principles, known by the light of nature and requiring no proof” (Ep. 3 | IV/10/30). These “axioms” he says are, in fact,

\textsuperscript{47} Additions and modifications to these contents can be found in Spinoza’s early correspondence, particularly Letters 2–4. The path of development observable in these Letters suggests that the first appendix of the \textit{KV} is the earliest extant draft of Spinoza’s geometrical system.

\textsuperscript{48} See Letter 2 | IV/7/23–25.

\textsuperscript{49} See Letter 3, IV/10/30–IV/11/15.
derived from the definitions of substance and accident (Ep. 4 | IV/13/27–35), and indeed, these axioms appear later in the *Ethics* as propositions derived from the definitions of substance and mode. The fact that Spinoza proposes axioms which may be derived from definitions is telling in light of what can be learned about his views on axioms in the *Ethics*.

In E2p40s1, Spinoza writes, “[w]ith this I have explained the cause of those notions which are called *common*, and which are the foundations of our reasoning,” and he indicates, furthermore, as he did previously in Letter 4, that such notions are often considered axioms. The ideata, or objects, of these common notions are “those things which are common to all, and which are equally in the part and in the whole,” which can only be conceived adequately (E2p38), and which do not constitute the essence of any singular thing (E2p37). By deliberately setting the basis of common notions apart from essences, Spinoza continues to maintain that axioms and definitions rest on distinct metaphysical grounds. What is the metaphysical basis of common notions, that is, what are common notions ideas of?

Spinoza’s demonstrations concerning common notions (E2pp37–40) indicate fairly clearly that the common notions themselves are adequate, or clear and distinct, ideas of those things which are common to all, and which are equally in the part and the whole. These demonstrations (especially E2p39dem and E2p40s2) also indicate that the

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50 See, for example, E1pp1–3 and E1p4dem.

51 “*His causam notionum, quae Communes vocantur, quaeque ratiocini nostri fundamenta sunt, explicui.*”

52 Spinoza maintains in E1p8s2 that “the true definition of each thing neither involves nor expresses anything except the nature of the thing defined” (II/50/23–24).
common “things” in question are, in fact, properties (*proprietates*). The properties of interest in this context are those belonging to all bodies, and thus those shared by the human body and the external bodies which affect it. Spinoza does not explicitly restrict common properties to bodies alone, however, and given his Parallelism (E2p7 and E2p7s), there is little reason to expect that he would. By way of example, Spinoza refers (in E2p38c) to the Physical Digression, in which he claims that “[a]ll bodies agree in certain things,” including the fact that they all involve the concept of the same attribute and that they are all capable of various degrees of motion and rest (E2p13sphysdigL2).

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54 Nevertheless, a number of scholars write as if common properties were restricted to bodies (see, e.g. Curely, “Experience,” 49–50, and Garrett, “Essence of the Human Body,” 295). Wolfson argues explicitly that common notions are restricted to the study of bodies, and that the idea of God, for example, is not a common notion, on the evidence of E2P47s in which Spinoza writes, “[b]ut that men do not have so clear a cognition of God as they do of the common notions comes from the fact that they cannot imagine God, as they can bodies” (2, 125). It bears noting, however, that the fact that the idea of God is not itself a common notion is hardly definitive evidence that common notions are restricted to ideas of extended modes. On the contrary, Spinoza claims in the *Theological-Political Treatise* that “the knowledge of God must be drawn from the common notions which, through themselves, are certain and known” (Ch. 4, Par. 20 | III/61). Given that God is a substance consisting of an infinity of attributes (E1d6), it is difficult to see how knowledge of him could be drawn from the ideas of extension alone.
Although many scholars have acknowledged the importance of the common notions for Spinoza’s theory of knowledge, few have taken the opportunity to investigate their nature in much depth or detail. I believe that a closer look at the properties represented by the common notions reveals that they are not merely properties in the generic sense of features in general, but in the special, technical sense of *proprietates* discussed in Chapter 2 of this dissertation (Section 2.3). The first clue, of course, is that Spinoza uses the term “*proprietates*,” so often used to refer to this special sort of properties, to describe these features.

The most powerful evidence in favor of this interpretation, however, is Spinoza’s justification for the adequacy of the ideas of common properties. In E2p38dem, Spinoza argues that any property which is common to all bodies, or which is equally in the part and in the whole, can only be conceived adequately. The demonstration reads:

> [I]et A be something which is common to all bodies, and which is equally in the part and in the whole. I say that A can only be conceived adequately. For its idea (P7C) will necessarily be adequate in God, both insofar as he has the idea of the human Body and insofar as he has ideas of its affections, which (by P16, P25, and P27) involve both the nature of the human Body and that of external bodies. That is (by P12 and P13), this idea will necessarily be adequate in God insofar as he constitutes the human Mind, or insofar as he has ideas that are in the human Mind. The Mind therefore (by P11C) necessarily perceives A adequately, and does so both insofar as it perceives its own or any external body. Nor can A be conceived in any other way. (II/118/23–II/119/4)

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55 One very notable exception is Gueroult, 2, 326–352.
Throughout much of Book II, the conditions that make an idea adequate are not immediately evident, and Spinoza devotes much more attention to explaining why some ideas are inadequate. The clearest explanation that Spinoza provides at this stage begins earlier, in E1p11c:

[t]he human Mind is part of the infinite intellect of God. Therefore, when we say that the human Mind perceives this or that, we are saying nothing but that God, not insofar as he is infinite, but insofar as he is explained through the nature of the the human mind, or insofar as he constitutes the essence of the human Mind, he has this or that idea; and when we say that God has this or that idea, not only insofar as he constitutes the nature of the human Mind, but insofar as he also has the idea of another thing together with the human Mind, then we say that the human Mind perceives the thing only partially, or inadequately. (II/94/30–II/95/5; emphasis added)

This conclusion follows, according to Spinoza, because the human mind is nothing other than the idea of some singular thing that actually exists (E2p11), and in particular, it is the idea of the human body (E2p13). To the extent that my mind is merely the idea of my body, I can only have partial ideas, at best, of other things insofar as they affect my body (E2p25dem). Visual representations in the mind of external objects represent those objects only indirectly, because those ideas are, in fact, ideas of own bodies insofar as they are affected by external objects. Spinoza argues, for example, that our ordinary experience of the sun fails to adequately represent its true distance, because “an affection of our body involves the essence of the sun insofar as our body is affected by the sun” (E2p35s).
Even more specifically, Spinoza appears to indicate that my mind is not the idea of my complete body, including all its parts, but only of the actual essence of my body:

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the parts composing the human Body pertain to the essence of the Body itself only insofar as they communicate their motions to another in a certain fixed manner (see Definition after L3C), and not insofar as they are considered as Individuals, without relation to the human Body ... And so, the knowledge of each part composing the human body is in God insofar as he is affected with a great many ideas of things, and not insofar as he has only the idea of the human Body ... And so, (by P11C) the human mind does not involve adequate knowledge of the parts composing the human Body. (E2p24dem | II/110/30–II/111/17; emphasis added)

The definition cited in the quoted text indicates that the identity conditions of bodies—the conditions under which they persist through time and change—consist in the preservation of a certain fixed pattern (ratio) of motion and rest (E2p13sphysdigd). The preservation of this pattern is compatible with changes in the parts of the body over time (E2p13sphysdigL4). Since the parts of the human body do not pertain to its essence, then, the ideas of those parts are not truly ideas of the human body alone or contained in the human mind alone. That is why, according to Spinoza, we only have inadequate ideas of those parts.

If that were the end of the story, we would be limited to a single adequate idea, the idea of the essence of the human body. He later argues, however, that the mind has adequate ideas insofar as it acts and inadequate ideas insofar as it is acted upon
(E3p3dem). By acting and being acted upon, Spinoza means being the adequate or inadequate cause of something, respectively:

E3d1: I call that cause adequate whose effect can be clearly and distinctly perceived through it. But I call it partial, or inadequate, if its effect cannot be understood through it alone.

E3d2: I say that we act when something happens, in us or outside us, of which we are the adequate cause, i.e. (by d1), when something in us or outside us follows from our nature, which can be clearly and distinctly understood through it alone.

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

It follows that I have adequate ideas (other than the idea of the essence of my body) only when those ideas follow adequately from the idea constituting my mind. Since the order and connection of ideas is the same (E2p7), and my mind is the idea of the essence of my body, it follows that my adequate ideas are ideas of things that are adequately caused by the essence of my body.57

So, returning once more to the common notions, if I have an adequate idea of some common property that is equally in the part and in the whole, it can only be because that property is adequately caused by the essence of my body. This idea will similarly be adequate in the mind of every human being, and indeed, in every idea contained in God’s

56 The notion that the order and connection of ideas is the same is discussed in more detail in Section 3.4 of Chapter 3.

57 A somewhat similar line of reasoning can be found in Michael Della Rocca’s Representation and the Mind-Body Problem in Spinoza, pp. 54ff.
mind: “[t]here will be an adequate idea of A [the common property] in God (by P7C), both insofar as he has the idea of the human body, and insofar as he has ideas of the posited external bodies” (E3p39dem). In order for God to have adequate ideas of the common property in other, external bodies, the common property must similarly follow adequately from the essences of each of those bodies.

With the foregoing in place, we can draw several conclusions about the nature of those things that are “common to all.” Firstly, they are properties belonging to each mode under a given attribute, since they are common to all. Secondly, any such property does not belong to any mode to greater or lesser extent than any other mode, since it is equally in the part and in the whole.\textsuperscript{58, 59} Thirdly, in each mode to which this property belongs,

\textsuperscript{58} Spinoza’s views on mereological composition are sufficiently permissive that any finite individual can be, and is, part of a larger whole. He writes in E2d7 that, “if a number of Individuals so concur in one action that together they are all the cause of one effect, I consider them all, to that extent, as on singular thing.” Furthermore, he makes it clear that all finite bodies all part of a single, Infinite Individual (E2p13sphysdigL7s). By the transitivity of equality, then, it could be shown that all modes in a given attribute possess any given common property to an equal extent. E.g., let \( m_1 \) and \( m_2 \) be two arbitrarily selected extended modes, and let \( p \) be a property that is common to all, that is, equally in the part and in the whole. Because \( m_1 \) is a part of the Infinite Individual, property \( p \) belongs to \( m_1 \) and the Infinite Individual to an equal extent. Because \( m_2 \) is part of the Infinite Individual, property \( p \) belongs to \( m_2 \) and the Infinite Individual to an equal extent. Therefore, by the transitivity of equality, property \( p \) belongs to \( m_1 \) and \( m_2 \) to an equal extent. In addition, this equality seems to be assumed by Spinoza in E2p38dem, for if a common property belonged to the human body and external body acting upon it to different extents, the idea of that property as it exists in the human body and as it exists in the external body would not reflect the true extent of the property in either body, but rather a mixture, or perhaps an “average,” of the two extents, and the idea would thus be a confused representation of the property.
the essence of that mode is the adequate cause of the property. Fourthly, because Spinoza maintains that an effect follows from its cause necessarily (E1a3), this property belongs to each mode necessarily. Fifthly, although this property is a necessary one, it is nevertheless not essential, or “does not constitute the essence” of any single mode (E2p37). As I will show in Chapter 2 (Section 2.3.1), the third, fourth, and fifth features of the common properties just presented are precisely those belonging to *proprietates* in a special, technical sense soon to be discussed.

Finally, one further piece of evidence that the common notions are representations of common properties derived from the essences of particulars is the fact that Spinoza maintains in E2p44c2dem that

> the foundations of Reason are notions (by p38) which explain those things that are common to all, and which (by p37) do not explain the essence of any singular thing. On that account, they must be conceived without any relation to time, but under a certain species of eternity.

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58 Notably, one of the features classically attributed to *proprietates* is that “[p]articipating in properties occurs equally; in accidents it is now more and now less” (Porphyry, *Isagoge*, 19; emphasis added). In other words, although accidents can be realized in degrees (e.g., one apple can be more red than another), properties are realized only to the same extent wherever they occur (e.g., one man is not more capable of laughter than another).

60 One might fairly respond that to be an essential property of a thing and to constitute the essence of a thing are not necessarily the same, because one property selected from a set of essential properties might not “constitute” the essence of a thing, in the sense of being the whole essence of that thing, while nevertheless being an essential property. I would agree, except that, in this case, Spinoza makes it clear that the property is the effect of the essence (E2p40dem), and we should therefore take him to mean that the common property does not belong to the essence of the thing.
If the common properties are derived from essences, which Spinoza maintains are eternal (see, e.g., E1p6exp and E1p8c), one would have reason to expect that those properties themselves would be eternal, and this is indeed what Spinoza claims in E2p44c2dem. In fact, in E5p33dem, Spinoza makes a very similar inference when he concludes that the third kind of knowledge is eternal, because it is caused by the mind insofar as it is eternal, and that the intellectual love of God is eternal, because it is caused by the third kind of knowledge.

Thus, it appears that at the time of writing the *Ethics*, Spinoza believed that axioms are ideas representing the common properties of things that are ultimately derived from the essences of things. I do not believe that definitive evidence can be found showing that Spinoza held these same beliefs concerning axioms during his early correspondence, but even so, two facts are telling. Firstly, as we have seen, Spinoza maintains that definitions, which are ideas representing essences, have a more narrow metaphysical grounding than axioms, which extend to “eternal truths.” Secondly, in the geometric draft contained in the first appendix of the *Short Treatise*, Spinoza proposes axioms which he later claims are derived from the definitions of substance and mode.

These choices are very much in agreement with Spinoza’s tendency to distinguish sharply between a thing’s essence and its properties, and his later view that the properties of things serve as the basis of axioms while essences serve as the basis of definitions.

Section 1.5: Questions of Consistency with Spinoza’s Mature Views: Refining the Distinction between Real and Nominal Definitions
I have argued so far that many of Spinoza’s assertions about the distinction between real and stipulative definitions should be understood as consequences of his views about the nature of mental content. In the *Ethics*, however, Spinoza would later develop unique and sophisticated views on the nature of mental content, and it is worth considering whether the views here discovered in Letter 9 are compatible with those of the *Ethics*. In this section, I take a closer look at three closely related issues: whether there is a distinction between merely conceiving an idea and conceiving an idea as true; whether some ideas (stipulative definitions) are non-representational; and whether stipulative definitions are unassailable due to the epistemic certainty of mental content.

**Section 1.5.1: Conceiving and Conceiving as True**

The question of whether Spinoza can consistently endorse a distinction between merely conceiving an idea and conceiving idea as true, and whether that distinction should be understood in terms of whether the idea bears a relationship of representation to some object, can actually be approached from *both* Spinoza’s early and mature views. That is, the truth of an idea or definition may not depend solely on its extrinsic representational relation to an external object for Spinoza. Spinoza writes in the *TIE*:

> [a]s for what constitutes the form of the true, it is certain that a true thought is distinguished from a false one not only by an extrinsic but chiefly by an intrinsic denomination. For if some architect conceives a building in an orderly fashion, then although such a building never existed, and even never will exist, still the thought of it is true, and the thought is the same, whether the building exists or not. On the other hand, if someone says, for example, that Peter exists, and does not know that Peter exists, that thought, in respect to him is false, or, if you prefer, not true, even though Peter really
exists. Nor is the statement, Peter exists, true, except in respect to him who knows certainly that Peter exists. (§69 | II/26/15–25)

Spinoza goes on to say in the following paragraph that “true thought is knowing things through their first causes.” According to this view, then, the truth of an idea (and therefore, of a definition) will consist primarily on its internal structure, although Spinoza seems to refrain from ruling out extrinsic relations altogether. Whether an idea is true depends primarily on whether it is conceived in an orderly fashion and through its first causes. So, we might say, for example, that the architect has a true idea of a hypothetical building when he understands its structure in such a thorough and detailed manner that he thereby also understands the way in which it must be constructed.

This conception of a true idea appears to be at odds with my claim that, for Spinoza, real and stipulative definitions are distinguished by the fact that the former may be true or false on the basis of its representational relation to an external object, while the latter is neither true nor false in virtue of its lacking any such relation. Indeed, I believe that the details of Spinoza’s views are somewhat more complex than my presentation so far has indicated.

In Letter 9, Spinoza includes a very brief caveat in his distinction between real and stipulative definitions, one which has been lost in Curley’s translation. The passage in question is: “[v]el explicat rem, prout a nobis concipitur, vel concipi postest, tumque in eo etiam differt ab axiomate et propositione, quod non exigit, nisi ut concipiatur absolute, non ut axioma sub ratione very” (IV/43/33–36). Curley translates this passage as: “or else it explains a thing as we conceive it or can conceive it—and then it also differs from an axiom and a proposition in that it need only be conceived, without any further condition, and need not, like an axiom be conceived as true” (emphasis added).
The italicized selection, translating, “nisi ut concipiatur absolute” could alternatively be rendered, “unless it should be conceived absolutely” which would suggest that there is indeed a sense in which even a stipulative definition must be true, namely, insofar as it is conceived absolutely, a manner of conception to be clarified on another occasion, apparently.61

It would appear that, in the early works, including the TIE and Letter 9, Spinoza thought that an idea could be “true” (‘vera’) in two different senses: according to its extrinsic, representational relation to an external object, or according to its internal structure. Spinoza would later distinguish more clearly between these two different senses of truth. In the Ethics, he would specify that a true idea is one that agrees with its object (E1a6), whereas an adequate idea is one which “considered in itself, without any relation to an object, has all the properties, or intrinsic denominations of a true idea. Exp.: I say intrinsic to exclude what is extrinsic, viz. the agreement of the idea with its object” (E2d4). I believe that Spinoza thus settled on reserving the term “true” to refer to the extrinsic representational relation and idea bears to its object, and the term “adequate” to refer to the relevant internal structure. His shift in this direction seems to emerge already in Letter 9, given that his discussion of true definitions focuses primarily on its extrinsic relation to its object and appears to refer to its internal structure only as an afterthought in the phrase “nisi ut concipiatur absolute.”

To complicate matters further, Spinoza would also come to maintain in his mature thought that all adequate ideas are true (E2p34), which would imply that adequate

61 In E2p34, Spinoza equates absolute ideas with adequate ideas: “[e]very idea in us that is absolute, or [sive] adequate and perfect, is true.”
definitions must be true. In what way, then, might stipulative definitions lack a truth-value? Given these views on truth and adequacy, I believe that Spinoza could maintain and elaborate the distinction between real and stipulative definitions in the following way. Strictly stipulative definitions are presented in a non-representational manner, and insofar as they are contained in the human mind they do, in fact, represent no object outside the mind. The non-representational nature of strictly stipulative definitions is achieved, if you will, by a certain vagueness in the definition or idea. These stipulative definitions are vague insofar as they do not conceive their objects in an orderly manner through an adequate cause. As I argue elsewhere (Section 4.2), it belongs to the essence of each object to have some particular cause. By omitting an adequate cause, then, these definitions fail to adequately specify any particular essence, and thereby fail to refer to the essence of any particular object. As Michael Della Rocca argues in Representation and the Mind-Body Problem in Spinoza, “a confused idea is, by virtue of its confusion, not determinately about any particular state of affairs. Thus, confused ideas, because of their indeterminateness, do not seem to be false (and for the same reason, they do not seem to be true).” Even if, as Della Rocca maintains, Spinoza would ultimately say that these ideas are false, because all confused ideas are false, they are “false” in a way that fits our expectations for, and Spinoza’s prior description of, stipulative definitions.

If, however, such an idea is adequately conceived through the adequate cause of the object, as when it is conceived absolutely, i.e. when it is related to God (E2p32) and an adequate idea (E2p34), the essence of the object is then adequately specified, and the

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62 Representation, pp. 111–112.

63 Representation, p. 112.
reference of the idea becomes fixed to some eternal essence comprehended in God’s attributes outside the intellect (E2p8c). These ideas referring to eternal essences can be thought of as a mediate class of definitions between strictly stipulative and strictly real definitions. They are true in the sense that they conceive the thing through its adequate cause and accurately represent its essence as comprehended in God’s attributes, but in the sense that they neither affirm nor deny the actual existence of the object with that essence, they cannot represent or misrepresent any actual state of affairs and could justifiably be said to lack a truth-value. Strictly real definitions can be classified those which represent not only the eternal essence of some object, but which also represent that object as actually existing. Although strictly real definitions would always be true insofar as they represent some eternal essence, they may nevertheless be false insofar as they represent that essence as having actual existence, and in the case of finite modes, duration.

Section 1.5.2: The Will and the Intellect

Another reason to question whether Spinoza would allow that some ideas are non-representational concerns the distinction between the will and the intellect. In his account of error in the *Meditations* and the *Principles*, Descartes distinguishes between the will and the intellect.64 According to this account, judgments representing things as being a particular way are a product of the combined work of the intellect, the faculty of perception, and the will, which affirms and denies propositions concerning our

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perceptions. This division of labor allows for non-representational mental content insofar as we can (through the will) suspend judgment about our perceptions and refrain from affirming or denying anything about objects external to the mind on the basis of those perceptions.

In E2p49 and its associated corollary and scholia, however, Spinoza rejects Descartes’s distinction between the will and the intellect. He argues instead that affirmation and negation pertain to ideas in their very natures. Descartes is able to maintain that ideas are not inherently representational insofar as they only affirm or deny propositions about things external to the mind through the added work of the will. Spinoza seems to hold, in contrast, that ideas are already representational in themselves, affirming and denying propositions about external objects without the intervention of an external faculty. He writes, for example, “what is perceiving a winged horse other than affirming wings of a horse?” (E2p49s3 | II/135/31–32). If all ideas are inherently representational, however, one might conclude that Spinoza’s distinction between real and stipulative definitions on the basis that the former represent or explicate the essence of some object outside the intellect, while the latter merely presents non-representational mental content for consideration, is incompatible with the more mature views of the Ethics.

I believe that the key to addressing this concern is recognizing that Spinoza did not disagree with Descartes on the question of the existence of those mental phenomena that are referred to as “suspensions of judgment” or “non-representational mental content,” but rather he disagreed with Descartes on the question of the underlying mechanism explaining those phenomena. In E2p49s3, Spinoza writes:
[t]o the second objection [that experience teaches us that we can suspend judgment so as not to assent to things we perceive] I reply by denying that we have a free power of suspending judgment. For when we say that someone suspends judgment, we are saying nothing but that he sees that he does not perceive the thing adequately. Suspension of judgment, therefore, is really a perception, not [an act of] free will. (II/134/11–15; emphasis added)

In the text following this excerpt, Spinoza argues that suspensions of judgment occur when some other idea counters the affirmative or negative content of a given idea. So, if I have an idea of a winged horse and nothing else, I will affirm that a winged horse is present, but if this perception is combined with another idea, such as my knowledge that such creatures are mere fictions, then I will not affirm the presence of a winged horse on the basis of my apparent perception of one. Similarly, if I entertain the idea of a certain temple together with the awareness that this idea is merely hypothetical in nature, I will not take this idea, or definition, to represent some object outside my intellect. The distinction between real and stipulative definitions is thereby saved and given a more detailed account.

Section 1.5.3: The Epistemic Certainty of Mental Content

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65 Note that this description of suspensions of judgment as a class of inadequately perceived ideas fits rather well with my suggestion above that the non-representational nature of strictly stipulative definitions is achieved by means of a certain vagueness (or inadequacy) in the idea. This interpretation is also reinforced by the fact that, as argued above, Spinoza maintained in Letter 9 that stipulative definitions need not be conceived as true (or false), unless they should be conceived absolutely, or, per E2p34, adequately.
The third and last question of compatibility that I will consider here is whether Spinoza could consistently maintain in his mature years that stipulative definitions are unassailable due to the epistemic certainty of mental content. In the *Ethics*, Spinoza would argue that our knowledge of our own minds, and hence, of our own ideas (E2p13), consists in the ideas of our ideas, which are contained in the human mind (E2p20–21). He also maintains that these ideas of ideas are not necessarily adequate, and that we do not have an adequate knowledge of the human mind (E2p29). That is, it would seem that, according to Spinoza, I can have an inadequate understanding of the contents of my own mind. The epistemic certainty of mental content thus appears to be thrown into question.

I believe this concern may be addressed by considering the nature of the confusion that inadequate ideas involve. As we saw in Section 1.4.2, and as Michael Della Rocca argues in his acute discussion of the adequacy and inadequacy of ideas in *Representation and the Mind-Body Problem in Spinoza* (pp. 53–57), an idea is inadequate a human mind whenever it is caused from outside the human mind, and consequently, it confusedly simultaneously represents the state of part of the human body and an external cause acting on the human body.\(^66\) Spinoza argues, for example, that we imagine the sun to be approximately 200 feet away from us, rather than according to its true distance from the earth, because “an affection of our body involves the involves the essence of the sun insofar as our body is affected by the sun” (E2p35s). Our perception of the sun, therefore, is not a representation of the sun *simpliciter*, but rather a representation of the sun insofar as it affects our body. The false inferences we draw about the sun’s distance from the earth result from our failure to adequately draw this distinction. The confusion that

\(^{66}\) Della Rocca, *Representation*, p. 63.
inadequate ideas involve, then, is a confusion regarding the manner in which we take our ideas to represent objects outside our ideas and our inability to distinguish between those features resulting from the nature of our body and those features resulting from the natures of external bodies acting upon us.

If, however, the confusion that inadequate ideas involve is the result of representational misattribution, then this sort of confusion is inert with regard to stipulative definitions. As we saw above, strictly stipulative definitions represent nothing in particular, and so representational misattribution is not an issue, unless it is mistakenly taken to represent something outside of the mind, which is precluded by explicitly conceiving the idea as a stipulative definition. I would argue, therefore, that the kind of confusion that Spinoza attributes to inadequate ideas actually leaves the epistemic certainty of mental content untouched, at least insofar as this certainty does not concern the representational correlates of our ideas.

Furthermore, those adequate (or intermediate) stipulative definitions which represent only an eternal essence, without affirming or denying the actual existence of any object with that essence, are unproblematic so long as there is some essence corresponding to it. These definitions, I argued, will be adequate, because they are appropriately conceived through their adequate cause, and they are therefore true insofar as they are considered simply as a representation of some essence as comprehended in God’s attributes. Spinoza argues, moreover, that our ability to recognize a true idea as true is unproblematic: “[h]e who has a true idea at the same time knows that he has a true idea, and cannot doubt the truth of the thing” (E2p43). So, regardless of whether a
stipulative definition is thought of as adequate or inadequate, it is consistent with Spinoza’s mature views to maintain that they require no defense.

Section 1.6: Conclusion

In this Chapter, I have endeavored to present a new and thoroughly developed interpretation of Spinoza’s distinction between real and stipulative definitions, how it compares and contrasts with historical precedents, and how Spinoza grounds this distinction in his views about the nature of representation, mental content, and the ontological character of definitions. I have clarified Spinoza’s nuanced criticisms of Borelli’s views on definitions and argued that those criticisms are, in fact, well-motivated. Finally, because of Spinoza’s underlying assumptions about representation and mental content in his distinction between real and stipulative definitions, and because of the evolution of Spinoza’s views between Letter 9 and the Ethics, I have examined three previously overlooked possible sources of tension between those assumptions and Spinoza’s mature views. Although Spinoza’s mature views on the nature of mental content and representation are superficially inconsistent with his previous assumptions, I have argued that Spinoza has strategies readily available for resolving those apparent inconsistencies and further developing the distinction between real and stipulative definitions. While I do not maintain that Spinoza ever formally adopted those strategies, I do think that I have presented compelling evidence showing that they are consistent with Spinoza’s mature views and they preserve the spirit of the distinction.

As previously noted, the consequences of this study for Spinoza’s definitions in the Ethics cannot be fully discussed here. Nevertheless, the following observation
deserves mention. A natural criticism of Spinoza’s philosophical approach is that he begins with a series of undefended (and therefore potentially unjustified) definitions which ultimately serve as pillars of his metaphysical system.\(^67\) A tempting response to this general criticism would be to invoke the distinction between real and stipulative definitions. One can defend Spinoza’s approach by pointing out that his definitions might be introduced in a stipulative posture, avoiding the requirement of any defense. In turn, once Spinoza has demonstrated the existence of those definienda (e.g., in his demonstration of the existence of God in E1p11), those same definitions can be regarded as real definitions, thereby avoiding the charge that his metaphysical system is a mere thought experiment with no grounding in reality.\(^68\) Spinoza’s definitions should thus be regarded as both real and stipulative, relative to one’s standpoint in the process of demonstration.

The study presented here introduces complications for this approach by revealing, firstly, that Spinoza’s grounds for the unassailability of stipulative definitions involve

\(^{67}\) One of Hegel’s criticisms of Spinoza in his Vorlesungen über die Geschichte der Philosophie III, for example is the “limitations of the method in which [he] presents his thoughts” (256). He claims that “it is really a weak point in Spinoza that he begins thus with definitions. In mathematics this method is permitted, because at the outset we there make assumptions, such as that of the point and line; but in Philosophy the content should be known as the absolutely true” (263).

\(^{68}\) I believe that Bennett’s suggestion that we view the Ethics as a hypothetico-deductive system resembles this strategy (Study, 20–25). Nadler proposes a similar approach (Spinoza’s Ethics, 47–48). In contrast, Parkinson argues that Spinoza would, like Descartes, respond to those who would reject his definitions by accusing them of pre-conceived prejudices (“Definition,” 65). While acknowledging the textual evidence in support of Parkinson’s view, I have devoted my comments in this final section toward briefly clarifying what I think is an epistemically preferable response made available by Spinoza’s theoretical resources.
substantial philosophical commitments including the theses that definitions are a form of mental content (in contrast with linguistic entities, such as sentences), the epistemic certainty of mental content, and the exclusivity of mental content. Secondly, I have also argued that, to be consistent with the views of the Ethics, Spinoza’s distinction between stipulative and real definitions needs to acknowledge at least two categories of stipulative definitions: inadequate (strictly) stipulative definitions and adequate (intermediate) stipulative definitions. Because a real definition represents an essence as actually existing, a stipulative definition would also have to represent some particular or identifiable essence, making it an intermediate stipulative definition, in order to be convertible into a real definition. To adopt the suggested strategy, then, Spinoza would be required to claim that the definitions of the Ethics are adequate ideas of essences, presented as intermediate stipulative definitions, whose definienda will be subsequently demonstrated to exist.

One might therefore be inclined to ask, in spite of its stipulative nature, whether Spinoza does indeed have an adequate idea of this essence. This concern is not entirely new. In fact, Leibniz makes a similar observation in his criticism of Spinoza’s demonstration of God’s existence. He remarks on the second proof of E1p14dem that “he has not yet proved that God’s nature does not imply contradiction” (200). Relatedly, he comments on Spinoza’s definition of God in E1d6 that

every definition is imperfect, however true and clear it may be, which permits some doubt, even when it is understood, about whether the thing defined is possible. Now this is such a definition, for it still can be doubted whether a being having infinite attributes does not imply a contradiction. (197)
I doubt, however, that Spinoza himself ever shared such a concern. He writes in E2p43 that “[h]e who has a true idea at the same time knows that he has a true idea, and cannot doubt the truth of the thing.” He continues in the Scholium:

the proceeding proposition is sufficiently manifest through itself. For no one who has a true idea is unaware that a true idea involves the highest certainty. For to have a true idea means nothing other than knowing a thing perfectly, or in the best way. And of course no one can doubt this unless he thinks that an idea is something mute, like a picture on a tablet, and not a mode of thinking, viz. the very [act of] understanding… As the light makes both itself and the darkness plain, so truth is both the standard of itself and the false. (II/124/5–17)

Spinoza denies Leibniz’s premise that every definition is imperfect, or that there can be any genuine doubt whether God, as defined in E1d6, is possible.69 Spinoza is not troubled by the skeptic—at least not philosophically. He tells us that “we commonly see [it] happen [that] someone says in words that he doubts, although his mind does not doubt. [But] it is not the business of the Method to emend that. That belongs to the investigation of stubbornness, and its emendation” (TIE, §77 | II/29/22–25).

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69 These passages help confirm my claim in Section 1.5.3 above that Spinoza ultimately continues to hold on to the epistemic certainty of mental content.
Chapter 2: Spinoza’s Criteria for Adequate Definitions

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Section 2.1: Introduction

In the previous Chapter, I reconstructed Spinoza’s views on the nature of definitions, the distinction between real and stipulative definitions, the manner in which the metaphysics of definitions supports the incontestability of stipulative definitions, his criticisms of Borelli’s views on definitions, the distinction between definitions and axioms, and finally, how these views can be reconciled with Spinoza’s evolving metaphysics in the *Ethics*. In this Chapter, I continue this line of inquiry by investigating Spinoza’s criteria for *satisfactory* definitions. Near the end of the *Treatise on the Emendation of the Intellect*, Spinoza presents what he considers to be the “conditions of a good definition” (§94 | II/34/26). In addition to the metaphysical considerations pertaining directly to definitions themselves, the criteria Spinoza provides for adequate
definitions reveal important information regarding his theory of essence. Here, I explore these criteria in depth and detail together with their implications for Spinoza’s views on essences.

In Section 2.2, I introduce and explain Spinoza’s requirement that definitions be intellectually affirmative, or that they state what the thing is rather than what it is not. I elucidate the significance of this seemingly straight-forward requirement by showing how this concept refutes Hegel’s famous interpretation of Spinoza’s philosophy according to the dictum that “omnis determinatio est negation,” or every determination is a negation. I also make use of Maimonides’s views on particularization to demonstrate that this requirement results in a more demanding conception of definition than the dominant contemporary version.

In Section 2.3.1, I explain Spinoza’s requirements that the definition of a thing include only its essence and not its properties [proprietates or propria] and that all of a thing’s properties be deducible from its definition. I introduce the distinction between essence and properties as it emerges from Aristotle and is later clarified by Porphyry, and I investigate Spinoza’s most likely sources for this distinction in the works of Johannes Clauberg (1622–1665), Bartholomäus Keckermann (1572–1609), and Adrianus Heereboord (1613–1661). The passages that I introduce and translate from Keckermann and Heereboord, in particular, have been neglected by scholars of Spinoza’s philosophy until now and offer substantial insights into the history and nature of the essence-properties distinction. I Section 2.3.2, I discuss various examples of the properties of God throughout Spinoza’s works, how they illustrate the essence-properties distinction, and I show that these examples introduce a complication for our understanding God’s
properties in terms of modes. I demonstrate the pervasive influence of the essence-properties distinction in the methodology of Spinoza’s *Ethics* in my discussion of the properties of human beings and their affects in Section 2.3.3. In this Section, I also offer an in-depth discussion of a particularly illustrative example of the essence-properties distinction at work in Spinoza’s conception of love. This example further clarifies the manner in which properties must follow from the essence of the thing for Spinoza.

In Section 2.4, I investigate Spinoza’s use of the definitions of geometrical figures to illustrate the distinction between essence and properties. With these examples, Spinoza’s fourth requirement for satisfactory definitions, namely, that they include the cause of the thing and are therefore “genetic” in nature, is introduced. I compare and contrast the nature and purpose of this requirement as it appears in the works of Hobbes, Borelli, and Spinoza, and I show that, perhaps surprisingly, Hobbes and Borelli (at least sometimes) allowed that a single given object may have multiple legitimate definitions. In Section 2.5.1, I investigate whether there is any evidence that Spinoza’s views on genetic definitions changed between his early and late discussions of them in the *Treatise on the Emendation of the Intellect* and Letter 60, respectively. I conclude that there is no evidence of any change in his views. Finally, in Section 2.5.2, I return to the puzzle of multiple genetic definitions for a single object, and I show that, while even Descartes appears at one point to have endorsed pluralism regarding genetic definitions, there is no positive evidence that Spinoza did so. I conclude that further investigation into the implications of Spinoza’s views is required to settle the matter.

Section 2.2: Condition 1: Intellectual Affirmation
Spinoza considered the first condition I will discuss so obvious that he nearly neglected to mention it. This requirement is that “every definition must be affirmative [affirmitavam],” and he emphasizes that he means “intellectually” affirmative and not merely “verbally” affirmative (TIE §96 | II/35/24-27). This emphasis on intellectual affirmation is in keeping with Spinoza’s tendency, which we have already seen, to believe that thought is, in some sense, closer to reality than spoken or written language.  

Earlier, we visited Spinoza’s view that we may string together words under the pretense of representing an impossible state of affairs, but in thought, anything involving a contradiction remains inconceivable and unrepresentable. In this context, we see Spinoza make the claim that, although certain verbal statements may be affirmative in their grammatical form, they might nevertheless conceal a hidden negation, whereas, in the intellect, negative content is made explicit.  

If I claim, for example, that the umpire is blind (and suppose as only a philosopher would that, in this case, I intend it as a factual statement rather than a criticism of his professional expertise), it would appear that I am making a statement about what is the case. Spinoza might say, though, that I am really talking about what is not the case. There is no real property picked out by the term “blindness;” instead, it can only serve to (confusedly) indicate what the umpire does not have, namely, eyesight, and this absence is the only content had by the concept of blindness. For example, in Letter

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70 In Chapter 1, Section 1.2.3.

71 In Chapter 1, Section 1.3.2.

72 For example, while the term “infinity” (“infinitas”) is negative in grammatical form, Spinoza asserts that “being infinite is an absolute affirmation of the existence of some nature” while being finite is “in part, a negation” (E1p8s1).
19, Spinoza rejects the view that the state of blindness is one in which a human being is denied something belonging to his nature. He instead describes it as a “pure negation [mera Negatio],” a “pure and simple lack, which in itself is nothing [simplicem, et meram carentiam, quae in se nihil est]” (IV/128). While such confusions abound in language, such is not the case in the intellect, according to Spinoza. In the intellect, negations are made explicit, our concepts are clear and distinct, and these concepts correspond to possible realities, whereas words can easily fail to do so.73

By insisting that definitions be intellectually affirmative, then, he is requiring that definitions state what the definiendum (i.e., the thing the definition aims to define) is rather than what it is not. This requirement may seem trivial at first, but it has substantial consequences, namely, that it is not possible to conceive of what something is by way of negation. One way of illustrating the significance of this claim is to consider how it contrasts with Hegel’s influential interpretation of Spinoza. Hegel’s favorite phrase to quote from Spinoza is “omnis determinatio est negatio,” all determination is negation, and he says in the Science of Logic, that “[t]his proposition is infinitely important” (SL, 113).74 As Hegel uses it, it means things are determinate, or they are what they are, in virtue of negating or excluding an other to which it is opposed. Hegel writes, for example, “through the limit, something is what it is” (SL, 126), and in the section on inner and outer, he writes, “it is precisely through its other that each is what it is in itself” (SL, 528). Thus Hegel claims that “determination carries within itself its own opposite”

73 For an interesting, if somewhat exaggerated view of Spinoza's pessimism toward language, see David Savan's “Spinoza and Language.” For a compelling response, see Mogens Laerke's “Spinoza's Language.”
74 Other discussions of Spinoza's "omnis determinatio est negatio" in Hegel can be found in EL, 147; HP3, 267 &285-286; and HP1 252.
(SL, 93-94), “determination implies its opposite” (SL, 441), and as we saw above in relation to inner and outer, each “presupposes” its opposite (SL, 525).

It seems to me, however, that Hegel has probably over-stated the importance of this principle in Spinoza’s philosophy. This phrase, in fact, only occurs once in Spinoza’s whole corpus (in his correspondence, not the *Ethics*), and Hegel apparently misquotes it. He does not say that “all determination is negation,” but rather simply “determination is negation,” and he only states it within the context of a discussion concerning figure, or “finite and determinate bodies” (Letter 50 | IV/240). What Spinoza says there is that “[t]his determination [figure] therefore does not pertain to the thing in regard to its being [esse]; on the contrary, it is its non-being [non esse]. So since figure is nothing but determination, and determination is negation, figure can be nothing other than negation.” Spinoza here seems to be saying that the outer figure or shape of a finite extended mode is determined by its relationship to other surrounding bodies. This claim is consistent with the fact that in E1p15, Spinoza argues against the possibility of a vacuum.

He elaborates on a consequence of this view with a helpful analogy in Letter 32. He describes the various parts of extended nature by comparing them to the particles composing the blood in a circulatory system of an organism. The particles “adapt themselves to one another in accordance with size and shape so as to be fully in agreement with one another and to form all together one single fluid,” so that each shares its borders with its immediately adjacent particles. The figure of each particle is thus

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75 Paul Franks points out in *All or Nothing*, that Jacobi was also keen to emphasize the importance of "*determinatio est negatio*" in Spinoza's philosophy more than was perhaps warranted; when he quotes Spinoza's Letter 50 on this matter in *Über die Lehre Spinozas in Briefe an Herrn Mendelssohn*, Jacobi removes the reference to figure (91, n.11).
determined by the manner in which it excludes or negates (and is excluded and negated by) other particles. The figure of bodies in extended nature is thus similarly determined by the adjacent bodies which they exclude.

But what Hegel seems to neglect is that Spinoza says that figure does not pertain to the extended mode with regard to its being (what it is), but rather with regard to its non-being (what it is not). In Letter 83, Spinoza places figure among the beings of reason [entia rationis], which are contrasted with real beings [entia realia] (IV/335). In the Cogitata Metaphysica, Spinoza groups beings of reason into three classes: modes of thinking by which we retain things (natural kinds, where things are grouped according to genus and species), modes of thinking by which we explain things (time, number and measure), and modes of thinking by which we imagine things (“modes which the mind uses for negating [ad negandum], such as blindness, extremity or limit, term, darkness, etc.”) (CM Part 1, Ch. 1 | I/234). It seems plausible that Spinoza would have placed figure in the third class as the extremity or limit of an extended mode. It is through this particular class of entia rationis that we “imagine nonentities [non-entia] positively, as beings [instar entium]” (CM Part 1, Ch. 1 | I/234). Spinoza says that, although these are modes of thinking, they cannot, strictly speaking be considered ideas, because they “have no object that … can exist” (CM Part 1, Ch. 1 | I/234). He elaborates, saying, “if anyone looks outside the intellect for what is signified by those words, he will find it to be a mere nothing [merum nihil] (CM Part 1, Ch. 1 | I/235; emphasis added). Spinoza insists that we must take care not to confuse beings of reason with real beings, “[f]or it is one thing to inquire into the nature of the things [rerum naturam], and another to inquire into the modes by which things are perceived by us” (CM Part 1, Ch. 1 | I/235). These statements
provide a stark contrast to Hegel’s views of negation. Spinoza argues that a negation, such as figure, is a mere nothing, of which, in reality, we can have no idea—it can have no genuine representational content, and hence no genuine mental content. For Hegel, no negation is ever a mere nothing. He writes that

[All that is necessary to achieve scientific progress—and it is essential to strive to gain this quite simple insight—is the recognition of the logical principle that the negative is just as much positive, or that what is self-contradictory does not resolve itself into a nullity, into abstract nothingness, but essentially only into the negation of its particular content [seines besonderen Inhalts], in other words, that such a negation is not all and every negation but the negation of a specific subject matter [der bestimmten Sache], which resolves itself [sich auflöst], and consequently is a specific negation [bestimmte Negation], and therefore the result essentially contains that from which it results … Because the result, the negation, is a specific [bestimmte] negation it has a content. (SL, 54; emphasis original)]

As we saw Chapter 1, however, Spinoza does believe that a contradiction results in a “nullity,” rather than resulting in a higher unity containing the contradictory moments. Contradictory beings are inconceivable and undefinable.76 He says that "the very nature of a square circle indicates the reason why it does not exist, viz. because it involves a contradiction" (E1p11dem). Since being a square and being a circle are mutually exclusive determinations, Spinoza argues that a square circle is self-contradictory and therefore impossible. Here, we see Hegel claiming that, because such negations as figure are specific in what they negate (as the limit of a body specifies not just what does not

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76 Chapter 1, Section 1.3.2.
belong to the body but also what does), they do, in fact, have content. For Hegel, things are determinate or have content in virtue of negating or excluding others. For Spinoza, however, a negation is merely a mode by which things are perceived by us; the nature or essence of the thing is something entirely different.

To return briefly to the nature of bodies, based on what we have seen, it seems safe to conclude that figure is not what determines their essence, for Spinoza. In the *Ethics*, Spinoza defines “pertaining to the essence of a thing [ad essentiam alicujus rei]” as that which, “being given, the thing is [NS: also] necessarily posited and which, being taken away, the thing is [NS: also] necessarily taken away; or that without which the thing can neither be nor be conceived, and which can neither be nor be conceived without the thing” (E2d2). While this definition deserves much more detailed discussion, for our present purposes, it suffices to note that, when Spinoza denies in Letter 50 that figure pertains to the being of bodies, it is plausible that in his view bodies can therefore both be and be conceived without their particular shape, as defined by their outermost boundaries with adjacent bodies. More specifically, Spinoza argues in the lemmata following E2p13 that an extended mode retains its identity by maintaining a constant pattern (ratio) of motion and rest among its parts. Whatever the precise nature of these patterns, Spinoza maintains that their preservation is compatible with changing parts over time (Lemma 4), growth or diminution of the parts composing it (Lemma 5), changes in the direction of motion of the parts (Lemma 6), and in the motion or direction of the body as a whole (Lemma 7). These lemmata, particularly 4–6, would seem to imply that a body can retain
its identity and nature even if its shape changes over time.\textsuperscript{77} This possibility in turn suggests that the identity of such a body is not determined by its relations to other external bodies, but by a principle internal to the body itself. The body’s figure may be a negation, but nature of the body itself is not.

Given this radical disagreement on the nature of negation, Hegel’s choice of Spinoza as the representative of his favorite slogan “\textit{omnis determinatio est negatio}” seems rather unfitting. If this principle does not apply in the intended sense to finite modes, it almost certainly does not apply with respect to God or God’s essence. This fact comes out perhaps most clearly in E1p10, the conceptual separation between the attributes. In the scholium to this proposition, Spinoza argues (contra followers of Descartes) that it is possible for a substance to have more than one attribute precisely because the conceptual divide implies that they cannot negate or exclude one another, and hence, “although two attributes may be conceived to be really distinct (i.e. one may be conceived without the aid of the other), we still can not infer from that that they constitute two beings, or two different substances” (E1p10s). On the one hand, Spinoza maintains that absolutely everything must be conceived under some attribute (E1p10), and so it seems plausible that he would agree that for anything to be what it is, it must be determinate. But here in E1p10s, we have a clear case of determination \textit{without} negation.

Another respect in which the attributes do not negate each other emerges in E1p8. Here Spinoza argues that every substance is necessarily infinite, because if a substance were finite, "(by D2) it would have to be limited by something else of the same nature,”

\textsuperscript{77} For in depth discussion of these passages, see Garrett’s “Spinoza’s Theory of Metaphysical Individuation.”
i.e. something having the same attribute. But since he argues in E1p5 that two substances cannot have the same attribute, it cannot be so limited, and it must be infinite. He goes on the say in the scholium that

[s]ince being finite is really, in part, a negation, and being infinite is an absolute affirmation of the existence of some nature, it follows from P7 alone that every substance must be infinite [NS: For if we assumed a finite substance, we would, in part, deny existence to its nature, which (by P7) would be absurd.]

Thus, a limitation of a substance is a negation in the sense that it involves denying (some degree of) reality to it, and Spinoza apparently denies that substances of different attributes can limit each other in this way. Supposing, per impossible, that there are two substances with the attribute of extension, one of the substances could be greater than the other insofar as they have a common measure in their shared attribute. Spinoza says that "a body is called finite because we can always conceive another that is greater" (E1d2). Without a common attribute, however, the relevant common measure is lacking and one substance cannot negate another. This feature of Spinoza’s system seems to be another sense in which the attributes are determinations that do not involve negation.

It must be admitted, however, that this particular inability of the attributes to negate each other is somewhat relative. Although E1p8 declares that "[e]very substance is necessarily infinite," it is clear that Spinoza must mean “necessarily infinite in its own kind.” The demonstration relies on E1d2, which does not define finitude in general, but finitude in kind: "[t]hat thing is said to be finite in its own kind that can be limited by another of the same nature" [emphasis added]. A body cannot be limited by a thought, and a thought cannot be limited by a body. Likewise, in the scholium, Spinoza writes that
"being infinite is an absolute affirmation of the existence of some nature" [emphasis added]. He contrasts being infinite in its kind with being absolutely infinite: "[b)y God I understand a being absolutely infinite, i.e., a substance consisting of an infinity of attributes, of which each one expresses an eternal and infinite essence" (E1d6). He elaborates that "if something is only infinite in its own kind, we can deny infinite attributes of it [NS: (i.e., we can conceive infinite attributes which do not pertain to its nature)], but if something is absolutely infinite, whatever expresses essence and involves no negation pertains to its essence" (E1d6).

Thus a thinking substance cannot negate or limit an extended substance insofar as it is extended—each attribute is conceived through itself and is therefore incommensurable with others. But the realities of the two substances that do not share attributes can nevertheless be compared in terms of absolute infinity, terms that, although not attribute specific, are still attribute dependent. Spinoza writes that "the more reality, or being [a substance] has, the more it has attributes which express necessity, or eternity, and infinity" (E1p10s). So, while substance S₁, with attributes A, B and C, cannot limit or negate substance S₂, with attributes D and E, with respect to D and E, S₁ nevertheless limits S₂ in absolute terms insofar as S₁ has more attributes. S₂ therefore is not entirely free of negation in the same sense that an absolutely infinite substance is. An absolutely infinite substance lacks no conceivable attribute, and it therefore does not stand in contrast to an other which it is not. Even so, none of the foregoing suggests that the nature of any substance is constituted by the manner in which it negates or excludes, or is negated or excluded by, any other substances.
Against this conclusion Hegel claims that, “[r]eality as thus conceived [taken only as perfection, as an affirmative being which contains no negation] is assumed to survive when all negation has been thought away; but to do this is to do away with determinateness” (SL, 112). Spinoza and Hegel thus seem to take directly opposite positions on this issue. For Spinoza, the more determinate a substance is (i.e. the more attributes it has), the less it involves negation, but for Hegel, the more determinate anything is, the more it involves negation (i.e. the more it excludes from itself). Once again, this disagreement is only possible in virtue of Spinoza's rejection of Hegel's interpretation of “determinatio est negatio.” The positive reality of being must be reflected in the intellectual affirmation of definitions.

One interesting consequence of this requirement is that it shows that Spinoza’s criteria for a successful definition are already stronger than that of necessary and sufficient conditions. To illustrate why this is the case, it is useful to consider what Maimonides has to say on the subject. In section Chapter 58, Part I of the Guide of the Perplexed, Maimonides presents a discussion of affirmative and negative attributes. He points out that both affirmative and negative attributes can be used to particularize or identify individuals to varying degrees. He writes that, “the attributes of negation have in this respect something in common with the attributes of affirmation, for the former undoubtedly bring about particularization even if the particularization due to them only exists in the exclusion of what has been negated from the sum total of things that we had thought of as not being negated” (Pines I, 134–135).

We can illustrate this point with the following example: suppose that while building the Ark, Noah was given specific instructions by God to create an exclusive
section for cats, on account of their particularly finicky nature. When Noah points out that he has never encountered these strange creatures before, God decides to present him with a list of criteria on the basis of which he can know which animals to allow into the special section. God could either provide him with a list of properties, the complete set of which belongs to all and only cats, or somewhat mischievously, with a list of all things that cats are not (e.g., not turtles, not rhinoceroses, etc.). Using either list, Noah could, with varying degrees of efficiency, identify all and only the cats on board the Ark, although one contains only affirmative and the other only negative attributes. However, the two lists would differ in that one would tell Noah a good deal about what cats are, and the other would seem to tell him virtually nothing on the subject. As Maimonides puts it, “[t]he attributes of affirmation, even if they do not particularize, indicate a part of the thing of which the knowledge is sought, … whereas the attributes of negation do not give us knowledge in any respect whatever of the essence the knowledge of which is sought” (Pines I, 135).

Even if positive and negative attributes are capable of producing extensionally equivalent particularizations or classifications of entities, positive content, information about what an entity is, is prior in nature to negative content, information about what an entity is not—being is prior to non-being. Spinoza demands that definitions reflect this fact. Because definitions *qua* necessary and sufficient criteria are similarly limited to a method of extensional particularization and classification, blind to whether those criteria or positive or negative in content, Spinoza has already broken away from the presently
dominant, contemporary understanding of definitions in this first and deceptively trivial requirement for definitions.

Section 2.3: Conditions 2 and 3: Essence and Properties

Section 2.3.1: The Distinction between Essence and Properties

Two of Spinoza’s most important criteria for successful definitions are based on a crucial distinction between two types of features attributable to entities. Spinoza adopts the traditional Aristotelian distinction between essence and proprietates (sometimes “propria”). According to Aristotle, a property, or ἰδιον, is

78 This assumption that definitions consist of necessary and sufficient criteria is so common that it often goes unstated. It is put forth quite clearly, however, by the prominent contemporary philosopher, Colin McGinn, in his recent book, Truth by Analysis. In it, he defines philosophy itself as the “a priori search for essences,” which are stated in definitions (4-5). He maintains that his conception of philosophy is “resolutely old-fashioned,” and even that his conceptions of essence and definition are, at least roughly, Aristotelian (4-5). However, he goes on to claim that the proper method for uncovering the essences of things is conceptual analysis, and that this consists largely in the “provision of necessary and sufficient conditions” (5). As we have just seen, McGinn’s claim to be following the Aristotelian tradition in this manner is somewhat exaggerated.

79 This fact has not always been appreciated by scholars of Spinoza’s philosophy. Jonathan Bennett, for example, is one important scholar who has identified Spinoza’s conception of essence with the contemporary notion of necessary and sufficient conditions (c.f. Study, pp. 61, 236).

80 Spinoza generally uses “proprietas” as a noun and “propria” as an adjective, which may or may not be related to this technical concept of property. For example, in one passage in Descartes’s Principles of Philosophy, Spinoza uses the term “propria” as an adjective modifying “natura,” i.e. “nostram propriam naturam” or “our own nature” (DPP, Part 1, Prol. I/147/15). If “propria” were here being used in the technical sense of “proprietas,” Spinoza would be conflating the distinction between essence and properties.
something which does not indicate the essence of a thing, but yet belongs to that thing alone, and is predicated convertibly of it. Thus it is a property of man to be capable of learning grammar; for if he is a man, he is capable of learning grammar, and if he is capable of learning grammar, he is a man. For no one calls anything a property which may possibly belong to something else, e.g. sleep in the case of man, even though at a certain time it may happen to belong to him alone. (Topics, 102a18–24)

This account seems to match what Porphyry would later describe in his classic philosophical “textbook,” the Isagoge, or Introduction, as the sort of accident that coincides “alone, and all, and always” of a certain species (11). In this passage, Poryphry introduces the now standard example of the ability to laugh as a property of man:

[f]or even if man does not always laugh, he is said to be laughing not in that he always laughs but in that he is of such a nature as to laugh—and this holds of him always, being connatural, like neighing of horses. And they say that these are properties in the strict sense, because they convert: if horse, neighing; and if neighing, horse. (11)

The fact that properties are convertible with their subjects while being contradistinguished with the essences of their subjects presents another interesting way in which contemporary extensional characterizations of definitions can fall short. Although all and only men are capable of laughter, this feature does not suffice as a definition of

by using the term to modify “natura.” There are two works in which this usage is not consistently followed: one is the Short Treatise, in which the Latin terms were presumably inserted by the translator, and the other is the TIE, in which Spinoza still mostly uses “proprietas” except for a few key passages.
man, which according to Porphyry, is instead provided by a thing’s genus and specific difference (in this case, man is a rational (mortal) animal) (9). Spinoza’s second criterion for definitions abides by tradition in that definitions must explain only the essence of a thing and avoid the pitfall of instead explaining its proprietates (TIE §95 | II/34/29–30), although he rejects the view that definitions should be constructed using a genus and specific difference.\(^\text{81}\)

While Spinoza embraces the notion that properties do not belong to the essence of a thing, he never explicitly addresses their other central, traditional characteristic, namely, that they are convertible with their subjects, belonging to all and only individuals of a certain kind. Instead, Spinoza emphasizes a rather different characteristic of properties: the fact that they, in some manner, follow from the essences of their subjects. Thus, his third requirement of definitions is that all of the definiendum’s proprietates must be deducible (“concludi possint”) from the definition (TIE §96 | II/35/17–21).

Whether Aristotle himself introduced or accepted this idea is difficult to say. W.D. Ross claims that, according to Aristotle’s distinction between essence and properties, and

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\(^{81}\) Spinoza addresses this topic most explicitly in the Short Treatise, Part 1, Chapter 7, where he dismissively claims that “though all logicians admit this [that a legitimate definition must be by genus and difference], I do not know where they get it” (I/46/10–12). He rejects this approach, because it allegedly makes knowledge of the highest genus impossible (because it is undefinable), and since the highest genus is “the cause of the knowledge of all other things,” it will be impossible to know anything at all (I/46/14–21). He instead proposes that definitions must be of two kinds, depending on whether the definiendum is an attribute, which exists and is known through itself, or a mode of some attribute, which must be understood through that attribute (I/46–47). This method of definition is discussed in greater detail in §§95–97 of the TIE, which I will address throughout this chapter and especially in Section 2.5.
thing’s properties “flow from” and are “demonstrable from” a thing’s essence, but he provides no indication of where Aristotle ever made such a claim (Aristotle, 37). The nearest evidence of this view I have managed to discover in Aristotle’s works is in his claim that the property of fire to be carried upwards is "not a nature nor has a nature but is by nature or according to nature" (Physics, 192b37-38). On this matter, Porphyry says only that “[s]pecies pre-subsist properties, and properties supervene on species” (18). In his commentary on this passage, Jonathan Barnes suggests that the priority of a species over its properties should be understood in a manner analogous to that of a genus over a species, namely, in terms of a causal or explanatory priority, and in particular, in terms of formal causation:

genera pre-exist their species inasmuch as they are formal causes of them. A species is presumably a formal cause of its properties: ‘Why is Socrates capable of laughing?’—‘Well, he’s a man’. That is to say, the nature of a man—and in particular, his rationality—explain how it is that men can laugh. (293)

This reading comports with Aquinas’s remarks on the priority of essences over properties: "[t]here is absolute necessity in things from the order of their essential principles to the properties [proprietates] flowing [consequentes] from their matter or form; a saw, because it is made of iron, must be hard and a man is necessarily capable of learning” (Summa Contra Gentiles II, 30, 11 | Andersen, 88). 82

Most likely, however, Spinoza became acquainted with the distinction between a thing’s essence and properties not through Aristotle, Porphyry, or Aquinas, but through the late scholastic philosophers Adrianus Heereboord—one of the few philosophers

82 See also, Carriero, “Spinoza’s Views on Necessity,” 51ff.
Spinoza cites by name, and possibly one of Spinoza’s teachers—Johannes Clauberg, and Bartholomäus Keckermann, whose logical treatises are known to have been contained in Spinoza’s personal library. In *Logica Vetus et Nova*, Clauberg provides the briefest characterization of *propria*, but agrees with the other two in following Porphyry’s division of *propria* into four types and identification of the fourth type as *propria* in the strict sense; in the characterization of *propria* as necessary consequences of a thing’s essence; and in the choice to distinguish *propria* from accidents in general. Porphyry’s types of *propria* are as follows:

1. “what is an accident of a certain species alone, even if not all (as doctoring or doing geometry of man);”
2. “what is an accident of all the species, even if not of it alone (as biped of man);”
3. “what holds of it alone and of all of it at some time (as going grey in old age of man);”
4. “where ‘alone and all and always’ coincide (as laughing of man). For even if man does not always laugh, he is said to be laughing not in that he always laughs but in that he is of such a nature as to laugh—and this holds of him always, being connatural, like neighing of horses. And these are properties in the strict sense, because they convert: if horse, neighing; and if neighing, horse.” (11–12)

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As an example of the fourth type of *proprium*, Clauberg offers “man’s power of speaking, including the faculty of the soul to understand words, gestures, movements, or any other manifest external sign”\(^85\) (83). Although this feature does not constitute the essence of man, which consists in being a rational animal, it is identified as a *proprium*, because “man cannot even conceive it to be separated from the essence of which it is a consequence”\(^86\) (81–82).

Heereboord and Keckermann offer more detailed discussions of *proprietates* and show particular interest in the questions of whether they can be separated from their subjects and whether they can be communicated to other subjects. Heereboord and Keckermann answer both of these questions with a vigorous “no” on the grounds that a thing’s essence is the *emanative cause* [*causa emanativa*] of its *propria*. Keckermann tells us that “[e]very *proprium* flows from the essential principles of its subject,”\(^87\) and because it so “flows from a certain and determinate form, that is, a specific difference,”\(^88\) it is therefore “determined to a certain species in nature”\(^89\) (184). Consequently, “[e]very *proprium* of a single species is incommunicable to other really distinct species”\(^90\) (184).

\(^{85}\) *facultas animi cogitata verbis, nutibus, gestibus aliisve signis externis manifestandi*”

\(^{86}\) *ab homine ne cognitione quidem separari potest, quippe essentiam illius necessario consequens*”

\(^{87}\) “*Omne proprium fluit ex principiis essentialibus sui subjecti.*”

\(^{88}\) “*fluit ex certa & determinata forma, atque adeò differentia specifica*”

\(^{89}\) “*est ad speciem certam in natura determinatum*”

\(^{90}\) “*Omne proprium unius speciei est incommunicabile alteri realiter diversae.*”
He maintains, moreover, that “[t]his axiom of logic is as abundantly manifest as the fact that twice four is eight”\(^9\) (184).

More specifically, however, Keckermann divides \textit{propria} into \textit{perfect} and \textit{imperfect}. The perfect \textit{proprium} most closely matches Porphyry’s fourth type: “[t]he perfect is that which is not only in only and all, but also always and perpetually”\(^9\) (185).

In describing these \textit{propria}, Keckermann explains that “[a]s quantity is with respect to the natural body, so powers emanate proximately from forms, as risibility, the power of understanding, willing, and speaking in man”\(^9\) (185). In his characterization of perfect \textit{propria} as powers, Keckermann explicitly draws the reader’s attention to the distinction between potential and actual \textit{propria}, which he attributes to Damascenus and Zabarella, and notes that the “proximate causes” of potential and actual \textit{propria} “are completely different, because potential \textit{propria} flow through the form of the subject, while actual \textit{propria} do not flow in this way”\(^9\) (186). Thus, for example, the power, ability, or potential to laugh flows from the essence of man and always inheres in him, but no particular instance of laughter has the essence of man as its proximate cause. Keckermann therefore writes that

\begin{itemize}
  \item \textit{Axioma est Logicum penè [sic: reading as “plenè”] tam manifestum naturae, ut illudque bis quatuor esse octo”} \(^9\)
  \item “Perfectum est, quod non tantum soli & omnibus sed & semper ac perpetuò inest.” \(^9\)
  \item “Ut est quantitas respectu corporis naturalis, idemque potentiae proximè emanantes à forma, ut in homine risibilitas, potentia intelligendi, volendi, loquendi.” \(^9\)
  \item “causae proximae eorum sint diversissimae, cum potentialia proximè fluant à forma subjecti, actualia non item” \(^9\)
\end{itemize}
An imperfect proprium is that which indeed inheres in only one [species] and all [of its individuals], but not always.

And such propria are actual, such as laughing, weeping, or speaking. Therefore, such propria are indeed counter-predicated with the subject, but not perfectly, and can also be separated from their subjects leaving their essences unharmed.95 (187)

Perfect propria, however, are utterly inseparable from their subjects. Keckermann writes that “[t]he subject cannot be conceived under the negation of its perfect propria without contradiction,” because “doing so would be to conceive the subject under the negation of its form or essence”96 (186). Perfect propria cannot be separated from their subjects “even for a moment of time,”97 because they “emanate proximately from the form of the subject,”98 and thus:

with the proximate cause having been posited, the effect is posited, and similarly, with the effect having been taken away, the cause is taken away.99 (186)

Scholars of Spinoza’s metaphysics will find this description of propria rather striking on account of its marked similarity to Spinoza’s definition of what “pertains to the essence of a thing”:

95 “Proprium imperfectum est, quod quidem soli inest, & omni sed non semper. Et talia propria sunt actus, ut risus, fletus, loquela. Idè talia propria reciprocatur quidem cum subjecto sed non perfectè & possunt etiam a subjectis separari saluâ eorum essentiâ.”

96 “Subjectum sine contradictione non potest concipi sub negatione proprii perfecti. Quía scilicet conciperetur subjectum sub negatione suae formae seu essentiae”

97 “vel ad momentum temporis”

98 “Quía nimimum cum proximè à forma subjecti emanent”

99 “causâ proximâ positi, effectu ponatur; itemque effectu sublato, causa tollatur”
E2d2: I say that to the essence of any thing pertains that which, being given, the thing is necessarily [NS: also] posited and which, being taken away, the thing is necessarily [NS: also] taken away; or that without which the thing can neither be nor be conceived, and which can neither be nor be conceived without the thing.\textsuperscript{100}

Adding to the likelihood that Spinoza was familiar with the use of such terminology to describe \textit{propria} is the following passage from Heereboord’s discussion of the subject in \textit{Meletemata Philosophica}:

[They] the first question, \textit{whether a proprium can be separated from its own subject?} can be understood in two ways, either as a \textit{real separation} or as a \textit{mental separation}. ... With regard to the real separation, we say that \textit{propria depend immediately on their subjects, and no power, neither natural nor supernatural, can separate them, so that neither a proprium can exist without a subject, nor can a subject exist without its proprium.} The reason for our assertion is this. Things that have emanative causes and effects cannot be separated from each other even for a moment of time, nor even by divine omnipotence; and the subject and the fourth kind of \textit{proprietas} are related as emanative causes and effects. Therefore, etc. Proof of the major premise. \textit{Those things which mutually posit and take each other away, the one having been posited, the other must be posited, and the one having been taken away, the other must be taken away} [emphasis added], cannot be separated from each other, not even by divine power, and emanative causes and effects mutually posit each other and take each other away. This proves that,
because an emanative cause causes in virtue of its own existence, what posits it as existing, also posits it as causing, but it cannot cause except having been caused. Therefore, to be actually posited as having been caused, the existence of the emanative cause is posited. Consequently, they mutually posit each other.\textsuperscript{101} (18)

It is more than a little curious that Spinoza should, on the one hand, distinguish sharply between a thing’s essence and \textit{propria}, and on the other hand, adopt a definition of “pertaining to a thing’s essence” that others have offered as a description of \textit{propria}. At least two questions emerge from this discovery: (i) Does it follow that Spinoza conceived of the relationship between a thing and its essence in terms of emanative causation? and (ii) If not, how should we understand Spinoza’s choice to use the terminology of mutual positing and sublation in this context?

The answer to the first question is almost certainly “no.” To cast a thing’s essence as the emanative cause of the thing itself would seem to require understanding it such that

\begin{quote}
\textit{Quaestio prior, An proprium à subjecto suo separari possit? dupliciter potest intelligi, aut de separatione reali, aut de mentali. De utraque distinctè est pronunciandum. Quod attinet separationem realem, dicimus propria ita immediatè dependere à suis subjectis, ut nulla virtute, nec naturali nec supernaturali, separari ab iis possint, sic ut nec proprium sine subjecto, nec subjectum sine proprio, existere queat. Ratio nostrae assertionis haec est. Quae se habent ut causa emanativa & effectum, ea non possunt, vel ad momentum temporis, à se invicem separari, ne quidem per omnipotentiam divinam: at subjectum & proprietas quarto modo habent se ut causa emanativa & effectum. Ergo, etc. Prob. Major. Quae se mutuo ponunt & tollunt, ut uno posito alterum ponatur & sublato tolatur; ea non possunt à se invicem separari, ne quidem virtute divina: at causa emanativa & effectum se mutuo ponunt & tollunt: quod probò, quia causa emanativa suà existentiä causat, ita ut, qui ponit eam existere, iam ponat eam causantem; at causare non potest nisi sit causatum; ergo actu ponitur causatum, posita existentia causae emanativae: consequenter se mutuo ponunt}.
\end{quote}

\textsuperscript{101} “Quaestio prior, An proprium à subjecto suo separari possit? dupliciter potest intelligi, aut de separatione reali, aut de mentali. De utraque distinctè est pronunciandum. Quod attinet separationem realem, dicimus propria ita immediatè dependere à suis subjectis, ut nulla virtute, nec naturali nec supernaturali, separari ab iis possint, sic ut nec proprium sine subjecto, nec subjectum sine proprio, existere queat. Ratio nostrae assertionis haec est. Quae se habent ut causa emanativa & effectum, ea non possunt, vel ad momentum temporis, à se invicem separari, ne quidem per omnipotentiam divinam: at subjectum & proprietas quarto modo habent se ut causa emanativa & effectum. Ergo, etc. Prob. Major. Quae se mutuo ponunt & tollunt, ut uno posito alterum ponatur & sublato tolatur; ea non possunt à se invicem separari, ne quidem virtute divina: at causa emanativa & effectum se mutuo ponunt & tollunt: quod probò, quia causa emanativa suà existentiä causat, ita ut, qui ponit eam existere, iam ponat eam causantem; at causare non potest nisi sit causatum; ergo actu ponitur causatum, posita existentia causae emanativae: consequenter se mutuo ponunt”
its essence is the cause of its existence, a prerogative that belongs to God alone. On the other hand, to cast the thing as the emanative cause of its essence would contradict Spinoza’s various claims that the essences of things have an existence sub species aeternitatis beyond their existence in duration.¹⁰²

In response to the second question, then, it should first be noted that, although Keckermann and Heereboord maintain that the relationship between emanative cause and effect is one of mutual positing and sublating, they do not make the reverse claim that every relationship of mutual positing and sublating is one of emanative causation. So, by adopting the terminology of mutual positing and sublating in E2d2 without also invoking a relationship of emanative causation, Spinoza does not thereby contravene the established usage of these terms. Secondly, we must take note of the fact that, in addition to the terminology of positing and sublating, Spinoza also characterizes pertaining to the essence of a thing in terms of being and being conceived through (or mediate conception). Heereboord’s remarks on the nature of mediate conception offer some potential insight into this relationship.

¹⁰² See, e.g., E2p8c, where Spinoza contrasts being comprehension of formal essences in God’s attributes with existence in duration; E1p25, where Spinoza argues that God is the cause not only of the existence of things but also of their essence; E2p45s, where Spinoza contrasts existence in duration with the “very nature of existence, which is attributed to singular things because infinitely many things follow from the eternal necessity of God’s nature”; and E5p29s, where Spinoza writes that “[w]e conceive things as actual 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, or real, we conceive under a species of eternity.”
As we saw above, Heereboord stridently denies that a subject and its *proprium* can be really separated, however, with regard to a mental separation between the two, he responds with a distinction. He claims that mental separations can be divided into those that are *simple* (*simplex* or *abstractio praecisionis*) and those that are *composite* (*composita* or *abstractio negationis*) (19). According to Heereboord:

[i]n the intellect, a simple separation or abstraction is an act of the mind by which one thing is apprehended from those things that have been conjoined, while the remainder is not apprehended. In the intellect, a composite separation or abstraction is that act of the mind by which two or many things are apprehended from the things conjoined, such that the one negates the other, and one is separated and divided from the other (for a negation is a division, while affirmation is a conjunction). A simple mental separation is liable to no falsehood, but a composite one is spurious and deceptive whenever it separates that which is conjoined. If someone conceives Peter, who is a father, without conceiving paternity, he separates paternity from Peter simply, and commits no falsehood. But if someone were to conceive Peter, who is a father, and negate paternity of him, then he separates paternity from Peter by a composite separation and commits a falsehood.\(^{103}\) (19)

\(^{103}\) “*cum intellectus, ex iis, quae conjuncta sunt, unum apprehendit, relictis caeteris, id est, non apprehensis, vocatur haec mentis actio, separatio vel abstractio simplex: cum intellectus, ex iis, quae conjuncta sunt, duo vel plura apprehendit, alterumque de altero negat, unum ab alio separat ac dividit, (negatio enim divisio est, ut affirmatio conjunctio) ista mentis actio dicitur separatio vel abstractio composita: separatio mentis simplex nulli falsitati obnoxia est, composita falsa est ac fallit, quando separat ea quae conjuncta sunt: si quis Petrum, quid pater est, concipiat, non conceptâ paternitate, paternitatem à Petro separat"
He argues, therefore, that a subject and its *proprium* cannot be separated by a composite mental separation, since doing so would falsely negate the *proprium* of the subject, which belongs to it necessarily. However, a subject and its *proprium* can be separated by a simple mental separation, though *only in one direction*. That is, by means of this separation, a subject *can* be conceived without its *propria*, but a *proprium* cannot be conceived without its subject (19). Heereboord justifies this conclusion with the following reasoning:

[w]hat is prior in nature can be conceived without the actual concept of what is posterior, for the posterior is not included in the concept of the prior, and so the posterior can be separated by the intellect, because the intellect can conceive the prior without actually conceiving the posterior. But the subject is prior in nature, because it is the cause; the *proprium* is posterior in nature, because it is the effect. Therefore, the subject can be understood without having understood the *proprietas*. However, the *proprietas* cannot be understood or conceived without having understood or conceived its subject, with which it is counter-predicated, and the reason is that the subject is contained in the definition of the *proprium*, and thus the subject belongs to the essence of the *proprium*. It would therefore be absurd if the *proprium* could be conceived without having conceived the subject. And so, risibility cannot be conceived without having conceived man, quantity cannot be understood without having conceived matter, snubness [*sinitas*] cannot

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*simpliciter, nec falsum committit: at si quis Petrum, qui pater est, concipiat, negata paternitate de eo, is eam separat à Petro separatione composita ac falsum committit.***
be conceived without having conceived the nose. Moreover, man, body, and nose can be understood without having understood risibility, quantity, or snubness. In this there is no contradiction. But it is contradictory to conceive snubness without having conceived the nose, or to conceive any *proprium* without having conceived the subject. For, as the nose enters into *ingreditur* snubness, so every subject enters into the definition and essence of its *proprium*, for they are said of themselves [*dicuntur de se*] reciprocally [*invicem*] in the second way of being said *per se*, see Aristotle I. 1. Poster. c. 4. t. 31. But it is a contradiction for a defined thing to be conceived without having conceived its definition and its parts, or else one could conceive man without having conceived animality or rationality—that would be to conceive man without conceiving man. Therefore, if a subject belongs to the definition of a *proprium*, it is impossible to conceive the *proprium* without having conceived the subject—that would be to conceive a *proprium* as not a *proprium*.  

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104 Note: other sources, such as Porphyry, understand the snubness of a nose (in this case Socrates’s nose) as an *inseparable accident*, rather than as a *proprium* (*Isagoge*, 9).  

105 “Quod prius est natura, potest concipi sine actuali conceptu posterioris, cum in illius conceptu posterius non includatur, itaque posterius potest intellectu separari à priori, quia potest intellectus cogitare prius, non cogitando actu de posteriori: at subjectum natura prius est, quia causa: proprium posterius, quia effectum. Ergò potest subjectum intelligi non intellecta propriitate: At proprietas intelligi aut concipi nequit, non intellecto aut non concepto subjecto sc. suo, cum quo reciprocatur, & ratio est, quia subjectum continetur in definitione proprii, ac proinde subjectum est de essentiâ proprii, si ergo proprium concipi possit non concepto subjecto, res concipi poterit, non conceptâ essentiâ rei, quod est absurdum: itaque risibile concipi nequit nisi intellectâ materiâ, sinitas cogitari nequit nisi cogitato naso: at homo, corpus, nasus, intelligi possunt, non intellectis, risbili, quantitate, sinitate: híc enim nulla est contradictio; at
Thus, while the relationship of positing and sublating is between the subject and *proprium* is mutual or symmetric, the relationship of mediate conception and understanding is not. Sublating the subject also sublates the *proprium*, and the *proprium* cannot be conceived or understood without conceiving or understanding the subject. Because the subject is the cause of the *proprium*, it is contained in its definition and is part of its essence. But on the other hand, even though the *proprium* belongs to the subject necessarily, and even though sublating the *proprium* also sublates the subject, the subject *can* be understood and conceived without understanding or conceiving the *proprium*.

Following this reading, Spinoza’s second formulation of E2d2 goes further than the first. Mutual positing and sublating is insensitive to conceptual priority as established by causal priority. While a subject is prior in nature to its *propria*, there is no such relation of priority between a thing and what pertains to its essence. The conceptual equivalence that holds between a thing and its essence might be understood in the following way: to conceive a thing and conceive its essence are the same, and in fact, a thing and its essence are one and the same thing, now conceived under duration, now conceived under a species of eternity. This interpretation is supported by Spinoza’s

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\text{contradictio est similitatem cogitari non cogitato naso, aut quodlibet proprium concipere non concepto subjecto: nam ut nasus similitatis, ita quodlibet subjectum proprii sui definitionem & essentiam ingreditur; nam dicuntur de se invicem in secundo modo dicendi per se, teste vel ipso Aristotele I. 1. Poster. c. 4. t. 31. At contradictio est, rem definitam concipere non conceptâ definitione, eiusque partibus, v.c. hominem concipere non concepto animali aut rationali: id enim est concipere hominem non hominem. Ergo si subjectum sit de definitione proprii, impossibile etiam est concipere proprium non concepto subjecto: esset enim concipere porprium non proprium."
\]
tendency to refer to the conception of things under eternity not as the conception of a particular subset of existing things, but as the conception of existing things in a particular way. This tendency is especially notable in E5p29s, where Spinoza writes:

[w]e conceive things as actual 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, or real, we conceive under a species of eternity.\textsuperscript{106}

Returning to the subject of \textit{propria}, however, one might question whether Spinoza truly adopts the conceptual framework of emanative causation, since the term does not appear throughout the \textit{Ethics} or, indeed, most of his work.\textsuperscript{107} He does occasionally describe effects as “flowing” from their causes in manner that calls to mind the emanative cause as discussed by Heereboord and Keckermann:

[b]ut I think I have shown clearly enough (see E1p16) that from God’s supreme power, or infinite nature, infinitely many things in infinitely many modes, i.e., all things, have necessarily flowed [\textit{necessario effluxisse}], 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. (E1p17s | II/62/15–20)

\textsuperscript{106} The interpretation presented here will be defended further in Section 4.4.2 of Chapter 4.

\textsuperscript{107} Spinoza does apply the term to God’s causality in \textit{KV} I.3 | I/35/15–16, Ep. 75 | IV/312a/8–11, and several times in Ep. 43 (A).
There is evidence to suggest, however, that Spinoza treats the relationship between a thing and its *propria* in a manner consistent with how Heereboord describes emanative causation. An emanative cause, according to Heereboord, is an efficient cause that it produces its effect immediately, without any intervening power or causality, so that its very existence is not distinct from its causality and its causality cannot be impeded so long as it exists:

[a]n emanative cause is one which, by its existence, brings it about that the effect immediately emanates from it. An active cause is one by which the effect is produced through a mediating action. Between an emanative cause and its effect no mediate causality intervenes; in such a way that there are only two, the cause and the caused: with an active cause there are three, the cause, causality, and the caused, and they are distinct.108 (226)

On account of the immediacy by which the effect follows from the emanative cause, Heereboord also refers to it as the “absolutely proximate cause” [*causa absolute proxima*] (262). In this sense, fire is the emanative, absolutely proximate cause of its own internal heat, but it is a proximate cause in its own kind [*causa proxima in suo genere*] of the external heat that it produces in other bodies (262). Between a proximate cause in its own kind and its effect, a mediate power or causality of a different type [*alterius ordinis*] intercedes, acting as an instrumental cause [*causa instrumentalis*]: fire produces external

108 “Emanativa est, quae sua existentia causat, à qua effectum immediate emanat. Activa est, à qua effectum producitur mediante actione. Inter causam emanativam & effectum nulla intercedit media causalitas; ita ut huc tantum duo sint, causa, causatum: in activa tria sunt, causa, casualitas, causatum, & haec inter sese distincta.”
heat through a “mediate calefaction” [*media calefactio*] and the father produces a son through semen (262).\(^{109}\)

Spinoza also portrays the relationship between a subject and its *propria* as one of efficient causation. In E1p16dem, Spinoza argues that infinitely many things follow in infinitely many modes from the necessity of the divine nature on the basis that

the intellect infers from a given definition of any thing a number of *proprietates* that really do follow necessarily from it (i.e. from the very essence of the thing); and that it infers more *proprietates* the more the definition of the thing expresses reality.

From this proposition, Spinoza infers, without any argument, that “God is the efficient cause of all things which can fall under an infinite intellect” (E1p16c1). If we suppose that Spinoza’s audience was familiar with the notion that a subject and its *proprietates* are related as emanative cause and effect, as Keckermann and Heereboord maintain, and that Spinoza similarly took this for granted, his choice to omit supporting arguments for E1p16c1 is more understandable. Spinoza also seems to implicitly assume a causal relationship in his discussions of definitions and *proprietates* in Ep. 60 and the *TIE*:

> [t]o know which of the many ideas of a thing is sufficient for deducing all its *proprietates*, I pay attention to *one thing only* [emphasis added]: that the idea or definition of the thing expresses the efficient cause (Ep 60 | IV/270/21–23).

\(^{109}\) In this case, the fire and father are the principal causes in relation to the noted instrumental causes. A remote cause is such that a mediating causality of the same type intercedes, so, e.g., the grandfather is the remote cause of the grandson, because the grandson is produced by means of the father (262).
If the thing is created, the definition, as we have said, will have to include the proximate cause... We require a concept, or definition, of the thing such that when it is considered alone, without any others conjoined [emphasis added], all the thing’s proprietates can be deduced from it. (TIE §96 | II/35/12–20)

I suggest that, in accordance with Heereboord’s discussion of essence and proprietates, the reason a definition must contain the efficient cause in order to make the proprietates deducible is that the essence of the thing is, in fact, the efficient, proximate cause of the proprietates. Moreover, Spinoza’s claim in both passages, which I have emphasized above, that the inclusion of the cause is, by itself, sufficient for the deduction of the proprietates, is consistent with Heereboord’s description of an emanative cause as an absolutely proximate cause, acting strictly in virtue of its existence and requiring no mediating cause or causality. A more thorough understanding of Spinoza’s distinction between essence and proprietates requires, however, a closer examination of how he actually employs the distinction in his metaphysical work.

Section 2.3.2: The Properties of God

While it is clear that Spinoza is committed to the distinction between essence and proprietates, it is also clear that committing oneself to a distinction is one thing and reasoning in a manner consistent with that distinction is another. Given the importance of this distinction for Spinoza’s methodology and metaphysics, a review of the manner in which Spinoza actually employs it helps both to clarify its significance in Spinoza’s philosophy and to provide a deeper, more detailed understanding of its systematic function. Examples of proprietates discussed by Spinoza tend to fall within three general
categories: those of God, those of human beings and their affects, and those of geometrical figures. In the \textit{KV}, Spinoza identifies the following features of God as \textit{propria}: that he is the cause of all things,\textsuperscript{110} his providence\textsuperscript{111} (i.e., that all things, both in the whole of nature and in particular things, strive to persevere in their being), his predestination\textsuperscript{112} (i.e., that nothing in nature is contingent), that he exists of himself, that he is the greatest good, that he is eternal, and that he is immutable.\textsuperscript{113} Spinoza appears to maintain a similar view in the \textit{Ethics}. In the appendix to Book One, he writes,

\begin{quote}
[w]ith these [demonstrations] I have explained God’s nature and properties \textit{[proprietates]}: that he exists necessarily; that he is unique; that he is and acts from the necessity alone of his nature; that (and how) he is the free cause of all things; that all things are in God and so depend on him that without him they can neither be nor be conceived; and finally, that all things have been predetermined by God, not from freedom of the will \textit{or} absolute good pleasure, but from God’s absolute nature, \textit{or} infinite power. (II/77/21–27)
\end{quote}

Since none of the listed features are included in the definition of God in E1d6, we must conclude that these features belong to God’s properties, rather than his nature. In addition, Spinoza claims in Letter 83, written near the end of his life, that “[s]imply from the fact that I define God as an Entity to whose essence existence belongs, I infer several

\begin{footnotes}
\footnotetext[0]{110} \textit{KV}, Part 1, Ch. 3 | I/35–36. This feature is broken down into eight parts, or manners in which God is a cause, including, significantly, that he is the immanent cause of all things and that he is a free cause.
\footnotetext[0]{111} \textit{KV}, Part 1, Ch. 5 | I/40/1–25
\footnotetext[0]{112} \textit{KV}, Part 1, Ch. 6 | I/40/25–I/40/35
\footnotetext[0]{113} \textit{KV}, Part 1, Ch. 7 | I/45/11–17. The first three features named in this list receive fairly extensive discussion in the passages cited, while the last four are merely mentioned.
\end{footnotes}
properties \textit{[proprietates]} of him, such as that he necessarily exists, that he is one alone, immutable, infinite, etc. I could adduce several examples of this kind, which I omit for the present” \cite[IV/335]{s958}. These lists contain some interesting variations which cannot be discussed here, but by and large, it is clear that they are quite similar. One of the benefits of these examples is that it is relatively clear what Spinoza meant by claiming that they follow from God’s essence. If we wish to know \textit{how} these properties supposedly follow, we need only to refer to relevant demonstrations.

It seems, however, that each of these lists is incomplete in a puzzling way. Yitzhak Melamed has provided decisive arguments demonstrating that Spinoza thought of modes as inhering in substance, and he also provides powerful reasons for believing that modes are also predicated of substance.\footnote{See, “Spinoza’s Metaphysics of Substance.” Also, Carriero’s “Mode and Substance,” Jarrett’s “Substance and Mode,” and Garrett’s “Spinoza’s \textit{Conatus} Argument,” pp. 156–157n24.} From here, he argues that if modes also follow from the essence of substance, they satisfy the requirements of being properties in the technical sense of \textit{propria}, and indeed, as he points out, Spinoza seems to indicate in E1p16dem that modes follow from God’s essence just as required.\footnote{See, Melamed’s “Spinoza’s Metaphysics of Substance,” §6.} But curiously, as we have seen above, whenever Spinoza writes about the properties that follow necessarily from God’s essence, he makes no mention of the modes with which we are familiar, such as minds or bodies, nor does he mention any of the infinite modes that he has introduced, such as motion and rest or the infinite intellect.

Furthermore, the properties he supplies do not seem to fit so comfortably into the same category as modes. Although the modes familiar to students of Spinoza’s system
can be thought of as properties inhering in a substance, they can also be thought of as individuals in their own right, even if at least one is infinite (e.g., E2p13sphysdigL7s). They have essences (E1p25) and causal powers (E1p22 and E1p28dem), and even strive to persevere in their existence (E3p6). The properties demonstrated of God in Book One of the *Ethics*, however, seem irreducibly abstract in contrast. For example, it is a property of God that he is the immanent cause of all things, but must this property itself be yet another mode alongside all the others whose relationship to God it describes? This suggestion seems to open the door to an unnecessary proliferation of modes corresponding to every predicate that can be truly ascribed to God. Suppose, for the sake of the example, that substance A has caused itself to have exactly 3 modes. In order for the proposition, “substance A has three modes,” to be true, it is not necessary that there be a fourth mode to which the predicate “has three modes” corresponds, rather, the three modes already had by substance A suffice for the truth of this proposition. Moreover, appending this fourth mode to the substance could add nothing to it is that is not already contained in the three modes it already possesses, because that itself is supposed to be precisely the content of this fourth mode. In addition, requiring that the predicate “has exactly 3 modes” itself correspond to a mode of the substance would have the paradoxical result that the predicate could, in principle, never be applied to a substance.\(^{116}\)

Philosophically, then, it seems to make little sense to treat the property of

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\(^{116}\) We are inclined to attribute this property to a substance when it can already be said to have 3 modes besides the mode corresponding to predicate “has exactly three modes,” and in such a case, the substance would then have at least 4 modes, of course. Could this difficulty be avoided by claiming that the predicate, “has exactly 3 modes,” can only be attributed to a substance when it has only 2 modes besides the one corresponding to the predicate “has exactly 3 modes”? I doubt it, since, in any such scenario, we can easily
being the immanent cause of all things as a mode.\textsuperscript{117} Furthermore, to my knowledge, at least, there is no textual evidence to suggest that Spinoza did so. If such properties are not modes, however, it is unclear where or how they fit into Spinoza’s system, since there is no third category, outside of substance and mode, for them to occupy.\textsuperscript{118}

It would be interesting to explore possible solutions to these problems on Spinoza’s behalf. Some of these properties might be analyzable into other more “basic” properties that can more naturally be construed as modes, for example. On the other hand, thinking of modes in terms of individual bodies and minds has lead us to believe that modes are reliably concrete in nature, and perhaps this category is somewhat broader that we have assumed, including such properties as being the immanent cause of all things or being unique. However, it appears that these are issues which Spinoza himself never considered, or if he did, we do not have any writings conveying his thoughts. Any attempt to address these issues on Spinoza’s behalf will necessarily be speculative in

\textsuperscript{117} The other properties mentioned seem to pose their own unique challenges. For example, it is puzzling that Spinoza should consider God’s necessary existence to be a \textit{proprietas}, since he argues that God’s existence is identical with his essence (E1p20). Given the otherwise sharp distinction between essence and \textit{proprietaes}, it therefore seems inappropriate to consider God’s necessary existence to be a mere property. It is notable, however, that Gueroult identifies God’s self-causation as among the properties of God (\textit{Dieu}, 223). Also, to construe God’s indivisibility, or unity, as a mode, with its own form of individuality and causal powers, would seem to press Spinoza toward certain Neoplatonic views for which there is little textual support.

\textsuperscript{118} See, e.g. E1d3, E1d5, and E1p4dem.
nature, and since their resolution is not essential to our present discussion, I will set them aside to continue our discussion of Spinoza’s views on *proprietaes*.

Section 2.3.3: The Properties of Human Beings and Their Affects

I proceed now to the discussion of the *proprietaes* of human beings and their affects. In much the same way that Spinoza concluded Book One of the *Ethics*, Spinoza writes in the Appendix to Book II, “[i]n [this Book] I think that I have explained the nature and properties [*proprietaes*] of the human Mind in sufficient detail, and as clearly as the difficulty of the subject allows” (II/136/23–25). In this passage, unfortunately, Spinoza does not provide specific examples of properties of the human mind that he believes himself to have demonstrated in Book II.\(^{119}\) However, Spinoza does explicitly cite several examples of properties of the affects and at least one example of a property of human nature in the *Ethics*. I will begin by discussing the properties of the affects.

In the Preface to Book III of the *Ethics*, Spinoza points out the uniqueness of his approach to studying the affects. Unlike many of his predecessors, who have treated men’s affects and actions as the product of their own free choices, Spinoza endeavors to treat them as he would any other natural object of study. Since the laws of nature are “always and everywhere the same,” and human beings and their affects are subject to them like all other singular things, the nature of the affects must be understood through those laws (E3pref | II/138/11–17). The affects, therefore, “acknowledge certain causes,

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\(^{119}\) Many propositions suggest themselves as candidates for being properties of the human mind, such as its adequate knowledge of God’s eternal and infinite essence (E2p47) and the fact that it does not involve adequate knowledge of the parts composing the human body (E2p24).
through which they are understood, and have certain properties [*proprietates*], as worthy of our knowledge as the properties of any other thing” (E3pref | II/138/21–23). Spinoza indicates that it is for this reason that he makes his exposition of the affects in the geometrical style (E3pref | II/138/8–11), treating them in the same manner as lines, planes, and bodies (E3pref | II/138/24–27). It seems likely that one significant reason for Spinoza’s preference of the geometrical style is that it provides an expository method that allows for the clear distinction between a thing’s essence and properties by means of definitions and propositions. This suggestion is supported by Spinoza’s claim in the Appendix of Book I that mathematics has helped pave the way of progress in human knowledge by “[showing] men another standard of truth” insofar as it is concerned with “the essences and properties [*proprietates*] of figures,” rather than ends in nature (E1app | II/79/30–35). The distinction between *essentia* and *proprietates* is at the core of Spinoza’s methodology, and it is subtly at work throughout the *Ethics*.

One place where this tendency is visible is in E4p73s, where Spinoza discusses various properties of strength of character. In E4p73, Spinoza argues that “[a] man who is guided by reason is more free in a state, where he lives according to a common decision, than in solitude, where he obeys only himself.” In the scholium to this proposition, he continues,

[t]hese and similar things which we have shown concerning the true freedom of man are related to Strength of Character [*Fortitudinem*], i.e. (by IIIP59S), to Tenacity [*Animositatem*] and Nobility [*Generositatem*]. I do not consider it worthwhile to demonstrate separately here all the properties [*proprietates*] of Strength of Character, much less that a man strong in character hates no one, is
angry with no one, envies no one, is indignant with no one, scorns no one, and is not at all proud. (II/265/10–17)

This passage suggests that Spinoza takes the propositions concerning strength of character, i.e., the affect such that all of a man’s actions follow from the dictate of reason, to present various properties of that affect. Further evidence that Spinoza believes that the propositions concerning the affects demonstrate properties of those affects, in the technical sense distinguished from the essence of a thing, is to be found in E4p57s. In this scholium, Spinoza discusses several facts concerning the affects of pride and despondency, and he remarks that,

[t]hese things follow from this affect [Despondency] as necessarily as it follows from the nature of a triangle that its three angles are equal to two right angles… I wished to remind my readers of this here, in passing, in case anyone thought my purpose was only to tell about men’s vices and their absurd deeds, and not to demonstrate the nature and properties [proprietates] of things. For as I said in the Preface of Part III, I consider men’s affects and properties just like other natural things. (II/252/27–II/253/2)

This passage clearly demonstrates that Spinoza took the features demonstrated of the affects in the Ethics to be properties in the technical sense. Spinoza frequently used geometrical figures as examples to exhibit the distinction between essence and properties and the necessity of the manner in which the properties follow from the essence.120

120 Spinoza states clearly in Letter 56 that he considers the fact that the three angles of a triangle are equal to two right angles to be a property of the triangle: “[w]hen I was studying Euclid’s Elements, I understood early on that the three angles of a triangle are equal to two right angles, and I clearly perceived this property [proprietatem] of a triangle although I was ignorant of many others” (S905, IV/261).
Spinoza’s use of the phrase, “nature and properties [naturam et proprietates]” also indicates that the distinction between essence and properties is at play. Finally, his insistence that his approach to the affects is the same as that which should be taken toward other natural things strongly suggests that he believes that the distinction between essence and properties applies equally well to all natural things, and thus for Spinoza, to things in general.

Before briefly discussing the properties of human nature, there is a particularly instructive case of a property of an affect to note. Spinoza puts the distinction between a thing’s essence and properties to work in his definition of love. In E3defaff6, Spinoza defines love as “[j]oy, accompanied by the idea of an external cause.” He contrasts this definition with the purportedly common alternative that love is “a will of the lover to join himself to the thing loved,” and claims that this alternative “expresses a property [proprietatem] of love, not its essence” (II/192/23–25). Spinoza never explains why he thinks that his definition expresses the essence of love while the other only expresses a property, but it is not difficult to infer what his reasoning might have been.

The basic idea, of course, is that the property follows from the essence, but not vice versa. Suppose that A loves B. By E3deffaff6, A is affected with Joy and has an idea of B as the external cause of that Joy. In E2p17 and E3p14, Spinoza deduces the association of ideas, so that, having been simultaneously affected by Joy and the idea of B as an external cause, A will anticipate experiencing Joy in the presence of B.

121 It has been suggested that Spinoza has Descartes, in particular, in mind. See Descartes’s Passions of the Soul II §80 (CSM I 356 | AT 387). Spinoza himself seems to have at one time accepted a definition which is nearly a combination of these two alternatives in KV, Part 2, Ch. 5 | 1/62/24–26.
According to E3p28, “[w]e strive to further the occurrence of whatever we imagine will lead to Joy,” so A will strive to be in the presence of B. But will is nothing more than our striving insofar as it is related to the mind (E3p9s). Therefore, since this striving is accompanied with the idea of B as the cause of A’s joy, it follows that A wills to be united with B.\footnote{This argument is jeopardized by the fact that Spinoza offers an \textit{entirely different} explanation of willing in E3defaff6exp than he does in E3p9s. He writes that “I do not understand by will a consent, or a deliberation of the mind, \textit{or} free decision (for we have demonstrated that this is a fiction in E2p48). Nor do I understand a Desire of joining oneself to the thing loved when it is absent or continuing when it is present. For love can be conceived without either of these desires. Rather, by will [\textit{per voluntatem}] I understand a Satisfaction [\textit{Acquiescentiam}] in the lover on account of the presence of the thing loved, by which the lover’s Joy is strengthened or at least encouraged” (II/192/29–II/193/4). This is a strange definition of will, indeed! Like its English cognate, \textit{voluntas} is typically understood as a “state of wanting to do something,” which naturally contrasts with a state of satisfaction (\textit{Oxford Latin Dictionary, voluntas}, p. 2101). Moreover, given the consequences of E3p28, as just elaborated in the argument above, it is rather unclear why Spinoza believes that love can be conceived without the desire to join oneself with the object loved. Spinoza never offers any hint of what precisely he means by “Satisfaction.” The most sensible choice for a definition of satisfaction within Spinoza’s system of affects is perhaps something like the following: the joy that one experiences upon obtaining a desired object or state, or successfully performing a desired action. This definition of satisfaction is only narrowly different from Spinoza’s definition of love itself—to understand it as a \textit{proprietas} of love would imply that the joy caused by obtaining the object is somehow distinct from the joy caused by the object itself, which is not beyond the realm of plausibility. Regardless of how satisfaction is defined, however, Spinoza’s definition of willing here would imply that I do not will to be united with anything except insofar as I already \textit{am} united with it. After all, one cannot experience “[s]atisfaction \ldots on account of the presence of the thing loved” if it is not present. Therefore, according to the definition of willing in E3defaff6exp, if my wife is on another continent, for example, I cannot possibly will to be reunited with her, regardless of how much I love her! Furthermore, since an object’s properties}
It might be objected, however, that the alleged essence of love follows just as well from the alleged property. Suppose that A wills to be united with B. Then A strives to be united with B (E3p9s), and in particular, A strives to persevere in his being by striving to be united with B (E4p25). Since each thing strives only to persevere in its being (E3p6, E4p25), it follows that being united with B in some way increases or aids A’s power of acting, i.e., it causes A to pass from a lesser to a greater perfection (E3p11s), and to experience joy (E3defaff2). Although A is not yet united with B, will is striving related to the mind, and so A must have an image, or mental representation, of what he is striving after. But according to Spinoza, “[m]an is affected with the same Joy or Sadness from the image of a past or future thing as from the image of a present thing” (E3p18). So, A’s joy at being united with B in the future is no different than as if A were united with B in the present. Therefore, A must be affected with Joy with the idea of B as the external cause, i.e., A loves B.

The lesson to be learned from this objection is not that Spinoza has failed in his assessment of which definition expresses the essence of love and which merely expresses a property, but rather that we must pay close attention to the sense in which a property “follows” from the essence of the thing. It cannot merely be a relationship of logical...
entailment. Recall that, earlier, we learned from Keckermann and Heereboord that essences and \textit{proprietates} mutually posit and sublate one another, and nevertheless, they are subject to an asymmetric causal and conceptual priority-ordering. A proper causal deduction of a \textit{proprietas} from an essence will \textit{explain why} the \textit{proprietas} belongs to any such subject, but any deduction of an essence from a \textit{proprietas} can only, at best, \textit{show that} the essence must be found wherever the \textit{proprietas} is found.

We can observe this fact in the two demonstrations above. The first demonstration helps us understand \textit{why} A wills to be united with B. The joy that A has experienced in his previous encounters with B is, indeed, \textit{the efficient cause} of his striving to be united with B. On the other hand, while the second demonstration might convince us that A must love B, since A wills to be united with B, it seems clear that the willing \textit{presupposes}, rather than \textit{produces} the love. We infer from the fact that A wills to be united with B that A has a mental image of B, but we have no explanation for that mental image itself. How did A come to have this particular image of B? If we suppose that A acquired this image through previous experience with B, we are left with the conclusion that A previously experienced joy together with the idea of B as the external cause, and that the love again explains the willing, rather than vice versa. But if the image was not acquired through experiences of B, then we may well worry that, as it does in fact sometimes happen, A does not love B at all, since his image of B is more fantasy than reality. A’s willing alone is insufficient to explain his love. To explain this relationship, we must get, quite literally, to the essence of the matter.

Finally, Spinoza makes explicit mention of one property of human nature in the \textit{Ethics}. He writes in E3p32s that,
[w]e see, therefore, that for the most part human nature is so constituted that men pity the unfortunate and envy the fortunate, and (by P32) [envy them] with greater hate the more they love the thing they imagine the other to possess. We see, then, that from the same property [proprietate] of human nature from which it follows that men are compassionate, it also follows that the same men are envious and ambitious. (II/165/10–16)

The property that Spinoza is apparently referring to is the imitation of the affects (E3p27). This property causes us both to be saddened by the suffering of others and to desire what others desire, provided that they are “like” [similem] us and that we have no prior affects toward them (in particular, provided that we do not hate them) (E3p27s).

This proposition is sufficiently deep within the thicket of the *Ethics* that it is difficult to be sure whether it has truly been deduced from the essence of the human mind alone. In E2p10s, Spinoza tells us that the essence of man is constituted by certain modes of God, and in E2p11 and E2p13 that the human mind is constituted by the idea of the human body. Spinoza infers from this construal of the human mind that our ideas of external objects, including people, reflect the interaction between our body and those external bodies, so that we do not perceive them directly, but only insofar as they affect us (E2pp16–17). The key to Spinoza’s demonstration of E2p27, however, is his assumption that “like affects like”:

[s]o, if the nature of the external body is like the nature of our Body, then the idea of the external body we imagine will involve an affection of our body like the affection of the external body. Consequently, if we imagine someone like us to be affected with some affect, this imagination will express an affection of our Body
like this affect. And so, from the fact that we imagine a thing like us to be affected with an affect, we are affected with a like affect. (II/160/13–20)

At first, this reasoning seems somewhat dubious. Spinoza needs to show that I can acquire an affect by imagining someone similar with such an affect, but he makes the fatal error of assuming that I already have this affect when he says that my idea of the external body “will involve an affection of our body like the affection of the external body.” Furthermore, why should my body come to be affected in a particular way in virtue of my imagining a similar body so affected? To compare the affects to a contagious disease would fail to explain the underlying mechanism.

Perhaps Spinoza’s best response would be to appeal to the confused manner in which our minds represent external objects. My ideas of external bodies are, in fact, ideas of my own body insofar as it is affected by those external bodies, and so “the ideas we have of external bodies indicate the condition of our own bodies more than the nature of the external bodies” (E2p16c2).\textsuperscript{123} So, especially when the external body is similar to my own, my mind can only confusedly distinguish between the external body and mine. Consequently, when an idea in my mind represents an external body affected with an affect corresponding to, e.g., sadness, it also confusedly represents my own body having such an affect. Similarity thus plays a role through the mechanism of mental confusion, which itself is a product of the very nature of the human mind.\textsuperscript{124}

\textsuperscript{123} For additional discussion of the nature of this confusion see Sections 1.4.2 and 1.5.3.

\textsuperscript{124} But can imagining oneself as being affected in a particular way cause one to become actually so affected? When it comes to the affects of the human mind, Spinoza does not seem to acknowledge such a distinction. We must avoid the mistake of thinking of Spinoza’s “imaginatio” primarily in terms of feigning or pretending. When I imagine myself to be affected with sadness, I feel sad and I believe myself to be sad.
Like the properties of God discussed above, this property of the imitation of the affects demonstrates the breadth of ascriptions that Spinoza was willing to file under the term “proprietas.” Many philosophers today would be much more comfortable calling this feature a disposition, rather than a straight-forward property. This is not surprising, however, when one considers that many traditional examples of proprietates, such as the ability to laugh or learn grammar, are themselves seemingly dispositional in nature. Thus, as we have seen, Keckermann distinguishes between perfect/potential propria, e.g., the ability to laugh, which follow immediately from the essence of a thing, and imperfect/actual propria, e.g., actually laughing, which require an external cause in addition. It is difficult to say whether Spinoza would have accepted such a distinction on account of his general antipathy for the distinction between the potential and the actual. Nevertheless, it cannot be denied that much of the Ethics concerns how human beings are, in virtue of their nature, disposed to behave under certain conditions. Given the examples of proprietates we have observed in this inquiry, it appears possible that Spinoza may have considered the majority of propositions of the Ethics to represent properties of the objects concerned, whether they be God or the human mind.

Section 2.4: Condition 4: Definitions, Causes, and Geometrical Figures

Spinoza’s use of geometrical definitions as examples is significant for several reasons. As already suggested, these examples have the potential to further illuminate

\footnote{Within the realm of human psychology, it is not unreasonable to say that someone who knows the meaning of the term “sad” cannot be mistaken about whether she is, in fact, sad.}

\footnote{See Choi, “Dispositions” in The Stanford Encyclopedia of Philosophy.}
how he understood the essence-\textit{proprietates} relation. But these examples also provide a natural transition into the discussion of the fourth requirement for satisfactory definitions, namely, that the definition include or express the cause of the definiendum, and the impact that other thinkers may have had upon Spinoza in this regard. Indeed, several scholars have argued that some of Spinoza’s most fundamental methodological convictions were deeply influenced by discussions of the methodology of geometry.\footnote{126} Spinoza’s most frequently used examples are perhaps the property of a triangle that its three angles are equal to two right angles\footnote{127} and the property of a circle that all lines drawn from the center to the circumference are equal in length.\footnote{128} The example of the circle is particularly relevant, as it appears within the context of two of Spinoza’s discussions of the nature of definitions. In the \textit{TIE}, Spinoza writes that

\begin{quote}
[i]f a circle, for example, is defined as a figured in which the lines drawn from the center to the circumference are equal, no one fails to see that such a definition
\end{quote}

\footnote{126} Perhaps most notably, Gueroult has argued that, for Spinoza, “method in philosophy can only be the adaptation of the genetic method of geometry to the cognition of physically real beings” \cite{Gueroult, 478–487}. More recently, Viljanen has argued that, “Spinoza consistently stresses … that the geometry-derived model applies, precisely the same way it does to corporeal things, to \textit{all} things …” \cite{Spinoza’s Geometry of Power, 16–21}.

\footnote{127} He explicitly designates this feature as a property, for example in Letter 56 and in the \textit{TTP}, ch. 4 (III/63). Spinoza, of course, was not aware that this proposition is logically equivalent to Euclid’s controversial parallel postulate, as this eventually emerged from the work of Adrien-Marie Legendre (1752–1833) \cite{Euclidean and Non-Euclidean Geometries, pp. 21–23 & 157–159}.

\footnote{128} This property is discussed, for example, in \textit{TIE} §95, and Letter 60.
does not at all explain the essence of the circle, but only a property of it (§95 | II/35/1–4).

On the other hand, Spinoza continues, if a circle is defined as “a figure that is described by any line of which one end is fixed and the other movable,” such a definition “includes the proximate cause [comprehendere causam proximam],” and from it, it would be possible to deduce all the properties of the circle, including the fact that all lines drawn from the center to the circumference are equal (§96 | II/35/10–20). In Letter 60, written in 1675 (about two years before his death), Spinoza again discusses these two alternative definitions and endorses the constructive one on the grounds that, if it is to be possible to deduce all the properties from the definition, it must “express the efficient cause [causam efficientem exprimat]” (IV/271/1).

The discussion of this example leads us naturally to the fourth requirement that Spinoza places on definitions that they must include (or express) the proximate (or efficient) cause. As noted above, the fact that Spinoza presents this requirement by means of a geometrical example is considered by some scholars to be an indication of the sources of its inspiration. Gueroult argues rather plausibly that the requirement that definitions be genetic, or include the cause, was inherited directly from Hobbes and his work on geometry, particularly his Examinatio et Emendatio Mathematicae Hodiernae (one of Hobbes’s treatises against the mathematical methods of John Wallis). Indeed,

129 “[S]i l’on se réfère aux ouvrages de Hobbes sur la réforme de la géométrie euclidienne, en particulier à son Examinatio et emendatio mathematicae hodiernae, publiée en 1660, un an avant la rédaction du De intellectus emendatione, il paraît évident que la source de la genèse spinoziste est là” (l’Âme, 482).
Hobbes’s views on genetic definitions bear a striking similarity to those of Spinoza. He emphasizes in the *Examinatio* that proper definitions must be genetic in nature:

A: Are definitions not the principles of the sciences?
B: They are.
A: And every science must derive from the cognition of the causes?
B: True.
A: Therefore the principle of science is the cognition of the cause?
B: Indeed.
A: It thus follows that the cognition of the cause must be contained in the definition.
B: I agree.
A: Thus, those who provide correct definitions are those who explain the generation of the thing in the definition.
B: That I also concede…¹³⁰

Also, in *De Corpore*, he identifies philosophy itself with the cognition of effects through their causes:

PHILOSOPHY is such knowledge [*cognitio*] of effects or appearances, as we acquire by true ratiocination from the knowledge we have first of their causes or generation: And again, of such causes or generations as may be from knowing first their effects (Ch. 1, §2, p. 3).

These claims very closely mirror some of Spinoza’s own most fundamental methodological convictions,\footnote{It should be noted, however, that while Hobbes apparently endorses not only the understanding of effects through causes, but also the understanding of causes through effects, in the above quotation, Spinoza consistently maintains that the proper order of philosophizing requires understanding effects through their causes. See, e.g. \textit{TIE} §92, E1app (II/80/10–23), and E2p10s.} which can be observed both in the early \textit{TIE} and the mature \textit{Ethics}:

\[\text{for really, cognition of the effect is nothing but acquiring a more perfect cognition of the cause (\textit{TIE}, §92 | II/34/13–14).}\footnote{“\textit{Nam revera cognitio effectus nihil aliud est, quam perfectiorem causae cognitionem acquirere.”}}\]

The cognition of the effect depends on and involves the cognition of the cause (E1a4).\footnote{“\textit{Effectus cognitio a cognitione causae dependet et eandem involvit.”}}

Furthermore, it would appear that Hobbes’s influence is present even in Spinoza’s choice of the example by which to illustrate this principle. Hobbes writes in \textit{De Corpore}:

\[\text{how the knowledge [\textit{cognitio}] of any effect may be gotten from the knowledge of the generation thereof, may easily be understood by the example of a circle: for if there be set before us a plain figure, having, as near as may be, the figure of a circle, we cannot possibly perceive by sense whether it be a true circle or no; than which, nevertheless, nothing is more easy to be known to him that knows first the generation of the propounded figure. For let it be known that the figure was made by the circumduction of a body whereof one end remained unmoved, and we may reason thus; a body carried about, retaining always the same length, applies itself first to one \textit{radius}, then to another, to a third, a fourth, and successively to all; and, therefore, the same length, from the same point, toucheth the circumference}\]
in every part thereof, which is as much as to say, as all the \textit{radii} are equal. We know, therefore, that from such generation proceeds a figure, from whose one middle point all the extreme points are reached unto by equal \textit{radii}. And in like manner, by knowing first what figure is set before us, we may come by ratiocination to some generation of the same, though perhaps not that by which it was made, yet that by which it might have been made; for he that knows that a circle has the property \textit{[proprietate]} above declared, will easily know whether a body carried about, as is said, will generate a circle or no. (Ch. 1, §6, p. 5)

Although it is very likely that Hobbes exercised some influence on Spinoza in these matters, it is worth noting that Hobbes’s doctrine that effects must be understood through their causes, his application of the genetic method of definition to geometry, and indeed, even the example of the circle, are far from unique. As Paulo Mancosu explains in \textit{Philosophy of Mathematics and Mathematical Practice in the 17th Century} (particularly, pp. 8–24), Aristotle’s conception of science as the knowledge of effects through their causes was commonly accepted during this period, and the scientific status of geometry and the question of the causal nature of explanations in geometry became controversial topics. The use of genetic definitions, and particularly, the use of the concept of motion in constructive definitions, was quite common at the time. The selection of mathematicians employing these methods is wide-ranging, and includes Barrow, Napier, Kepler, Descartes, Fermat, Torricelli, Roberval, de Witt, Wallis, Fabri, Gregorius a S. Vincentio, Gregory, Barrow, and Newton.\footnote{Mancosu, p. 95. Mancosu attributes this list to H. Breger’s \textit{Der mechanische Denkstil in der Mathematik des 17. Jahrhunderts}. Descartes, of course, is one of the most notable influences with regard to Spinoza’s...}
The prevalence of the use of the two definitions of a circle as an illustration of the distinction between genetic and non-genetic definitions may be explained by the fact that, according to Hobbes, many of Euclid’s definitions, with the exception of that of a circle, are genetic, and the definition of the circle must therefore be rectified. Continuing the dialogue from the Examinatio above, Hobbes writes,

A: Thus, those who provide correct definitions are those who explain the generation of the thing in the definition.

B: That I also concede. And I see in Euclid’s definitions of the sphere, the cone, and the cylinder the generations of those bodies, although he did not similarly define the circle.

A: But he thankfully assumes among his postulates, as is well known, that a circle can be described, and it can only be described by means of motion. Indeed, this example was so commonly cited that Borelli, who did not explicitly insist that geometrical demonstrations be causal in nature, while maintaining that definitions serve as the bases of “constructions,” also made use of it. He writes in Euclides Restitutus that,

philosophy, but it should also be pointed out that Johan de Witt, who wrote “Elementa Curvarum Linearum” in 1659 as an appendix to Frans von Schooten’s translation of Descartes’s “La Géométrie,” has been reported to be a friend of Spinoza (See, Freudenthal’s Die Lebensgeschichte Spinoza’s, pp. 15–16).

The common definition of a circle is this: A circle is a plane figure consisting of one line, which is called the periphery, in which the straight lines posited inside the figure as falling from one common point are equal. And this is one of those definitions which provides an unknown property. For it is not easy to see whether it is possible to find such a figure in nature, which has a single point inside itself from which all straight lines drawn from its terminus are equal to each other. For it is always possible to doubt whether some line from those infinitely many lines has the same measure as the rest. It will therefore be better for us to proceed with the circle having been defined in the same way which Euclid found useful in the definition of a sphere, [and] in which there is no difficulty. And it is not possible to doubt whether there is a figure in nature which has equal distances from the center to the circumference, since it is clearly posited in the definition that it follows from that very figure, both in the description and the construction. For the same line was revolved around the center, and since it is always of the same measure, it necessarily creates distances from the center to the circumference that are equal to each other.\textsuperscript{136}

\textsuperscript{136} My translation of “Vulgata circuli definitio haec est: Circulus est figura plana ab una linea comprehensa, quae peripheria appelatur, in qua ab uno puncto eorum, quae intra figuram sunt posita, cadentes lineae rectae sunt aequales. Et haec est una ex iis definitionibus, quae passionem ignotam tradunt. Non enim facile est videre, an in natura reperiri possit talis figura, quae habeat punctum unicum intra se, a quo omnes rectae, ad eius terminum ductae, sint inter se aequales. Semper enim dubitare potest, an aliqua ex infinitis illis lineis habeat eadem mensuram cum reliquis. Melius ergo procedemus definiendo circulu eo modo, quo Euclides in definitione spherae usus est, in qua nulla difficulties adest; neque dubitari potest an in natura detur figura, quae a centro ad circumferentiam habeat distantias aequales: cum ex ipsam et descriptione, et
Hobbes’s and Borelli’s discussion of this definition can help demonstrate interesting ways in which their views compare and contrast with Spinoza’s.

Hobbes’s motives for including causes in definitions appear to be two-fold. Firstly, as we saw above, he maintains that philosophy itself consists in understanding effects by demonstrating the manner in which they follow from their causes. In the following statement from Chapter 6 of De Corpore, he seems to reiterate this view, together with the implied assumption that we will not be able to derive the causes from the effects if the causes themselves are not included in the relevant definitions:

[to return, therefore, to definitions; the reason why I say that the cause and generation of such things, as have any cause or generation, ought to enter into their definitions, is this. The end of science is the demonstration of the causes and generations of things; which if they be not in the definitions, they cannot be found in the conclusion of the first syllogism, that is made from those definitions; and if they be not in the first conclusion, they will not be found in any further conclusion deduced from that; and, therefore, by proceeding in this manner, we shall never come to science; which is against the scope and intention of demonstration (Ch. 6, §13, p. 82).

Secondly, however, Hobbes also seems to indicate in his definition of the circle that the purpose of including the cause in the definition is that it provides a criterion of identification. That is, we can discern whether the figure of some body discovered in nature is a circle on the basis of the manner in which it was constructed. Since it is

constructione, in definitione posita declaretur. Nam eadem linea revoluta circa centrum, cum sit semper eiusdem mensurae, necessario facit distantias a centro ad circumferentiam inter se aequales” (9–10).
impossible to measure all the radii of any alleged circle, we can instead consider the manner in which it was constructed, and whether such a method of construction necessarily gives rise to a circle (given certain assumptions, e.g., that the line which rotates about a fixed point is of constant length throughout the procedure). In this sense, the inclusion of the cause in the definition of the circle serves not as a necessary condition for being a circle, but rather as a useful heuristic device for judging whether a given figure is a circle. Hobbes acknowledges that there are other suitable methods of construction, and that a figure need not be so constructed in order to be a circle:

A: But [Euclid] thankfully assumes among his postulates, as is well known, that a circle can be described, and it can only be described by means of motion.

B: In any case, Euclid should have said that a sphere is the kind of solid created by the rotation of a semicircle, rather than saying that a sphere is what is made by such a rotation. For indeed, nature has never created a sphere by means of rotation.

A: Those who define figures are considering ideas in the mind, not bodies themselves, and from those figures which they imagine to be made, they deduce the properties of similarly made figures, regardless of the manner in which they were [actually] made.\(^{137}\)

\(^{137}\) My translation of, “A: At circulum describi posse, qui describi nisi per motum non potest, inter postulate ut rem notam gratis sumsit. B: Saltem dicere debuit Euclides, sphaeram esse solidum quale fit, potius qua quod fit, ex circumductione semicirculi. Nulla enim est sphaera, quae per cirdumductionem fact est a natura. A: Qui figurae definiunt, ideas quae in animo sunt, non ipsa copora respiciunt; et ex iis quae imaginantur fieri, deducunt proprietates factorum similium, a quocunque et quomodocunque facta sunt” (IV, 87).
According to Hobbes, then, it may in fact be the case that the definiendum might be the result of one out of *any number of possible efficient causes*. The cause identified by the definition need not be unique, or special, or indeed, even the *actual* cause of the thing defined. The point, it seems, is that the inclusion of the cause allows us to deduce what properties an object resulting from such a cause would have, and he assumes that any other cause which might give rise to such an object will be sufficiently similar that the resulting properties will be the same. This is supposedly acceptable, because the true object of definition is not an object outside of the mind, but rather a kind of idealization of external objects, which we use to reason about them.

A similar pattern of reasoning can be observed in Borelli’s motives for his views on the nature of definitions. Firstly, Borelli shares Hobbes view that definitions provide the basis of our reasoning, and that they must for that reason meet certain criteria. As we saw in the first Chapter, Borelli emphasizes that definitions are the bases of mathematical constructions, and that they must provide the essential, or first and best known, property of the definiendum, or else the cognition resulting from our reasoning from that definition will be uncertain.\(^{138}\) Secondly, Borelli also acknowledges that there are often many possible ways of defining a figure, and there are many ways of constructing a circle:

* [f]ifthly, there are many possible bases for the formal construction of some subject. For any thing whatever can have not just one, but many convertible essential properties. For example, the construction of a circle may be accomplished not only through the revolution of a straight line in a plane around a

\(^{138}\) Section 1.2.4.
fixed point, but also through the revolution of a right angle around the diameter, and from conic sections and cylinders, and by many other methods.\textsuperscript{139}

Given that a subject may have many “convertible,” or logically equivalent, essential properties, what does Borelli mean by insisting that we must choose the “first and best known” property? His discussion of the definition of a circle quoted above goes some way in clarifying his intention. There we saw Borelli claim that, if a circle is defined as a figure consisting of a single line all of whose points are equidistant from the center, then “it is not easy to see whether it is possible to find such a figure in nature,” since it is not possible to measure the distance of every point along the circle from the center. Defining a figure through an executable means of construction, however, provides a demonstration of the possibility of the figure existing outside of the mind, or in nature. The essential, or first and best known, property of a figure, then, is that property which best manifests the possibility of the definiendum existing in nature. The selection of this property therefore appears to be\textsuperscript{140} an epistemological or methodological choice on our part, which does not seem to imply that any of the other convertible essential properties belong to the essence of the thing any less than the property chosen. We saw earlier in Section 1.3.1 that Borelli was particularly concerned with the requirement that definitions be both true and known to be true in the sense that it is possible for the object so defined to exist in nature, which

\textsuperscript{139} My translation of, “Quinto, ratio structurae formalis alicuius subiecti quanti multiplex esse potest. Sicut etiam quaelibet res non unicam, sed plures essentiales proprietates convertibles habere potest. Ut structura circuli, ne dum ex revolutione rectae lineae in plano circa punctum fixum; sed ex revolutione anguli recti circa diametrum; et ex sectione coni, et cylindri, et aliis pluris modi effici potest” (Euclides Restitutus, 15–16).

\textsuperscript{140} There is a further complication with Borelli’s view which I discuss in Section 2.5.2 below.
agrees with our findings in this case concerning the definition of the circle. So, while Hobbes suggests that the causal nature of definitions may be used as a means of identifying the figures of bodies found in nature, Borelli suggests that definitions may serve the purpose of demonstrating the possibility of finding such figures in nature.

Spinoza’s views on the inclusion of causes in definitions at first seem very close to those of Hobbes. As we have seen, both are at least partly motivated by the view that the proper understanding of an object is achieved by understanding the manner in which it follows from its causes. Furthermore, we saw above in his discussion of the definition of a circle that Hobbes believes that the inclusion of the cause in the definition is integral for the purpose of deriving the properties of the definiendum. Similarly, Spinoza claims in Letter 60 that

\[
\text{[t]o know which of the many ideas of a thing is sufficient for deducing all its properties, I pay attention to one thing only: that the idea or definition of the thing expresses the efficient cause (IV/270/20–23).}
\]

Spinoza’s inclusion of causes in definitions, however, also involves several complications, some of which may elucidate differences between Hobbes and Spinoza on this subject. The complications I will discuss here are the following: firstly, does Spinoza change his views somehow between the \textit{TIE} and Letter 60? And secondly, would Spinoza allow, like Hobbes and Borelli, that an object may have multiple possible causes and therefore multiple possible genetic definitions?

Section 2.5: Spinoza on Genetic Definitions over the Course of His Philosophical Career

Section 2.5.1: Early and Late Views on Definitions and Causes
In the *TIE*, Spinoza divides definitions into two different types according to two different types of objects which may be defined. He claims that a thing may be “conceived through its essence alone or through its proximate cause” (§92 | II/34/9–10). If a thing requires a cause in order to exist, it should be conceived through its proximate cause (and its definition should include the proximate cause), but if a thing is uncreated, it should be conceived through its essence alone (and its definition “should exclude every cause, i.e., … the object should require nothing else except its own being for its explanation”) (§97 | II/35/30–31). However, in Letter 60, written in 1675, Spinoza apparently drops this distinction. As we see in the quotation from Letter 60 above, Spinoza presents the rule that a definition should “express the proximate cause” as being general in nature, and he cites the definition of God (the best candidate for an uncreated being, if there ever was one) from the *Ethics* as an example of the rule. Two questions which naturally arise in the face of this change are: (i) What explains the shift in the treatment of God from “uncreated” to “self-caused”? (ii) What is implied by the shift in terminology from “including the proximate cause” to “expressing the efficient cause”?

With regard to the first question, it is worth noting that Spinoza does, in fact, use the terminology of self-causation in the *TIE*. He writes, for example, that “[i]f the thing is in itself, or, as is commonly said, is the cause of itself, then it must be understood through its essence alone” (*TIE*, §92 | II/34/10–11). Nevertheless, from Spinoza’s insistence that the definition of such a being should exclude every cause, because it requires only its own being for its explanation, it seems clear that, in this context, being self-caused hardly differs from being uncaused. It is difficult to say when Spinoza changed his views on this matter, but it would appear to have been rather early on. He writes in the first chapter of
the KV “[b]ut God, the first cause of all things, and also the cause of himself, makes himself known through himself. So what Thomas Aquinas says—that God could not be proved a priori, because he supposedly [kwansuys] has no cause—is not of much importance” (KV, Part 1, Ch. 1 | I/18/23–27; emphasis added). Thus, by this point, Spinoza seems to clearly distinguish between having no cause and being self-caused.

As for why Spinoza changed his view on this matter, Spinoza suggests in Letter 60 that the reason why it is sensible to demand that God’s definition should express the efficient cause is that “I understand an efficient cause to be both internal and external” (IV/271/4–5). This leads me to hypothesize that at least two major considerations are involved in Spinoza’s shift from thinking of God as uncaused to thinking of God as positively self-caused. The first is the recognition that the manner in which essences may be thought of as the efficient causes of their properties is an example of efficient causation in which the cause is not, strictly speaking, distinct from the effect. Spinoza draws attention to this feature of immanent causation in the KV:

[y]ou say, then, that since the cause is the producer of its effects, it must be outside them. You say this because you know only the transitive [overgaande] and not the immanent [inblyvende] cause, which does not in any way produce anything outside itself (KV, Part 1, Ch. 2, 1st dialogue | I/30/21–25).

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141 Spinoza’s correspondence suggests that he had made a complete draft of the Short Treatise at least by April of 1662. See Letter 6 | IV/36/10–12.

142 For more in-depth discussions of Spinoza’s views on self-causation, see Laerke’s “Spinoza’s Cosmological Argument in the Ethics,” and Carraud’s “Causa sive Ratio.”

143 This distinction also appears in KV, Part 1, Ch. 3 | I/35/1–22.
It is possible that, from here, Spinoza inferred that, because the cause and effect need not be distinct according to his understanding of efficient causation, God may be the cause of himself just as he is the cause of his own properties. Indeed, Spinoza claims in E1p25s that “God must be called cause of all things in the same sense in which he is the cause of himself.” Notably, he asserts that this claim follows from E1p16, the demonstration of which depends heavily on his assumption that “the intellect infers from the given definition of any thing a number of properties that really do follow necessarily from it (i.e., from the essence of the thing).” This evidence suggests that Spinoza’s understanding of God’s self-causation may have been modeled upon the causal relationship between a thing’s essence and its properties.\textsuperscript{144}

A second, perhaps less obvious, but equally interesting factor in Spinoza’s shift from thinking of God as uncaused to being positively self-caused, is the relationship between conception and causation. There is widespread agreement among scholars of Spinoza’s philosophy that Spinoza accepted what is sometimes called (following Don Garrett) the “conception implying causality doctrine,” or the view that if y is conceived through x, then y is caused by x.\textsuperscript{145} It would appear, however, that when Spinoza

\textsuperscript{144} In Section 2.3.2, I pointed out that Spinoza lists God’s necessary existence among his proprietates. Though, for reasons already discussed, this claim is somewhat problematic, it would fit with and could perhaps be explained by the possibility that Spinoza understood God’s self-causation along the lines of essence-proprietates causation.

\textsuperscript{145} This view usually attributed to Spinoza on the basis of his use of E1a4 in the demonstration of E1p25dem. This attribution is defended by Melamed, \textit{Spinoza’s Metaphysics: Substance and Thought}, pp. 89–90; Garrett, “Spinoza’s \textit{Conatus Argument},” pp. 136–137; Della Rocca, \textit{Representation}, p. 11; Bennett, \textit{Study} p. 128n1; Jarrett, “Logical Structure,” 29; and Wilson, “Spinoza’s Causal Axiom,” 163n27. For a
advocated distinct types of definition for created and uncreated beings in the *TIE*, he either did not hold this doctrine or he was not particularly aware of it, for he writes in one and the same sentence, “[the definition of an uncreated thing] should exclude every cause, i.e., … the object should require nothing else except its own being for its explanation” (§97 | II/35/29–30). Michael Della Rocca has presented powerful arguments for the conclusion that, for Spinoza, the notions of conception and explanation are equivalent, such that to be self-explanatory is to be conceived through oneself.\(^{146}\) If this is so, it follows that Spinoza maintains in this passage of the *TIE* that God is conceived through himself, but that he is not self-caused, except insofar as this is understood to mean that he is uncaused. It would be impossible for Spinoza to consistently hold this view together with the conception implying causation doctrine.

Although this fascinating and difficult topic cannot be explored here, it is worth noting that this issue at least presents a difficulty for the view that Spinoza endorsed the conception implying causation doctrine. It shows that there was time at which Spinoza apparently did not hold it, and although the doctrine is incompatible with the view that God is uncaused, Spinoza does not cite his adoption of the doctrine as one of his reasons for his later view that God is self-caused. His evident non-endorsement of the principle also occurs in spite of the fact that Spinoza evidently believed at this time that effects must be understood through their causes, the principle that would later be embodied in

E1a4, i.e., “the cognition of the effect depends on and involves the cognition of the cause.” In addition, Spinoza never employs the conception implying causation doctrine in his later arguments for the self-causation of substance or God, even though the conclusion would follow immediately from this doctrine together with the definition of substance as “what is in itself and conceived through itself” (E1d3). If Spinoza did indeed later come to hold the conception implying causation doctrine, this would be a good reason for him to believe that God is self-caused. Unfortunately, he never provides any evidence to suggest that this doctrine is one of his motives.

I turn now to the question of why Spinoza’s terminology shifted from including the proximate cause to expressing the efficient cause between the *TIE* and Letter 60. At first glance, it may appear that Spinoza’s choice to invoke the efficient cause in Letter 60, rather than the proximate cause, is a reflection of his assertion that an efficient cause can be internal as well as external, as one might reasonably assume that a proximate cause is a transitive, rather than immanent cause. The term “proximate” naturally suggests to the contemporary reader that the cause and effect are distinct. However, that is not necessarily the case. The proximate cause is a kind of efficient cause which itself can be internal or external. As previously shown in Section 2.3.1, Heereboord divides the efficient proximate cause into the absolutely proximate cause and the proximate cause in its own kind. While the proximate cause in its own kind is distinct from the effect, Heereboord maintains that “[e]very absolutely proximate cause is emanative: fire with respect to the heat in it, the rational soul with respect to risibility, and the form of every
substance with respect to its properties” (262). Thus, the effect of a proximate cause is not necessarily distinct from or external to it.

It is not entirely clear whether Spinoza understood the proximate cause in this manner in the *TIE*, but it is apparent that he recognized that the proximate cause may be an internal one in the *KV*. For he says both, on the one hand, that “God is the proximate cause of those things that are infinite and immutable, and which we say he has created immediately,” and on the other hand that, “[h]e is an immanent cause and not a transitive cause, since he does everything in himself, and not outside himself (because outside him there is nothing)” (*KV*, Part 1, Ch. 3 | I/35/19–I/36/18). Also, in the *Ethics*, Spinoza asserts more specifically that, “God is absolutely the proximate cause of things produced immediately by him, and not [a proximate cause] in his own kind, as they say” (E1p28s; emphasis added), which demonstrates that he was familiar with the distinctions internal to proximate causation as elucidated by Heereboord. Given that every proximate cause is an efficient cause and that a proximate cause may be internal as well as external, it is unclear why Spinoza shifted from the terminology of the “proximate cause” to that of the “efficient cause,” and we cannot infer that it represents a change in his theory of definition.

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147 My translation of “[c]ausa absolute proxima est emanativa omnis: ignis respectu caloris, qui est in se; anima rationalis respectu risibilitas, et forma omnis substantialis respectu proprietatum.”

148 Might it be the case that Spinoza later came to allow that definitions should include or express non-proximate efficient causes? What would that mean? According to Heereboord’s taxonomy, the proximate efficient cause is contrasted with the remote efficient cause (261–262). The remote cause is distinguished from the proximate cause in its own kind by the fact that another cause of the same kind intervenes between the cause and the effect. Heereboord clarifies the distinction with the following example: The father is the
What about the shift from “including” the cause to “expressing” the cause? The precise meaning of the term “express” (exprimere; uytdrukken) as used by Spinoza is a complex and difficult issue that cannot be adequately addressed here. However, among the various uses to which Spinoza puts this term, one of them is to indicate a relationship of representation that can be exhibited by words and ideas. Spinoza most commonly uses the term to indicate that words are used to communicate meanings or as representations of mental contents. In addition, however, he maintains that expression is a relation that

proximate cause in his own kind of the son, because while another cause, the semen, mediates between the father and son, this intervening cause is not of the same kind as the father. On the other hand, the grandfather is the remote cause of the grandson, because the intervening cause, the father, is of the same kind as the grandfather (262). If this is how the distinction is understood, then it is difficult to see the benefit of including the remote cause in a thing’s definition. Whatever might be gained by including the grandfather in the definition could be had equally well, if not better, by instead including the father in the definition. On the other hand, it is possible that Spinoza did not understand the distinction in precisely this way. Spinoza writes in E1p28s, for example, that “God cannot properly be called the remote cause of singular things, except perhaps to distinguish them from those things that he has produced immediately, or rather, that follow from his absolute nature. For by a remote cause we understand one which is not in any way conjoined with its effect. But all things are in God, and so depend on God that they can neither be nor be conceived without him” (a similar claim is made in KV, Part 1, Ch. 3 | I/36/16–18). Apparently, by stating that a remote cause is one which is not in any way conjoined with its effect, Spinoza is here using the notion of a remote cause in the sense of a non-immmanent, or transitive, cause. However, understanding a remote cause in this way adds nothing to the story, since, as we have seen, this possibility is already compatible with Spinoza’s understanding of the proximate cause in its own kind.

149 This meaning of the term “express” is made explicit, for example, in DPP1d2exp and in E2p40s1. Excluding the adverbial “expresse,” which might be well translated by “explicitly,” various forms of the verb “exprimere” occur approximately 50 times in the Compendium of Hebrew Grammar (HG), more than
holds between an idea and its object. He holds that ideas of the affects express the
constitution of the human body (E3gendefaffexp | II/204/5–10), and that the mind
expresses the actual existence of the body so long as the body exists (E5p21dem).
Furthermore, Spinoza maintains in the *Ethics* that a definition expresses the nature of the
definiendum, and, in fact, that it expresses nothing else (E1p8s2). If he continues to
believe at this time, as we saw earlier with regard to Letter 9, that a true definition is an
idea which accurately represents the essence of the definiendum, then I believe that we
should take his use of the term “expression” in Letter 60 purely as an indication of a
relationship of representation. Other uses of the term, “expression,” may seem to carry
additional metaphysical implications, such as the manner in which modes are expressions
of God’s attributes (E1p25c), which seems to include a relationship of causation and
determination, or the manner in which each attribute is an expression of reality (or
perfection, or being, or essence) (E1d6exp, E1p10s), which has the appearance of a
relationship of determination without causation,150 but at least within the context of
Spinoza’s mature views, the idea of an object can neither be caused by its object (E2p6)
nor can it be a determination of its object (E2p6dem, E2p7s).

Spinoza’s shift from “including” the cause to “expressing” the cause is therefore
not evidence of a change in his theory of definition, but rather it is most likely another
element of the fact that he sometimes adopts the term “expression” to indicate a

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150 On this issue, see also Letter 36, where Spinoza describes God as absolutely indeterminate, and each
attribute as indeterminate in its own kind.

any other of Spinoza’s works. The *HG* is followed by Book One of the *Ethics*, in which the term occurs 22
times.
relationship of representation. Surprisingly, then, in spite of the fact that, between the TIE and the much later Letter 60, Spinoza drops a distinction between two different kinds of definition and makes noticeable changes in terminology, there is no indication that his theory of definition changed substantially in this time.

Section 2.5.2: Pluralism and Singularism Concerning Genetic Definitions

As we saw in Section 2.4, Hobbes maintains, and Borelli appears to maintain, that for a given (geometrical) object, a variety of genetic definitions may be acceptable. For Hobbes, the question of whether the definition presents the actual cause of some object is irrelevant. An object apparently admits multiple possible causes, and the inclusion of one of these causes in a definition serves the methodological goal of enabling the deduction of the properties of the object from the definition. The efficient cause of an object, we might therefore say, is not essential to the object, in Hobbes’s view; a given object might have one particular cause, but equally could have had some other cause. The properties of similar objects can be expected to be the same, as long as the process of construction is sufficiently similar.

The evidence in favor of Borelli’s endorsement of multiple acceptable genetic definitions is, firstly, that he maintains that (geometrical) objects may have many

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151 If one were to ask, then, why did Spinoza not use the term “express” in the TIE? I would respond that, although Spinoza occasionally makes metaphysical uses of the term in the early works, claiming, for example, in the TIE that the ideas formed by the intellect express infinity (§108 | II/39/4), or in the KV that Nature is expressed in infinite ideas (Part 1, Ch. 20 | I/98/1–2), he only seems to adopt more regular and serious use of the term later. He does not make serious (or virtually any) use of the term in his correspondence, for example, until January of 1665 in Letter 19.
convertible essential properties, and secondly, that he suggests on at least one occasion that the first and best known property of an object is the one that best manifests the possibility of the object existing outside the mind. In principle, it seems that a variety of genetic definitions could be equally effective in this task.

However, Borelli also expresses another view regarding the first and best known property of an object, and this view appears to be incompatible with a multiplicity of genetic definitions for a single object. Near the end of his discussion of definitions, he writes that

[f]inally, even though a construction, or a property of a definition, may be manifest, it should be the most evident of all, so that it is not possible to deduce it from others, but all the remaining properties should be deduced from it. For example, if someone should say, “I call an equilateral triangle a triangular plane figure, in which each angle is the third part of two right angles,” this would deliver a principle that is not the best known and first. For the best known principle is that the said three-sided figure can be comprehended by three straight equal lines, and from this property the former can be deduced, but the latter cannot be deduced from the former.\(^{152}\) (17)

\(^{152}\) My translation of “Tandem licet constructio, aut passio definitionis sit manifesta, debet esse omnium evidentissima, ut non ea ex alis; sed reliquae omnes ab ea deduci possint. Ut si quis diceret: voco triangulum aequilaterum figuram planam triangularem, in qua quilibet angulus tertia pars est duorum rectorum: traderet principium non maxime notum et primum, nam magis notum est, quod dicta figura trilatera comprehendi possit a tribus rectis lineis aequalibus, et hac illa deduci potest; non autem haec ab illa.”
Here, Borelli seems to switch from thinking of a manifest property or construction in epistemic terms to logical or metaphysical terms. What makes a property or construction manifest is not just its ability to reveal the possibility of the object existing outside of the mind, but also that it is fundamental to the object in the sense that from it, the other properties of the object can be deduced, but it cannot, in turn, be deduced from any other property or construction of the object.

Notably, this understanding of definitions closely resembles the distinction between a thing’s essence and *proprietaes*, which Spinoza accepts. However, this understanding of definitions also appears to be at odds with Borelli’s claim that an object may have many convertible essential properties. That is, depending on one’s understanding of “deduction” (*deducere*), there might not be a unique property or set of properties from which all other properties can be deduced and which cannot be deduced from any other properties. Indeed, Borelli appears to have fallen prey to just this problem in the example he uses to illustrate this requirement on definitions, for contrary to what he claims, it is indeed possible to deduce (assuming the parallel postulate) that a three-sided figure each of whose angles is 60˚ is an equilateral triangle. As we previously saw in Section 2.3.3 regarding Spinoza’s definition of love, the manner in which the *proprietaes* of an object may be deduced from the essence of an object, but not vice versa, cannot merely be a matter of logical deduction, for this form of deduction fails to distinguish between the essence and the properties.

Would Spinoza allow that an object may have multiple acceptable genetic definitions? There is little evidence to suggest that he would. The closest he comes to making such a claim appears in *Descartes’s Principles of Philosophy*:
[n]ext, since the best way to understand the nature of Plants and of Man is to consider how they gradually come to be and are generated from seeds, we shall have to devise principles as are very simple and very easy to know, from which we may demonstrate how the stars, earth and finally all those things that we find in this visible world, could have arisen, as if from certain seeds—even though we may know very well that they never did arise that way. For by doing so we shall exhibit their nature far better than if we only described what they now are. (I/226/19–28, emphasis added).

So that you may understand this, I shall use the following example. If someone should find drawn on paper the curved line we call a parabola, and we wish to investigate its nature, it is all the same whether he supposes that line to have been, first cut from some Cone, and then pressed on the paper, or to have been described by the motion of two straight lines, or to have arisen in some other way—provided that he demonstrates all the properties [proprietates] of the Parabola from what he supposes. Indeed, even though he may know it to have come to be from the pressing of a Conic section on the paper, he will nevertheless be able to feign any other cause he pleases, which seems to him the most convenient to explain all the properties [proprietates] of the Parabola. Similarly we are permitted to assume any hypothesis we please to explain the features of nature, provided that we deduce [deducamus] all the Phenomena of nature from it by Mathematical consequences (I/227/23–I/228/2, emphasis added).

This line of thinking is surprisingly similar to what Hobbes maintains. The supposition of a cause serves to elucidate the nature of the object and to provide the basis of a causal
derivation of the properties. Even so, the selection of the cause is based only on how convenient it is to derive the properties from such a cause.

As Curley points out, Spinoza’s discussion above mirrors Descartes’s *Principles of Philosophy*, Part III, Section 45 (C295n2). He suggests that Descartes is there attempting to “excuse his departure from the creationist account in the Bible.” Indeed, the mess of conflicting claims and tortuously bad arguments in Sections 43–47 provide a rather thin veil for Descartes’s intentions. On the one hand, Descartes claims that “[i]f a cause allows all the phenomena to be deduced from it, then it is virtually impossible that it should not be true,” (§43), but on the other hand, he goes on to say that the causes he is about to suggest should be regarded merely as hypotheses (§44), and even that some of them are *false* (§45). He then offers the rather odd consolation that, even if his assumptions are false, the conclusions he derives from them can nevertheless be true (§47). He maintains, furthermore, that, contrary to the hypotheses he is about to employ, “there is no doubt that the world was created right from the start with all the perfection which it now has,” since “[t]his is the doctrine of the Christian faith, and our natural reason convinces us that it was so” (§45). In the same section, Descartes claims that “although we know for sure that they never did arise in this way, we shall be able to provide a much better explanation of their nature by this method than if we merely described them as they now are.” In favor of his hypotheses, he claims that they have the virtues of being the simplest, easiest to understand, and most plausible principles from which one could possibly explain the present state of the universe (§47).

This constellation of claims seems to make it plausible that Descartes does indeed believe that he has probably identified the true causes of the phenomena in question, and
that he draws this conclusion on the basis of his claim in Section 43. That is, while Hobbes appears to believe that the same object and properties can be derived from a variety of causes, Descartes most likely believes that, if it is in fact possible to derive the phenomena\(^{153}\) from a cause, this process, which resembles inference to the best explanation, identifies the unique and actual cause of the object, at least when the object in question is the physical universe as a whole.

The fact that Spinoza does not, in his own voice, endorse the possibility of multiple genetic definitions for a single subject offers some evidence in favor of the conclusion that acceptable genetic definitions will be unique, in his view. But this evidence is certainly not conclusive, and it seems that this question cannot be settled on textual grounds alone.\(^{154}\) It may be suggestive that Spinoza acknowledges, in his own original example, that a parabola could be the result of any number of possible causes or methods of construction, as Hobbes acknowledges that a sphere could be the result of a number of methods of construction, many of which will not correspond to the manner in which any particular sphere has been caused to exist in nature. At the same time,\(^{153}\) One notable difference between Descartes’s views and Spinoza’s presentation of them is that, while Descartes presents the matter at hand in more general terms as the supposition of certain cosmological principles and a beginning state from which to derive the observable phenomena of the universe, Spinoza frames the issue in terms of finding a cause from which an object and its properties may be derived. This difference seems to be a reflection of Spinoza’s conception of deduction in general, which would later emerge more clearly still in the *Ethics*, c.f. Section 2.3.3.\(^{154}\) Sadly, the relevant passages are written in Latin, which lacks definite and indefinite articles. Therefore, little can inferred from the fact that our English translations say that the definition must include *the* proximate cause, for the passages could equally be translated so as to say that the definition must include *a* proximate cause.
however, both Spinoza and Hobbes seem to insist that defining geometrical objects is one thing while defining real objects is another.\(^{155}\) Formulating a plausible response to the question of whether Spinoza would allow for the possibility of multiple genetic definitions requires a closer look at the philosophical issues surrounding his views on essences and causes.

**Section 2.6: Conclusion**

In this Chapter, I have developed detailed interpretations of Spinoza’s criteria for satisfactory definitions and elucidated their implications for his understanding of essences. These requirements include the fact that definitions must be intellectually affirmative (Section 2.2), that they state the essence of the thing and not its properties (Section 2.3.1), that the properties be deducible from the definition (Section 2.3.1), and that the definition include the cause of the definiendum (Section 2.4). Throughout this discussion, I have taken note of a variety of ways in which Spinoza’s conception of definitions differs from more contemporary views. While contemporary conceptions of definition tend to aim at particularizing individuals, Spinoza’s more traditional approach aims to characterize the true, underlying natures of things. In Section 2.2, we saw that Spinoza’s requirement of intellectual affirmation prioritizes being over non-being, and

\(^{155}\) Spinoza: “[t]o be called perfect, a definition will have to explain the inmost essence of the thing, and to take care not to use certain *propria* in its place … And though, as I have said, this does not matter much concerning figures and other beings of reason, it matters a great deal concerning Physical and real beings …” (*TIE* §95). Hobbes: “[t]hose who define figures are considering ideas in the mind, not bodies themselves, and from those figures which they imagine to be made, they deduce the properties of similarly made figures, regardless of the manner in which they were [actually] made” (IV, 87; my translation).
resists Hegel’s interpretation of determination in terms of negation. I made use of previously neglected resources from Spinoza’s late scholastic influences to clarify the history and nature of Spinoza’s crucial distinction between a thing’s essence and its properties (Section 2.3.1). I continued to fill out the shape and significance of this distinction in Spinoza’s philosophy by discussing examples of it as it appears in relation to God (Section 2.3.2) and human beings and their affects (Section 2.3.3), while pointing out tensions that these examples create for Spinoza’s ontology (Section 2.3.2), and its underappreciated role in Spinoza’s methodology and use of the geometrical style of presentation (Section 2.3.3). I used the opportunity presented Spinoza’s discussions of the distinction between a thing’s essence and properties in the case of geometrical figures to clarify the significance of Spinoza’s fourth criterion for adequate definitions, that a definition should include (or express) the thing’s proximate (or efficient) cause, by comparing the manner in which this norm functions in the philosophical and mathematical methodologies of Spinoza’s contemporaries, Hobbes and Borelli (Section 2.4).

This discussion of the role of a thing’s cause in its definition drew two important questions into focus: Firstly, is there any evidence that Spinoza’s views on the inclusion of a thing’s cause in its definition changed between the early and late periods (Section 2.5.1), and secondly, contrary to Hobbes, is there a single, unique cause that the definition must identify (Section 2.5.2)? After a careful discussion of important issues including God’s self-causation, the relationship between conception and causation, and the nature of proximate causation, insofar as they relate to the first question, I concluded in Section 2.5.1 that the evidence points to the conclusion that Spinoza’s views on the
inclusion of causes in definitions most likely changed little, if at all, between his early and late periods. Finally, after a thorough consideration of the available evidence, I concluded in Section 2.5.2 that the question of whether Spinoza would allow that multiple genetic definitions of the same thing could be constructed from a variety of possible causes cannot be resolved on the basis of textual evidence alone. In the following chapter, I will address this question through the lens of the implications of Spinoza’s philosophical commitments, and I will continue the line of inquiry into the relationship between a thing’s essence and its cause.
Chapter 3: The Principle of Unique Causes

Section 3.1: Introduction

In the previous Chapter on Spinoza’s criteria for adequate definitions, we left off on the question of whether Spinoza would allow for the possibility of multiple acceptable genetic definitions. Addressing this question requires investigation of the relationship between a thing’s cause and its essence. I will begin by investigating certain questions pertaining to formal features of Spinoza’s conception of the relationship between cause and effect.

It is clear that, in the Ethics, Spinoza thought of the relationship between cause and effect as a necessary connection, at least in one “direction.” That is, for any particular cause, there is only one possible effect.\(^{156}\) So much seems evident from Spinoza’s claim

\(^{156}\) By this interpretive claim, I mean that a given cause could not possibly have a different complete effect than the one that it actually does, not that a given cause cannot have multiple actual effects or that the effect of a given cause cannot be divided into parts. For the sake of simplicity, I will write as if each cause has a single actual effect, but this principle should be understood to also mean that if a cause has multiple actual effects, it could not possibly have had different effects.
in E1a3: “[f]rom a given determinate cause the effect follows necessarily; and conversely, if there is no determinate cause, it is not possible for an effect to follow.”¹⁵⁷ The more pressing question for the present study, however, is whether the connection is also necessary in the other direction; that is, does Spinoza hold that for any given thing, there is only one possible thing that could be its cause? Let us call this proposition that every object has one and only one possible adequate cause the Principle of Unique

¹⁵⁷ One might question this interpretation on the grounds that the definite and indefinite articles are imposed upon the original Latin in translation. That is, E1a3 might alternatively be read as saying that “[f]rom a given determinate cause an effect follows necessarily,” meaning that some effect or other necessarily follows, but not any effect in particular. This interpretation is contradicted by Spinoza’s use of E1a3 in E1p27dem and the use of E1p27 in E1p29dem. In E1p27, Spinoza claims that, if God determines some thing to produce an effect, it cannot render itself undetermined, and that this is evident from E1a3. While this reasoning might be interpreted as saying that a thing can produce only one possible effect, it could also be understood as saying that a thing which produces an effect cannot possibly produce no effect, which would be consistent with the alternative interpretation of E1a3. However, this interpretation of E1p27 is ruled out by Spinoza’s use of E1p27 in E1p29dem, in which Spinoza relies on E1p27 to argue that God has determined all things to exist and produce an effect in a certain way (ad certo modo). If the alternative interpretation of E1a3 were adopted, Spinoza’s argument for E1p29 would fail, because, firstly, it would be possible for modes to produce their effects in a different way than they actually do, since this interpretation of E1a3 only requires that a given determinate causes some effect or other and no effect in particular, and secondly, by the same reasoning, it would be possible for modes other than those actually existing to exist. On this interpretation of E1a3, Spinoza’s central doctrine of Necessitarianism would fall; indeed, he could not even consistently maintain determinism.

¹⁵⁸ E3d1: I call that cause adequate whose effect can be clearly and distinctly perceived through it. But I call it partial, or inadequate, if its effect cannot be understood through it alone.
Causes (PUC).\textsuperscript{159} If Spinoza is committed to the PUC, it would follow that, in his view, each object has but one possible causal derivation, and he would thereby also be committed to the idea that each object can have only one legitimate genetic definition.\textsuperscript{160}

In this Chapter, I present a detailed exposition and analysis of the various grounds that do and do not commit Spinoza to the uniqueness of each object’s genetic definition.

\begin{itemize}
  \item E3d2: I say that we act when something happens, in us or outside us, of which we are the adequate cause, i.e. \textit{(by d1)}, when something in us or outside us \textit{follows from our nature}, which can be clearly and distinctly understood \textit{through it alone}. On the other hand, I say that we are acted on when something happens in us, or something follows from our nature, of which we are only a partial cause (emphasis added).
  \item One might object to this formulation on the grounds that many or even most objects are caused to exist by the confluence of several other existing objects “working together.” I do not presently foresee any problem with allowing that this principle should also be taken to mean that if an effect follows from a system of interacting causes, then the effect could not have possibly followed from any other system of interacting causes. However, one should note that Spinoza himself was willing to adopt the convention that a system of interacting causes giving rise to a single effect should be considered, to that extent, a single thing (E2d7).
  \item Another way of framing this question is to ask whether Spinoza would have accepted what is referred to in contemporary metaphysics as the “necessity of origin,” which has variously been portrayed as the view that things could not have possibly had a different origin or cause of their existence (e.g. that I could not have had different parents than I did), or more commonly in the case of inanimate objects, that they could not have possibly had a different original material constitution than they did. Kripke offers a brief argument for the necessity of original constitution in footnote 56 on p. 114 of \textit{Naming and Necessity}. The necessity of origin has been defended by McGinn in “On the Necessity of Origin,” Noonan in “The Necessity of Origin,” Forbes in \textit{The Metaphysics of Modality} (pp. 138ff.), Rohrbaugh and DeRosset in “A New Route to the Necessity of Origin.” It has been criticized by Robertson in “Possibilities and the Arguments for Origin Essentialism,” Salmon in \textit{Reference and Essence} (pp. 197ff.), and Lowe in \textit{A Survey of Metaphysics} (pp. 104–108).
\end{itemize}
and the Principle of Unique Causes. In Section 3.2, I explain some of the more general philosophical considerations motivating the Principle of Unique Causes. I reserve detailed demonstrations that Spinoza was, in fact, motivated by these reasons for later discussions, and instead argue that, given some of his views on explanatory methodology, he at least ought to have found this thesis attractive. In Section 3.3, I consider what is, on my interpretation, the most likely counterexample to the Principle of Unique Causes and the uniqueness of genetic definitions, namely, common properties \([proprietates communes]\) as interpreted in Section 1.4.2, and I provide some preliminary reasons suggesting that this problem is not as serious as it first seems. In Section 3.4, I examine Spinoza’s Parallelism in E2p7 and its justification in his causal axiom, E1a4, as a possible basis for the Principle of Unique Causes. I show that, although Spinoza is clearly committed to the PUC with respect to substance(s), surprisingly, Spinoza’s Parallelism is consistent with the denial of the PUC with respect to modes. I explore Spinoza’s Necessitarianism and the Principle of Sufficient Reason (PSR) in Section 3.5 as possible grounds for the Principle of Unique Causes. I argue that the PSR does not, in fact, entail the PUC, and that while Necessitarianism does, it does not provide a satisfactory explanation of the Principle. In Section 3.6, I delve more deeply into Spinoza’s causal axiom in E1a4, and in particular, into the role played by the technical term “involves \([involvere]\).” I use the findings of this investigation to construct a more informative demonstration of Spinoza’s commitment to the PUC, one which shows that the PUC is true in virtue of the structure of essences. Then, in Section 3.7, I fortify and enrich this demonstration by reconstructing some of Spinoza’s core views on modal semantics, and by showing how these views make that demonstration possible.
Section 3.2: Causation and Explanatory Methodology

But why should we care about whether Spinoza was committed to the PUC? At the risk of venturing into the realm of “charitable interpretation,” I will note at least one primarily philosophical reason for avoiding the conclusion that Spinoza would allow that objects may have a variety of possible causes, and hence, multiple legitimate genetic definitions. The reason is that this possibility seems to undermine the motivation for the epistemological norm of explaining things through their causes, which, as we have already seen, Spinoza enthusiastically embraces. Return for a moment to the previous discussion, in Section 2.5.2, of Descartes’s “hypothetical” cosmology and its defense in *Principles*, Part III, Sections 43–47. Hobbes and Descartes both claimed (perhaps with varying degrees of ingenuousness) that, when giving causal explanations, one is at liberty to choose among a variety of possible causes with little regard to what the actual causes, in fact, were. As first impressions go, it is difficult to take this suggestion seriously. When reconstructing the causal ancestry of some object, we generally take it for granted that we endeavor to provide an account that is true to what actually happened. Descartes and Hobbes indicate, however, that the goal is not to reconstruct the natural history of the object, but rather it is to explain its nature and properties through a causal derivation.

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161 I assume that this reason is only useful if it can also be shown that there are compelling, textually grounded reasons for interpreting Spinoza in this way, which I supply below. I take the opportunity here to reiterate the importance of striving, as much as possible, to take Spinoza at his own word concerning his views, and allowing those views to challenge our own preconceptions, rather than foisting our own prejudices upon him.
Nevertheless, this conception of explanatory methodology, which requires that a thing be explained through its cause while allowing for a variety of possible causes, is unsatisfying. It may be the case that the properties of an object follow from its essence by means of a causal process, but even so, little seems to be gained by positing a merely hypothetical cause from which the object itself is derived. To see why, suppose that the cause of an object is somehow important to our understanding of it, i.e., it belongs to the essence of the object to be caused by that cause, or that the essence of the object is in some manner derived from its cause.\(^\text{162}\) If so, then it seems to matter a great deal indeed which cause we choose for the derivation of the object and its properties. If the cause does somehow belong to the essence of the object, then it would seem that no other cause could be substituted in its place. To do so would be to misrepresent the essence of the object in our definition. On the other hand, if the object is not so related to the essence of the object, then while it may be permissible to select from a variety of possible causes, it is difficult to see the purpose of including any cause at all. The properties could be derived from the essence alone, since the cause bears no special relation to the essence of the object.

For example, if the nature and identity of a table is all the same, regardless of whether it was made by Smith or Jones, or how the carpenter made it (e.g., using hand tools or power tools), why would we need to consider some hypothetical cause in order to understand its nature? If the possible causes are interchangeable in our explanation of its nature, then it seems that its essence must be constituted by other features—features that

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\(^{162}\) Here, I am tacitly assuming that, as Michael Della Rocca argues, to understand an object is, for Spinoza, to understand its essence (Representation, pp. 84–86).
are not interchangeable. But if the origin of the table does pertain to its nature, then we certainly could not come to understand its nature by imagining some other process that might have given rise to it. Although these reasons for rejecting the interpretation of Spinoza as accepting the possibility of multiple legitimate genetic definitions are philosophical in nature, rather than depending on direct textual evidence, I do believe they are motivated by a philosophical position that Spinoza did clearly occupy.

Section 3.3: Common Properties and Possible Causes

As we saw in the previous Chapter (Section 2.5.2), there is no solid textual evidence suggesting that Spinoza did allow for the possibility of multiple genetic definitions. Before discussing the textual evidence in favor of the uniqueness of any given object’s possible cause, I will address what I consider to be the most pressing philosophical evidence for the contrary conclusion. In my discussion of the distinction between definitions and axioms (Section 1.4.2), I showed that Spinoza argued for the existence of “common properties” which I argue serve as the metaphysical basis of axioms. If these common properties are a kind of universal, it might appear to follow that any such property has many possible, and indeed many actual, causes. Consider, for

163 Could it be the case that including a cause, even if it is only one of several possible causes, is necessary for deriving the properties of the object? That would be at odds with the fact that the essence of the object suffices to cause the properties (as discussed in detail in Section 2.3). Here, we are operating under the supposition that cause of the object does not figure into its essence.

164 Note, however, Spinoza’s suggestive claim in the TTP: “interpreting nature consists above all in putting together a natural history, from which, as certain data, we infer the definitions of natural things” (Ch. 7 | III/98).
example, the property of bodies that they are all capable of moving at various speeds (E2p13sphysdigL2). According to the interpretation that I advocate, this property is caused to exist and inhere in my body by the essence of my body, and at the same time, it is also caused to exist and inhere in a soccer ball by the essence of the soccer ball. Thus, we have an example of something\textsuperscript{165} that has many possible causes.

To show that this concern should not forestall the present investigation of Spinoza’s commitment to the PUC, I will argue that there are at least three possible responses to this argument. The first possible response is to claim that the common properties in question are not, in fact, universals, but that they are instead particular qualities, namely, what are commonly referred to today as “tropes.” Insofar as these qualitatively identical properties are numerically distinct, it would follow that no single property has multiple causes. The notion that Spinoza’s modes are best characterized as tropes has been advocated by several scholars in works such as Carriero’s “On the Relationship between Mode and Substance in Spinoza’s Metaphysics,” Jarrett’s “The Concept of Substance and Mode in Spinoza,” Bennett’s Learning from Six Philosophers 1:145, and Melamed’s Spinoza’s Metaphysics: Substance and Thought, pp. 49–59.

The second possible response is to claim that, contrary to appearances, these common properties are not manifested in each individual in a qualitatively identical manner. For example, although Spinoza often adopts the convention of discussing affects

\textsuperscript{165} As for the objection that the property of being capable of various degrees of motion and rest is not properly a “thing,” I draw the reader’s attention to those works of Melamed and Garrett which show that the distinction between properties and individuals in Spinoza’s ontology is “weak” at best. See, for example, Melamed’s “Acosmism or Weak Individuals? Hegel, Spinoza, and the Reality of the Finite,” and Garrett’s “Spinoza’s Theory of Metaphysical Individuation.”
such as joy, sadness, and desire as if they were the same in each individual, he sometimes suggests that they are not, in fact, qualitatively identical. He claims in E3p56 that “[t]here are as many species of Joy, Sadness, and Desire … as there are species of objects by which we are affected.” He claims that “these … affects … are by nature different, because they arise from causes of a different nature” (E3p56dem), and that “[e]ach affect of each individual differs from the affect of another as much as the essence of the one differs from the essence of the other” (E3p57). Perhaps common properties are similarly not qualitatively identical, but only qualitatively similar. This response, however, is seemingly at odds with epistemological function of Spinoza’s common properties. It is precisely on account of the sameness of common properties across the various bodies (or ideas, etc.) in which they are manifested that they are necessarily conceived adequately (E2pp38–39). If I interpret the properties of all bodies according to the properties of my own when they are merely qualitatively similar, I run the risk of misinterpreting the whole of nature by projecting my own nature upon it.

The third possible response is to claim that common properties do not serve as a counter-example to the uniqueness of possible causes, because, contrary to appearances, each common property does not have many causes, but rather a single, unique cause which is, like the property itself, multiply instantiated. One might argue that in each individual, the property is caused to exist and inhere in that individual by one and the same universal, essential feature. Thus, for example, we would say that all bodies, insofar as they are bodies, share some universal feature, F, which belongs to their essences, and it is in virtue of having feature F that each body also has the property of being capable of various degrees of motion and rest. This is not to say that any two bodies can have
precisely the same essence, but rather that, to the extent that they are bodies, they will share certain essential features, or “partial essences.” In virtue of those shared essential features, it is possible to deduce general truths (concerning common properties) applicable to all bodies. Defending this strategy in detail, however, would require an in-depth investigation that must be set aside for another time. For my present purposes, it suffices to show that the Principle of Unique Causes is not obviously incompatible with what I have argued so far.

Section 3.4: Parallelism, E1a4, and Possible Causes

One potentially important piece of textual evidence of Spinoza’s commitment to the PUC is his causal axiom, E1a4. As translated by Curley, E1a4 reads: “[t]he knowledge [cognitio]\(^{166}\) of an effect depends on, and involves, the knowledge of its cause.” What does it mean for one idea or cognition (cognitio)\(^{167}\) to depend on another? Spinoza’s first uses of E1a4 in E1p3dem and E1p6cdem show that he takes the dependence of one idea on another to entail that the former is understood (intelligi) or conceived (concipi) through the latter. Recall, for example, that Spinoza’s motivation in the TIE for introducing the requirement that a definition must include the proximate cause was that an effect must be conceived through its cause (concipiatur ... per proximam suam causam) (§92 | G II/34/8–9).\(^{168}\) E1a4 appears to indicate, then, that a

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\(^{166}\) In order to be faithful to Curley’s translation, I have retained his use of the term “knowledge” to translate “cognitio,” even though I generally prefer the term “cognition,” since Spinoza allows that there are forms of cognitio which are false. See, e.g. E2Pp40s2.

\(^{167}\) Spinoza uses the terms idea and cognitio interchangeably in E2p7dem and E2p49dem, for example.

\(^{168}\) This requirement introduced in the TIE has been discussed in Sections 2.4 and 2.5.
genetic definition should not include just any possible cause of the thing, but a specific one, *its* cause, the actual cause of the object.

To be thorough, however, it should be noted that while Spinoza uses the possessive “*its* cause” [suam causam] in the TIE, which suggests a unique cause, and therefore only one possible genetic definition, he does not do the same in E1a4, in spite of what Curley’s translation suggests. Instead, he uses the genitive, writing, “*a cognitione causae dependet …*” which, by grammar alone, could equally be translated as “depends on the cognition of the cause” or “depends on the cognition of a cause.” The second translation, of course, would not imply that the cause must be unique. However, the above noted passage from the TIE offers at least prima facie evidence that the first translation would be more accurate.

Further evidence is available in E1p6c, where Spinoza offers an alternative demonstration of his claim that a substance cannot be produced by another substance. He reasons that “[i]f a substance could be produced by another substance, the knowledge of it would have to depend on the knowledge of its cause [suae causae] (by A4). And so (D3) it would not be a substance.” That is, the substance would be conceived through the other substance that caused it, and it would not be conceived through itself. But if E1a4 only required that the effect be conceived through one of several possible causes, and if the substance itself were one of those possible causes, then this conclusion would not follow. The substance could be caused by another substance, and yet conceived through itself as a possible cause of itself. Notice, moreover, that Spinoza’s *reductio* hypothesis is not even the claim that a substance *is* caused by another substance—it is instead the more modest claim that the substance *could be produced* [potest produci] by another substance.
In other words, Spinoza appears to be claiming in this argument that if another substance were a possible cause of our substance, then our substance would be actually conceived through that substance. It therefore appears that Spinoza took E1a4 to mean that if A is a possible cause of B, then B is conceived through A, at least in the case of substances. Although Spinoza never indicates that E1a4 applies differently to modes than substances, given the differences between the two, one might reasonably demand independent justification of the PUC with respect to modes.

A promising justification can be found in Spinoza’s use of E1a4 in E2p7dem, his argument for his famous doctrine of Parallelism. His reliance on the causal axiom in this argument appears to indicate that the effect must be conceived through a unique cause. The text of E2p7 is the following:

P7: The order and connection of ideas is the same as the order and connection of things.

Demonstration: This is clear from IA4. For the idea of each thing caused depends on the knowledge of the cause of which it is the effect [causae, cuius est effectus] (emphasis added).

This demonstration suggests that E1a4 must be interpreted in such a way that the idea of an effect is not conceived through any one of a number of possible causes, but rather through one cause in particular: the one of which it is, in fact, the effect. If E1a4 were not interpreted in this way, it would provide no assurance that the order and connection of ideas matches the order of things. At best, it would entail that the order and connection of ideas represents one possible causal ancestry of a given idea.
Somewhat more formally, suppose that we have a set of things A, B, and C, and a set of ideas of those things I(A), I(B), and I(C), respectively. Suppose, further, that although B is actually caused by A (and C is caused by B), B also could have been caused by some other thing, X, which does not actually exist. If E1a4 only requires that the idea of the effect depends on and involves only the idea of at least one possible cause, then while the actual order and connection of things is A→B→C, E1a4 would be compatible with more than one ordering of ideas: I(A)→I(B)→I(C) or I(X)→I(B)→I(C). In other words, the state of affairs in which the order and connection of things is A→B→C and the order and connection of ideas is I(X)→I(B)→I(C) would imply no contradiction. But in such a scenario, contrary to E2p7, the order and connection of ideas would not be the same as the order and connection of things. Therefore, to adequately support E2p7, E1a4 must require that the effect be conceived through its actual cause, and not through an alternative possible cause.\[169\]

The evidence is not as straight-forward as it first seems, however. Other scholars have pointed out that E2p7dem cannot stand on the strength of E1a4 alone. Spinoza assumes in this demonstration, for example, that there are ideas of things, a gap that can

\[169\] It is worth noting that most recent reconstructions of E2p7dem, which vary widely in their interpretations of the argument, implicitly assume that E1a4 specifies conception through the idea of the thing’s actual cause. Many scholars have thus been taking the PUC for granted without realizing it. See, for example, Curley’s *Spinoza’s Metaphysics*, pp. 119–126; Bennett’s *Study*, pp. 127–130; Della Rocca’s *Representation*, pp. 22–23; Melamed’s *Spinoza’s Metaphysics: Substance and Thought*, p. 147; and Morrison’s “Restricting Spinoza’s Causal Axiom,” pp. 54–57.
be filled by E2p3. Perhaps E2p7 can be defended even if E1a4 allows for conception through merely possible causes, as long as the “slack” is picked up by other propositions. Working with the argument above, the trick is to distinguish between the actual and merely possible causal series. Given the series of things, \(A \rightarrow B \rightarrow C\), E1a4 tells us that, since each thing must be conceived through a possible cause and the possible causes of B are A and X, the series of ideas could be \(I(A) \rightarrow I(B) \rightarrow I(C)\) or \(I(X) \rightarrow I(B) \rightarrow I(C)\). E2p3 tells us that, since A exists, \(I(A)\) exists. Since \(I(A)\) exists, it must be contained in the series of ideas, and so the series of ideas must be \(I(A) \rightarrow I(B) \rightarrow I(C)\) and not \(I(X) \rightarrow I(B) \rightarrow I(C)\). Therefore, the order and connection of ideas is the same as the order and connection of things, and we did not have to assume the truth of the PUC.

The trouble with this argument is that, while it follows from E2p3 that \(I(A)\) exists, it does not also imply that \(I(X)\) does not exist, or that a similar argument could not be constructed on the basis of \(I(X)\). In fact, Spinoza argues in E2p8 that “[t]he ideas of singular things, or of modes, that do not exist must be comprehended in God’s infinite idea in the same way as the formal essences of the singular things, or modes, are contained in God’s attributes.” To return once again to E5p29 and E5p29s, Spinoza claims that “[i]nsofar as the mind conceives the present existence of the body, it conceives duration, which is determined by time” (E5p29), but

\[\text{w}e \text{ conceive things as actual in two ways: either insofar as we conceive them to exist in relation to a certain place or time, or insofar as we conceive them to be}\]

170 “In God there is an idea of his essence and everything that follows from his essence.” Since everything that exists follows from God’s essence (E1p15 and E1p16), this proposition implies that in God there are ideas of everything that exists. See, e.g., Bennett’s Study, pp. 127–130 and Della Rocca’s Representation, pp. 22–23.
contained in God and to follow from the necessity of the diving nature. But the
things we conceive in the second way as true, or real, we conceive under a species
of eternity … (E5p29s)

So, while X does not “exist” in the sense that it does not have duration (E2p8dem), I(X)
does exist in the sense contained in God’s infinite idea in the same way that the formal
essence of X is contained in (one of) God’s attributes.

In spite of this problem, it also follows from E2p8 that a difference between I(A)
and I(X) remains, and so it may still be possible to demonstrate E2p7 without relying on
the PUC. While I(X) is “merely” comprehended in God’s infinite idea, I(A) is contained
in God’s idea (E2p3) such that it also has duration.171 So, even though B has two possible
causes, and there are two corresponding possible series, E2p7 may nevertheless be true in
the more specific sense that the order and connection of durational things is the same as
the series and order of durational ideas. In this sense, E2p7 may be compatible with the
existence of many alternative series of non-durational ideas that are comprehended in
God’s infinite idea in the manner described in E2p8 and E2p8cs. In other words, if the
series of things existing in duration is A→B→C, then E2p7 implies that the series of
things existing in duration is I(A)→I(B)→I(C), but it does not yet rule out the possibility
that the series I(X)→I(B)→I(C) is also comprehended in God’s infinite idea without
duration. Borrowing a Leibnizian concept, the series I(X)→I(B)→I(C) might be thought
of as an alternative possible world or history in God’s mind that was rejected in favor of

171 Spinoza argues in E1p11dem that if the thing does not actually exist (i.e., does not have duration), then
the idea of the thing similarly does not actually exist (i.e., does not have duration), even though it is
comprehended in God’s infinite idea (E2p8).
the actual world.\textsuperscript{172} Even though each thing has a single adequate cause and is conceived through a single adequate cause in duration, E1a4 and E2p7 do not yet, on their own, rule out the possibility that the thing might have had a different cause and been conceived through a different cause. So, although the PUC has been implicitly taken for granted in many reconstructions of E2p7\textsuperscript{dem},\textsuperscript{173} and E2p7 at first appears to entail the PUC, demonstrating Spinoza’s commitment to this principle with respect to modes is not as straight-forward or trivial as it may seem.

Section 3.5: Necessitarianism, the PSR, and the Principle of Unique Causes

Another possible route to establishing that an object has but one possible cause is to appeal to Spinoza’s Necessitarianism, which rules out merely possible, non-actual series of things and ideas. The doctrine of Necessitarianism is generally understood to mean that “every actual state of affairs is logically or metaphysically necessary, so that the world could not have been any different than it is—or to adopt a Leibnizian mode of expression, that the actual world is the only possible world.”\textsuperscript{174} In contrast, the weaker doctrine of determinism means that each actual state of affairs is necessitated by prior states of affairs and laws of nature.\textsuperscript{175} Under determinism, each actual state of affairs is only conditionally necessary, such that any actual state of affairs could have been

\textsuperscript{172} Those readers who take Spinoza to be a necessitarian may balk at this suggestion. I also consider Spinoza a necessitarian, and will thus examine that doctrine as a possible basis for the PUC in the following section. At this stage, I mean to consider the implications of E1a4 and E2p7 for the PUC in isolation.

\textsuperscript{173} See footnote 169.


\textsuperscript{175} Garrett, “Spinoza’s Necessitarianism,” p. 191.
different if the past or laws of nature had been different. If we suppose, as Necessitarianism entails, that the infinite series, or causal chain, of finite modes (E1p28) is the only one possible, it follows that each object could not have had any other cause than the one it actually did. If it were possible for an object to have had a different cause than it in fact does, a different causal series would be possible, which is incompatible with Necessitarianism.\footnote{While there are scholars who maintain that Spinoza espoused only determinism and not necessitarianism (see, e.g., Curley and Walski’s “Spinoza’s Necessitarianism Reconsidered”), I believe, as I will explain below, that one of Garrett’s arguments shows that Spinoza was indeed committed to Necessitarianism.}

One of Don Garrett’s most interesting arguments for Spinoza’s Necessitarianism gives E2p7 another chance to prove its mettle in the pursuit of the Principle of Unique Causes. It invokes Spinoza’s Parallelism and the Principle of Sufficient Reason (PSR) as justification of the claims:

\begin{enumerate}
\item Everything that falls under the infinite intellect is actual. \\footnote{Garrett, “Spinoza’s Necessitarianism,” p. 207.}
\item Everything that is possible falls under the infinite intellect. \footnote{Garrett, “Spinoza’s Necessitarianism,” p. 207.}
\end{enumerate}

And these commitments together entail that:

\begin{enumerate}
\item Everything that is possible is actual. \footnote{Garrett, “Spinoza’s Necessitarianism,” p. 207. It should be specified that the Parallelism justifying this claim is the Ideas-Things Parallelism of E2p7, and not the Inter-Attributes Parallelism of E2p7’s, since the}
\end{enumerate}
possible being, and since E2P7c entails that God already has an idea of each actually existing thing, the only ideas left to consider would be those of possible, but non-actual beings. By E1p28, if there are any such ideas, they would have to represent objects belonging to a possible, but non-actual, series of finite modes. Garrett then asks: if there are such possible, non-actual series of finite modes, what prevents the existence of the corresponding series of ideas representing them? He argues that there are only three possible causes:

(i) the cause is to be found in the attribute of Thought itself;
(ii) the cause is to be found in the non-existence of the objects of ideas;
(iii) there is no cause, but the non-existence of the series of ideas is a brute, contingent fact.

latter arguably depends on E1p16 (see Melamed’s Spinoza’s Metaphysics: Substance and Thought, pp. 150–151), and Garrett’s line of argument using E2p7 is allegedly independent of E1p16. It should be clear, however, that the Ideas-Things Parallelism is, in fact, the appropriate justification of (6), since it asserts a correspondence between ideas in the infinite intellect and actually existing things.


It is somewhat puzzling that Garrett specifies (i) and (ii) as the only explanatory options. To show that the PSR has been violated, one must demonstrate that all explanatory options have been exhausted. Given (i), the natural choice for (ii), i.e., the choice that would ensure that all explanatory options have been considered, would be “the cause is to be found outside the attribute of Thought.” Garrett’s specification of (ii) seems to only identify a specific set of possible causes outside the attribute of Thought, and not all possible causes outside the attribute of Thought. Nevertheless, the explanatory barrier between the attributes (in E1p10, E1p10s, and E2p6) is equally effective at eliminating (ii) as an explanatory option on either of these specifications.

He maintains that none of these causes are compatible with Spinoza’s views.\footnote{Garrett, “Spinoza’s Necessitarianism,” p. 208.} Since Spinoza’s version of the PSR requires a cause not only for the existence, but also for the nonexistence of anything (E1p11dem), and nothing can possibly cause the non-existence of the series of ideas, Garrett concludes such a series of ideas would have to actually exist, and E2p7 would require that the corresponding objects exist as well, contradicting the hypothesis that they are non-actual.

Based on what we saw concerning E2p7 in the previous section, the reader may well worry that E2p8 will pose a problem for this argument. Recall that according to this proposition, the ideas of modes that do not exist are comprehended in God’s infinite idea in the same way that the formal essences of those modes are contained in God’s attributes. Contrary to step (6), then, it appears that there are indeed ideas in the infinite intellect of things that are not actual. Garrett addresses this complication in footnote 21 of “Spinoza’s Necessitarianism.” He argues that because these ideas are of formal essences, they are ideas of “really existent thing[s],” and E2p8 is therefore consistent with (6).

Although I agree with Garrett that the ideas described in E2p8 are ideas of formal essences, and that these formal essences are really existent things, by taking advantage of the ambiguity of actuality, Garrett substantially changes the argument. When the notion of actuality at work in (6) is thus expanded to accommodate E2p8, the consequence is that (8) must be understood as claiming that “everything that is possible exists either in duration or as an eternal essence contained in God’s attributes.” This claim, however, hardly seems worthy of the title “Necessitarianism.” Such a claim is compatible with the proposition that Frank Sinatra might never have existed, since this proposition means (in
this context) that Frank Sinatra might never have existed in duration, but only insofar as his formal essence is contained in God’s attributes. Indeed, this revised understanding of (8) is weaker than determinism, since it does not, by itself, require anything to exist, or exclude anything from existing, in duration, irrespective of any antecedent conditions; it is satisfied so long as the formal essence of each possible thing is contained in God’s attributes.

Nevertheless, it may be possible to preserve Garrett’s argument by appropriately adjusting its terminology. Step (8) should instead understood as claiming that the infinite series of finite causes existing in duration is the only series of causes that can possibly exist in duration. To adjust Garrett’s key question, we must ask: if other possible series of finite modes could exist in duration, what prevents the existence of the corresponding series of ideas from existing in duration? Garrett’s candidate causes can be adopted largely as-is:

(i) the cause of the non-durationality of the series of ideas is to be found in the attribute of Thought itself;
(ii) the cause is to be found in the non-durational existence of the objects of ideas;
(iii) there is no cause, but the non-durational existence of the series of ideas is a brute, contingent fact.

Garrett refutes (iii) on the basis that “if the existence or non-existence of a particular series of finite modes is an independent matter of chance within each attribute,” then the correspondence of the series of modes under each attribute, and hence the truth of E2p7,
would be a contingent matter of chance (contrary to E2p7dem). Similar reasoning refutes (iii)\(^a\). He refutes (ii) on the basis that it would violate Spinoza’s ban on cross-attribute causality in E2p5.\(^b\) Finally, he refutes (i) on the basis that

if the non-existent series of finite modes is indeed a genuinely possible series, then the series of ideas of those modes must be a genuinely possible series of finite modes of thought; and hence we cannot say that the idea is prevented from existing by the attribute of Thought itself.\(^c\)

Although Garrett’s reasoning against (iii) is compelling, his arguments against (i) and (ii) are problematic. While it is true that E2p5 prohibits cross-attribute causality, given the hypotheses that the series of things in question does not exist in duration, E2p7 and E2p8 necessarily imply that the series of ideas of those things also do not exist in duration. In spite of the causal barrier between the attributes, Spinoza frequently uses facts about modes under one attribute to infer corresponding facts about the modes under other attributes, without thereby assuming any causal relationship between the two. A fourth possibility that Garrett seems to neglect, then, is that the non-durationality of the series of ideas is not a brute, contingent fact (which is incompatible with E2p7), since it is implied by the non-durationality of the corresponding series of finite things, but that it is also not caused by anything. To exclude this possibility, Garrett might appeal to Spinoza’s Principle of Sufficient Reason (PSR), which requires a cause not only for the


existence, but also for the non-existence, of any given thing (E1p11dem). E2p5 thus leaves our reconstruction with (iₐ) as the last option.

At this stage, however, it becomes evident that Garrett’s argument does not truly depend on E2p7, and moreover, it is circular. To translate Garrett’s argument against (iₐ):

if the non-durational series of finite modes is indeed genuinely capable of existing in duration, then the series of ideas of those modes must be genuinely capable of existing in duration; and hence we cannot say that the idea is prevented from existing in duration by the attribute of Thought itself. The key assumption of this argument is that if the series of ideas is genuinely capable of existing in duration, then nothing (in the attribute of thought—and therefore nothing at all, given the explanatory barrier) can prevent the series of ideas from existing in duration. Recall, firstly, that the question of Necessitarianism really concerns whether any non-durational series of things could possibly exist in duration, and so this assumption may as well be framed in terms of those things, rather than the ideas of those things. The invocation of E2p7 therefore seems unnecessary. In that case, our assumption is: if a non-durational series of finite things is genuinely capable of existing in duration, then nothing (in the relevant attribute, and so nothing at all) can prevent that series from existing in duration. Once combined with Spinoza’s PSR, however, this assumption is nothing other than the thesis of Necessitarianism itself, and so it appears that Garrett’s argument is circular.

It is unclear, moreover, why Garrett believes that being “genuinely possible” should mean “nothing can prevent it from existing.” A more plausible understanding of “genuinely possible,” in this case, might be (more conservatively) that its essence does not involve a contradiction. Under this interpretation, we must do some further work with
the PSR to show that, in fact, nothing can prevent this series of things from existing in
duration. As Garrett keenly points out in his article, “Spinoza’s ‘Ontological’ Argument,”
the clause of the PSR requiring a cause for the non-existence of anything can be
interpreted in at least two different ways: the cause of a thing’s non-existence could be
the non-existence of a sufficient cause, or more strictly, the cause of a thing’s non-
existence could only be some other, actually existing thing.187 I believe that, contrary to
what Garrett assumes, on either interpretation of this clause, a cause of the non-
durationality of the series things can be found.

If we adopt the weaker interpretation that the non-existence of a sufficient cause
is itself a sufficient cause for the non-existence (in duration) of a thing, the cause is to be
found in the attribute of Thought after all. It is, simply, the non-existence of any
sufficient cause in the attribute of Thought for that series of ideas. Garrett might object
that taking this stance makes the allegedly possible series of things impossible, contrary
to the hypothesis that it is possible. After all, Spinoza claims in E1a3 that “if there is no
determinate cause, it is impossible for an effect to follow.” How we understand the
impossibility of this series of things depends, however, on the scope of our modal
operators. Let us suppose that A is the actual series of things B is a possible series of
things. If it were implied by the PSR and E1a3 that: if there is no sufficient cause for B,
then necessarily (B does not exist in duration), then we could conclude from the
supposition that there is no sufficient cause for B that, contrary to our hypothesis, B is

non-durationality could be the non-durationality of a sufficient cause, or more strictly, the cause of a thing’s
non-durationality could only be some other thing existing in duration.
indeed impossible. On the other hand, if the PSR and E1a3 imply that: necessarily (if there is no sufficient cause for B, then B does not exist in duration), then we can only conclude that B does not, in fact, exist in duration. B is only impossible if it is also impossible for a sufficient cause of B to exist in duration. To that extent, we can say that B is a non-actual, but possible, series of causes, and Necessitarianism remains unproven.

Suppose we adopt the stronger interpretation of the PSR and say that a thing can only be caused not to exist by an existing thing. In this case, the cause of the non-existence in duration of the possible series of ideas is to be found, once again, in the attribute of Thought. How could an existing thing exclude or prevent the existence of an infinite series of ideas? I believe the best answer to this question is that some other series

188 Garrett clarifies in private correspondence: “[b]y hypothesis, the attribute of Thought does not necessitate the existence of either of the two ‘possible’ series of ideas (i.e., the actual and the non-actual). So if one is nevertheless impossible due to lack of a ‘sufficient’ cause, then why isn’t the other similarly impossible? Presumably the answer is that Thought provides a sufficient reason for one of them without necessitating it. But then the question is how such a reason can really have been sufficient, since it left open the possibility of an incompatible alternative?” I suggest that, in accordance with the above, we yet lack proof that B is impossible, and secondly, that the sufficient cause of the actual series (A) similarly does not entail that B is impossible unless it is shown that the sufficient cause of A’s existence in duration (which may or may not be the absolute nature of Thought) also exists necessarily. In other words, demonstrating Spinoza’s Necessitarianism requires a more direct proof, in particular, one showing that the series of things existing in duration exists necessarily in virtue of its cause.
of ideas exists, and within each attribute, the existence of any one infinite series of finite modes necessarily excludes the existence of every other series of finite modes.\textsuperscript{189}

One might object that PSR requires that there be a reason or cause for the non-existence of any possible being, but argument seems to merely point out that the possible series in question does not exist and that some other possible series instead exists. This argument therefore does not explain why one possible series exists while another does not. This objection fails, however, because it loses sight of what it is that we are required to explain in the context of this argument. Suppose again that A is the series of finite things existing in duration and B is a different possible series. Since we have assumed that the PSR is true and that A exists in duration, it follows that there is a sufficient cause for A’s existence. Furthermore, since A’s existence in duration is incompatible with B’s existence in duration, the sufficient cause of A’s existence is also a sufficient cause of B’s non-existence. Garrett’s argument does not require us to find the reason for A’s existence, whatever it might be, but rather a reason for B’s non-existence—and he claims that there can be none. My argument amounts to the claim that, once the existence of A has been assumed as a fact with its own explanation, the sufficient reason for the non-existence of B has already been provided.

This reasoning might be clarified through the following analogy. Suppose I look out my apartment window and wistfully ask myself, “Why aren’t there any trees out there?” The answer to this question (at least in the sense of an efficient cause, if not a final cause) is that there is instead a parking lot where the supposed trees would be, and

\textsuperscript{189} This does not entail, however, that series of ideas, or idea-aspects, from other attributes can exclude series of ideas, or idea-aspects, within a given attribute.
the parking lot was paved by such-and-such a company so many years ago. Whatever explains the existence of the parking lot at the same time explains the non-existence of the trees, since the two are incompatible (at least it could not be *that* parking lot if it did include trees). Similarly, the existence of each series is mutually exclusive, because each series is the sum total of all ideas, ordered by causal relations, that ever have or will exist in duration; adding or subtracting any member from the series results in a numerically different series.

So, if the actually existing series, A, has a reason for its existence, as the PSR requires, that same reason explains the non-existence of every other series. Like the previous argument involving the weaker interpretation of the PSR, it still has not been shown that B is therefore impossible—that would require a direct proof of Necessitarianism by demonstrating A’s necessity by showing that its cause (or another antecedent cause downstream) exists necessarily. So, just as Spinoza’s Parallelism does not imply the PUC, it similarly does not imply Necessitarianism.

Thankfully, however, Garrett also provides a more successful and textually grounded argument for Necessitarianism on the basis of E1p16. Spinoza writes:

P16: From the necessity of the divine nature there must follow infinitely many things in infinitely many modes, (i.e., everything which can fall under an infinite intellect.)

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I am sympathetic with Garrett’s suggestion, shared by Carriero (“Spinoza’s Views on Necessity,” pp. 79–83), that the actual series is necessitated by the fact that it expresses the most reality and perfection (“Spinoza’s Necessitarianism,” p. 197).
Dem.: This Proposition must be plain to anyone, provided he attends to the fact that the intellect infers from the given definition of any thing a number of properties that really do follow necessarily from it (i.e., from the very essence of the thing); and that it infers more properties the more the definition of the thing expresses reality, i.e., the more reality the essence of the defined thing involves. But since the divine nature has absolutely infinite attributes (by D6), each of which also expresses an essence infinite in its own kind, from its necessity there must follow infinitely many things in infinite modes (i.e., everything which can fall under an infinite intellect), q.e.d.

Garrett points out that this demonstration plausibly includes the following commitments:

1. Everything that falls under an infinite intellect follows from the necessity of the divine nature.
2. “The necessity of the divine nature” is something necessary.
3. Whatever follows from something necessary is itself necessary.
4. Everything that is actual falls under the infinite intellect.\(^{191}\)

And these commitments together entail that:

5. Everything that is actual is necessary.\(^{192}\)

Importantly, as Garrett also explains, E1p16 forms the primary basis of of E1p29 and E1p33, where Spinoza ultimately concludes that “[t]hings could have been produced by God in no other way, and in no other order than they have been produced” (E1p33).

Garrett’s analysis of Spinoza’s terminology shows that the relevant “things” most likely

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include finite modes existing in duration. E1p16 thus implies that the actual series of finite modes existing in duration could not have been different, and no other series of finite modes could have existed in duration. The Principle of Unique Causes thus follows, since the possibility of having a different cause would imply the possibility that things could have been produced differently than they actually were, contrary to E1p33.

While this route of justification is effective, it is also not entirely satisfying with regard to our present purposes, because it does not depend on the relationship between a thing’s essence and its cause. It does show that each object has only one possible cause, but such considerations tell us little about the question of whether anything about the effect (or the relationship of the effect to the cause) demands that it can only have one possible cause. Consider what explains Spinoza’s Necessitarianism, according to the above argument. It seems that the core principles that explain Spinoza’s Necessitarianism are fairly simple: God exists necessarily (2), everything that exists is caused to exist by God ((1) & (4)), and effects follow from their causes necessarily (3). It is the directional necessity of the “follows from” or cause-to-effect relationship that allows God’s necessity to “trickle down” to the finite modes, so to speak. Notice that it is not the requirement of a unique cause to each effect, but rather of a unique effect to each cause,

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194 I have modified Garrett’s reconstruction by invoking the relationship of causation where he invokes the “follows from” relation. I believe that, for our present purposes, there is little risk in doing so. Spinoza apparently indicates that the manner in which modes, both finite (E1p16c) and infinite (Elapp | G II/80/15–22), follow from the necessity of God’s nature is by way of causation. For detailed arguments for the conclusion that modes follow from God by way of efficient causation, consider Melamed’s Spinoza’s Metaphysics: Substance and Thought, pp. 63–66.
which is operative here. So, although Spinoza’s Necessitarianism commits him to the Principle of Unique Causes, this argument tells us relatively little about the effect-to-cause relationship demanded by the essences of finite modes. Another demonstration of the PUC is therefore desirable.

Let us consider whether the Principle of Unique Causes might follow from the Principle of Sufficient Reason. Can we construct a simple scenario in which the PUC is false but the PSR is true? I believe so. Let $\varphi_a$ be some arbitrary finite mode. Suppose that $\varphi_a$ has two possible adequate causes, finite modes $\varphi_b$ and $\varphi_c$. The PSR requires that $\varphi_a$ has a cause, so either $\varphi_b$ is the actual cause of $\varphi_a$ or $\varphi_c$ is the actual cause of $\varphi_a$. Suppose that $\varphi_b$ is the cause (the reasoning is the same for the case in which $\varphi_c$ is the cause). Now, at this point, it might be tempting to argue that the PSR also requires that there must be some reason explaining why $\varphi_b$ rather than $\varphi_c$ is the cause, but by claiming that they are both possible causes, we have the result that no fact about $\varphi_a$ can provide any such reason, and the PSR is therefore false. The fault in this argument would be the assumption that some fact about $\varphi_a$ must explain why $\varphi_b$ is the cause. Since the effect follows necessarily from a given cause (E1a3), the question of why $\varphi_b$ caused $\varphi_a$ to exist reduces to the question of why $\varphi_b$ exists. That question is answered, as the PSR (and E1p28) requires, by the existence of some finite mode $\varphi_d$, which is the cause of $\varphi_b$’s existence, and so on, ad infinitum. Thus, we have a scenario in which the PSR is true, but the PUC is false.

\[195\] I assume in this demonstration that $\varphi_a$ exists, and therefore the distinction between the strong and weak interpretations of the PSR discussed above is not relevant, since that distinction concerns what is necessary to cause the non-existence of a thing.

\[196\] E1P28 requires that $\varphi_b$ and $\varphi_c$ be finite modes.
Whether the PSR is truly satisfied in this scenario depends, however, on whether it requires the existence of a necessary being, a question that often arises in cosmological arguments. If we consider an infinite series of causes and effects, each of which are individually contingent, each individual thing would have a sufficient cause in the immediately prior thing. Some have suggested that, even under these circumstances, the infinite series itself, considered as a whole, requires an explanation, and so, without a necessary being in which to ground the series, the PSR remains unsatisfied. It might therefore be controversial whether such an infinite series can be properly considered a “thing” falling under the purview of the PSR. Alternatively, one might pose a similar objection, ignoring the thing-ness of an infinite series, by challenging the sufficiency of any individual cause, because its effect might not have existed given an infinite set of counterfactuals (i.e., the effect would not have existed if its cause had not existed, and that cause would not have existed if its cause had not existed, and so on). If the infinite series were itself necessitated by a necessarily existing being, no other series could have possibly existed, and there would be no possible world in which the aforementioned set of counterfactuals would obtain.

Although Spinoza clearly does posit the existence of a necessary being, it is less clear whether his justification of this belief is a version of the PSR requiring, by itself, a necessary being. Spinoza clearly does employ the PSR in at least one, if not more, of his proofs of the existence of God, but it is not formulated in a way that obviously requires the existence of a necessary being: “[f]or each thing there must be assigned a cause, or reason, as much for its existence as for its nonexistence” (E1p11dem). Spinoza

197 See Garrett’s “Spinoza’s ‘Ontological’ Argument.”
relies heavily on the reasoning that nothing can prevent God’s existence, rather than the notion that an infinite series of individually contingent causes and effects would lack an adequate explanation for its existence.

In any case, even once we grant the existence of a necessary being, we remain in precisely the same position with respect to the PUC that the proof from Necessitarianism left us. The PUC may be true in Spinoza’s system, but it has yet to provide us with much information about the effect-to-cause relationship and the essences of things.

Section 3.6: “Involves” and the Principle of Unique Causes

I believe, however, that a second look at E1a4 can help reinforce the idea that Spinoza would accept the PUC independently of these considerations concerning Necessitarianism and the PSR. Recall that E1a4 states that the cognition of the effect depends on and involves the cognition of the cause. We have seen that his use of E1a4 in the Ethics strongly suggests, though perhaps not yet conclusively, that the idea of the effect is uniquely conceived or understood through the idea of the cause. However, Spinoza also provides, in E2p49dem, a more explicit statement of what he means by “involves” (involvere):

[t]his affirmation [that the three angles of a triangle are equal to two right angles] involves the concept, or idea, of the triangle. For, to say that A must involve the concept of B is the same as to say that A cannot be conceived without B (emphasis added). Further, this affirmation (by A3) also cannot be without the idea of the triangle. Therefore, this affirmation can neither be nor be conceived without the idea of the triangle.
Haec affirmatio conceptum, sive ideam trianguli involvit, hoc est, sine idea trianguli non potest concepi. Idem enim est, si dicam, quod A conceptum B debeat involvere, ac quod A sine B non possit concepi. Deinde haec affirmatio (per Axiom. 3. hujus) non potest etiam sine idea trianguli esse. Haec ergo affirmatio sine idea trianguli nec esse, nec concepi potest.

This explanation of the term “involves” adds modal force to our understanding of E1a4. The idea of the effect is not only conceived through the idea of its cause, but it must be conceived through the idea of its cause in the sense that it cannot be conceived without it.

One might object that this interpretation of “involves” is unwarranted by the text, because what Spinoza says is that A must involve (debeat involvere) the concept of B, if and only if, A cannot be conceived without B. That is, A must involve B if and only if A is necessarily conceived through B, and perhaps more restrictively, A involves B if and only if A is conceived through B. Spinoza’s use of the term, however, does not bear out this more restricted interpretation. He writes in E1d1, for example, that “[b]y cause of itself, I understand that whose essence involves existence, or [sive] that whose nature cannot be conceived except as existing.”198 Similarly, in E1a5: “[t]hings that have nothing in common with one another also cannot be understood through one another, or [sive] the concept of the one does not involve the concept of the other.”199 And in E1a7: “[i]f a thing can be conceived as not existing, its essence does not involve existence.”200

198 Per causam sui intelligo id, cujus essentia involvit existentiam, sive id, cujus natura non potest concepi, nisi existens.

199 Quae nihil commune cum se invicem habent, etiam per se invicem intelligi non possunt, sive conceptus unius alterius conceptum non involvit.

200 Quicquid, ut non existens, potest concepi, ejus essentia non involvit existentiam.
think we can therefore safely interpret Spinoza as having intended to say: A involves B, if and only if, the idea of A cannot be conceived without the idea of B.

With this understanding of “involves” in place, then, E1a4 presents more conclusive evidence that, in Spinoza’s view, the nature of causation and conception require that the effect can only be conceived through its cause, or the effect is inconceivable without the idea of its cause. Is this sufficient to establish the PUC? Suppose that A is the adequate\textsuperscript{201} cause of B. We wish to know whether it is possible for some other object, C, to have been the cause of B. Let us accept that a scenario is possible if and only if it is conceivable.\textsuperscript{202} Then, it is possible for C to have been the cause of B if and only if it is conceivable for C to have been the cause of B. To conceive of the scenario in which C, and not A, is the cause of B, we must conceive, or understand, B through C, and not through A (E1a4). But A is the cause of B, and B therefore involves A (E1a4). B thus cannot be conceived except through A (definition of “involves”). B therefore cannot be conceived through C, and (by E1a4) it is not conceivable for C to

\textsuperscript{201} E3d1: “I call that cause adequate whose effect can be clearly and distinctly perceived through it. But I call it partial, or inadequate, if its effect cannot be understood through it alone.” I believe that, in E1a4, where Spinoza claims that the effect depends on and involves the cause, he has the thing’s adequate cause in mind. If E1a4 were true in the case of mere partial causes, then the demonstration of E2p7 would fail, because the order and connection of ideas could fail to be the same as the order and connection of things insofar as the order of ideas could fail to represent all of an object’s causes. Furthermore, it is appropriate to focus on a thing’s adequate cause in any attempted demonstration of the PUC, because, with regard to partial causes, the PUC is trivially false. That is to say, if we suppose that A is a partial cause of B and ask whether B could have had a different partial cause than A, the answer is necessarily, “yes,” because it actually does have partial causes other than A, precisely because A is only a partial cause of B.

\textsuperscript{202} I will discuss the nature of this claim in more detail in the following section.
have been the cause of B. Consequently, it is impossible for C to have been the cause of
B, and A is the sole possible cause of B.

For the sake of completeness, we should also consider are two further cases which
must be ruled out in order for this argument to be successful: (i) that B is caused by the
disjunction “A or C” and (ii) that B is caused by the conjunction “A and C.” I will
consider (i) first. Regarding (i), it should first be noted that A and C are objects (modes)
and not propositions. It is therefore difficult to say what the disjunction of two objects is
supposed to be. I suggest that the most plausible approach is to designate the object-
disjunction A-or-C as “X,” and say that X exists whenever A exists or C exists. Now, I
am tempted to suggest that, if Spinoza were in my position, he would dismiss this object-
disjunction as a mere ad hoc decision to call two different objects (A and C) by the same
name (“X”). No new object has been introduced, and the argument should remain
unchanged. Let us suppose, then, that this object-disjunction is no mere naming
convention, but rather, X is a fourth member of our micro-ontology. Whenever A exists
or C exists, X also exists, but in neither case is X identical with A or C. If, for example,
A, B, C, and X are conceived under the attribute of extension, X is co-located (and non-
identical) with A whenever A exists, and similarly for C.

Supposing, then, that A is the actual adequate cause of B, is X a possible adequate
cause of B? Let us suppose that X is a possible cause of B. It was shown in Section 3.1
that E1a3 entails that each cause has only one possible complete effect, in this case, B.
Furthermore, since X actually exists (given that A exists), it follows again from E1a3 that
B necessarily follows from X. But now, B is the effect of two causes, A and X, each of
which must be regarded as partial causes of B (E3d1), which is contrary to the hypothesis
that A is the adequate cause of B. Therefore, X, the object-disjunction, A-or-C, is not a possible adequate cause of B.

Let us now consider the second case, (ii), in which B is caused by the conjunction “A and C.” While conjunction is, like disjunction, a linguistic concept, it has the precedent of a clear metaphysical analogue: mereological summation. We can thus introduce the sum, or composite, consisting of A and C as parts, called “Y.” Supposing again that A is the adequate cause of B, is Y a possible adequate cause of B? Again, the answer should be, fairly clearly, “no.” Supposing again that a scenario is possible if, and only if, it is conceivable, we must determine whether it is conceivable that Y is the adequate cause of B. If we conceive of Y as the adequate cause of B, then, since A and C are parts of Y, we conceive of A and C as (proper) partial causes of B (E3d1). Now, since a merelogical sum exists only if its parts exist, it follows that to conceive of Y as existing, we must conceive of A as existing. However, from a given determinate cause, the effect follows necessarily (E1a3), so, B must be conceived as following from A, and in particular, it must be conceived as following from A as its adequate cause (E1a4, see footnote 201 above). Therefore, A must be conceived both as a (proper) partial cause (together with C) and as the adequate cause of B. But this is contradictory, for A cannot be a proper part of itself. Therefore, the mereological sum of A and C cannot be conceived as an adequate cause of B, and it is not possible that the mereological sum of A and C should be an adequate cause of B. Part of what these demonstrations thus show is that Spinoza’s definitions of adequate and partial causes rule out cases of causal overdetermination. Moreover, E1a4 entails the Principle of Unique Causes, i.e., each object has one and only one possible adequate cause.
Section 3.7: Spinoza’s Modal Semantics

In this section, I will address a possible objection to the argument for the PUC just presented above and hopefully thereby also enrich our understanding of that argument and Spinoza’s modal semantics. This objection takes aim at the premise that we may “accept that a scenario is possible if and only if it is conceivable.” Such a claim raises plenty of philosophical questions, and given Spinoza’s Necessitarianism, it is not immediately clear whether there is any meaningful sense in which one can talk at all about the possibility of any non-actual circumstances. I believe, however, that Spinoza himself has provided the basic (and somewhat deflationary) modal-semantic resources necessary for this argument. The relevant passages are the following:

E1p33s: A thing is called necessary [necessaria] either by reason of its essence or by reason of its cause. For a thing’s existence follows necessarily either from its essence and definition or from a given efficient cause. And a thing is also called impossible [impossibilis] from these same causes—viz. either because its essence, or definition, involves a contradiction, or because there is no external cause which has been determined to produce such a thing.

But a thing is called contingent [contingens] only because of a defect of our knowledge. For if we do not know that the thing’s essence involves a contradiction, or if we do know very well that its essence does not involve a contradiction, and nevertheless can affirm nothing certainly about its existence, because the order of causes is hidden from us, it can never seem to us either necessary or impossible. So we call it contingent or possible [possibilem].
E4d3: I call singular things contingent [*contingentes*] insofar as we find nothing, *while we attend only to their essence*, which necessarily posits their existence or which necessarily excludes it.

E4d4: I call the same singular things possible [*possibiles*], insofar as, *while we attend to the causes from which they must be produced,*²⁰³ we do not know whether those causes are determined to produce them. (emphasis added in each of the preceding quotations)

As I understand these passages, Spinoza’s “truth-makers” for modal discourse are not possible worlds, but rather there are four possible targets for the interpretation of modal claims: the essences of things (E), the order of causes in nature (O), our knowledge states concerning the essences of things (KE), and our knowledge states concerning the order of causes in nature (KO). So, for example, the modal claim, “the cat in the box might be alive,” can be interpreted in four different ways:

**Cat\_E**: The essence of the cat in the box and the essence of the box do not entail that the cat is not alive.

**Cat\_O**: The complete causal history of the universe prior to the relevant point in time does not entail that the cat in the box is not alive.

**Cat\_KE**: What we know about the essence of the cat in the box and the essence of the box does not entail that the cat is not alive.

²⁰³ Note that the phrase, “*causas, ex quibus produci debent,*” itself suggests that objects are necessarily produced by unique causes or sets of causes.
CatKO: What we know about the complete causal history of the universe prior to the relevant point in time does not entail that the cat in the box is not alive.

Interpreted according to the order of causes in nature and Spinoza’s determinism, there will be few, if any, true modal claims that are merely possible and not also necessary. On the other hand, our vast ignorance entails that there will be many such claims if we interpret them according to our knowledge states concerning essences or our knowledge states concerning the order of causes in nature, regardless of whether Spinoza accepts Necessitarianism. Furthermore, if we assume that the essences of the relevant objects underdetermine aspects of their relationships to one another (a possibility strongly suggested by E4d3), we will also find true possibilities that are not also necessities when interpreted in this way.

With respect to the above argument for the PUC, the question is now: which of the four interpretive schemata is appropriate? We can quickly rule out KO by noticing that, in the argument presented, it is taken as a premise that A is the actual adequate cause of B, and we wish to know whether it is possible for something else, C, to have been the adequate cause of B. Our knowledge state of the order of causes therefore excludes the possibility that C is the cause of B immediately, since we already know that A is the adequate cause. Similar reasoning rules out O as an appropriate interpretive schema. Since the disputed claim concerns the relationship between conceivability and possibility, I suggest that the argument for the PUC would be best emended by interpreting our modal claims using KE, rather than E. The resulting argument, then, is the following:

Part 1:
1. Suppose that A is the adequate cause of B. We wish to know whether it is possible for some other object, C, to have been the adequate cause of B. That is, we wish to know whether it is possible for there to be some object C such that, if C existed, then C would be the adequate cause of B.

2. Let us accept that a scenario is possible if and only if what we know about the essences of things does not entail that the scenario does not obtain (KE).

3. Then, it is possible for C to have been the adequate cause of B if and only if what we know about the essences of A, B, and C does not entail that C is not the adequate cause of B (1, 2).

4. To conceive of the scenario in which C, and not A, is the adequate cause of B, we must conceive, or understand, B through C, and not through A (1, E1a4, exclusivity of adequate causation—see footnote 201).

5. But A is the adequate cause of B, and B therefore involves A (1, E1a4).

6. B therefore cannot be conceived except through A (5, definition of “involves” in E2p49dem).

7. Our knowledge of the essences of B and A therefore entails that B is conceived through A (6, KE).

8. But then, our knowledge the essences of A, B, and C entails that B is not conceived through C (4, 7).

9. It follows that our knowledge of the essences of A, B, and C entails that B is not adequately caused by C (8, E1a4).

10. Therefore, it is not possible for C to have been the adequate cause of B (3, 9).

Part 2:
1. We wish to know whether it is possible for there to be an object-disjunction X such that:

   (i.) X exists if and only if A exists or C exists;

   (ii.) X is identical with neither A nor C;

   (iii.) A and C are both such that:

      (a.) if A exists, then A adequately causes B;

      (b.) if C exists, then C adequately causes B;

   (iv.) X is the adequate cause of B (definition).

2. It is possible for X to be the adequate cause of B if and only if what we know about the essences of A, B, C, and X does not entail that X is not the adequate cause of B (1, KE).

3. Suppose that X is the adequate cause of B (reductio hypothesis).

4. Then X exists (3).

5. Then A exists or C exists (4, 1.i)

6. Suppose A exists (5, separation of cases; the reasoning is the same in the case that C exists).

7. Then A adequately causes B (1.iii.a, 6).

8. B is therefore adequately caused by both X and A (1.ii, 3, 7).

9. B therefore involves both X and A (8, E1a4).

10. B therefore cannot be conceived without conceiving both X and A (9, definition of “involves” in E2p49dem).

11. B therefore both can (3, E3d1) and cannot (10) be conceived through X alone, which is a contradiction.
12. X is therefore not the adequate cause of B (3-11, reductio ad absurdum).

13. It follows that our knowledge of the essences of A, B, C, and X implies that X is not the adequate cause of B (12, E1a4).

14. X is therefore not a possible adequate cause of B (2, 13).

Part 3:

1. We wish to know whether it is possible for there to be a mereological sum Y such that:

   (i.) Y exists if and only if A exists and C exists;
   (ii.) Y is identical with neither A nor C;
   (iii.) A and C are both such that:
      (a.) if A exists, then A adequately causes B;
      (b.) if C exists, then C adequately causes B;
   (iv.) Y is the adequate cause of B (definition).

2. It is possible for Y to be the adequate cause of B if and only if what we know about the essences of A, B, C, and Y does not entail that Y is not the adequate cause of B (1, KE).

3. Suppose that Y is the adequate cause of B (reductio hypothesis).

4. Then Y exists (3).

5. Then both A and C exist (4, 1.i)

6. Then A, C, and Y each adequately cause B (3, 5, 1.iii, 1.ii).

7. B therefore involves A, C, and Y (6, E1a4).

9. B therefore both can (3, E3d1) and cannot (8) be conceived through Y alone, which is a contradiction.

10. Y is therefore not the adequate cause of B (3–9, reductio ad absurdum).

11. It follows that our knowledge of the essences of A, B, C, and Y implies that Y is not the adequate cause of B (10, E1a4).

12. Y is therefore not a possible adequate cause of B (2, 11).

The particular advantage of this argumentative strategy is that, not only does it demonstrate that Spinoza’s understanding of E1a4 commits him to the PUC using a modal-semantic approach native to his philosophical system, but it also helps show, crucially, that E1a4 provides us with information about how Spinoza understood essences. E1a4 tells us that, when we know the adequate cause of a thing, we thereby also know that, by its very nature alone, it could not have had any other cause. This conclusion explains how Spinoza can claim on the one hand that “the true definition of each thing neither involves nor expresses anything except the nature of the thing defined” (E1p8s2 | II/50/23–24; emphasis added), and on the other hand that “the definition of a thing should express its efficient cause” (Ep. 60). It belongs to the essence of each thing to have some particular cause. That is why we ought to use genetic definitions, and that is why genetic definitions must be unique.

Section 3.8: Conclusion

At the end of the last Chapter, we were left with a puzzling and difficult question. Like many of his contemporaries, Spinoza argued that definitions should explain the nature of a thing by deriving it from a cause—or that it should be “genetic.” Surprisingly,
some of those contemporaries, including thinkers who exercised great influence over Spinoza, also maintained that objects can have *more than one* legitimate genetic definition. Would Spinoza have agreed? And in connection with this methodological question, there is a metaphysical one: did Spinoza believe that the essences of objects are so constituted that they can have only one adequate cause, or instead many possible adequate causes? I have argued in this Chapter in favor of the former. Spinoza is committed to the Principle of Unique Causes, the thesis that each thing has one and only one possible adequate cause. Although this Principle has gone unchallenged and unnamed in Spinoza scholarship, the demonstration Spinoza’s commitment to it was surprisingly elusive.

It is surprising, in part, because as I argued in Section 3.2, a philosopher of Spinoza’s ilk would have naturally found this Principle appealing. If the definition of a thing explains its essence and its essence constitutes its identity, one would expect the definition to omit any description that is not necessarily true of its definiendum, including any cause that it did not, in fact, have. In Section 3.3, I tentatively offered several possible responses to the most likely counterexample to this Principle in Spinoza’s work, the so-called “common properties” (*proprietates communes*; E2pp37–39). Although further work on the nature of common properties remains to be done, they should not convince us that Spinoza’s epistemology is incompatible with the PUC.

At first blush, the most plausible starting point for a demonstration of Spinoza’s commitment to the PUC is his causal axiom, E1a4. Indeed, his use of this axiom in some of the earliest demonstrations of the *Ethics* indicates that the PUC must be true of substances, at least. I also argue in Section 3.4 that surprisingly, however, when E1a4 is
interpreted according Spinoza’s use of it in the demonstration of his famous doctrine of Parallelism\(^{204}\) (E1p7dem), the PUC is apparently independent of the causal axiom. In Section 3.5, I consider another, indirect role for Spinoza’s Parallelism. Don Garrett argues that Spinoza’s Parallelism may serve as a basis of Spinoza’s Necessitarianism,\(^{205}\) and I argue that Necessitarianism can indeed serve as a basis for the PUC. However, for reasons similar to those discovered in the previous section, this argument for Necessitarianism fails. Furthermore, I show that the PUC is also independent of Spinoza’s Principle of Sufficient Reason.\(^{206}\) Fortunately, I argue, Garrett provides another argument for Spinoza’s Necessitarianism on the basis of E1p16 that is, in my view successful. As a result, we can conclude that Spinoza is, indeed, committed to the Principle of Unique Causes.

Even so, this demonstration left something to be desired. It depends primarily on the necessity of God’s nature while revealing relatively little about the specific manner in which finite modes depend on their causes. A more informative approach is found by returning once again to our starting point: E1a4. In the demonstration of E2p49, Spinoza tells us that one thing “involves” \([\textit{involvit}]\) another when it cannot be conceived without the other. Thus, as I argue in detail in Section 2.6, when Spinoza claims that the effect depends on and involves the cause (E1a4), it is implied that the effect could not

\(^{204}\) In particular, Spinoza’s Ideas-Things Parallelism, the doctrine that the order and connection of ideas is the same as the order and connection of things.

\(^{205}\) The doctrine that the complete history of the universe could not have possibly been different than it, in fact, is.

\(^{206}\) The thesis that each thing has a cause of its existence, if it exists, and a cause for its non-existence, if it does not exist.
have possibly had any other cause. Finally, in Section 3.7, I take a closer look at the meaning of possibility in Spinoza’s necessitarian context. I present an analysis of Spinoza’s unique and fascinating modal semantics, and I develop detailed reconstructions of my arguments for the PUC in terms of Spinoza’s modal-semantic system. Understood in this light, we find that each thing necessarily has a unique adequate cause in virtue of the structure of essences. Nevertheless, at least two important questions remain. Firstly, is the uniqueness of a thing’s adequate cause a feature that belongs to a thing’s essence itself, or instead a property that follows from the thing’s essence? And secondly, what kind of cause does the Principle of Unique Causes concern? These questions will be addressed in the next Chapter.
Chapter 4: Causes, Essences, and the Laws of Nature

Section 4.1: Introduction

As indicated at the conclusion of the previous Chapter, this Chapter aims to determine whether having a specific cause belongs to the essence or proprietaes of a thing and to delineate the nature of that cause in greater clarity. I argue in Section 4.2 that there are several reasons that allow us to conclude with confidence that having a specific cause does indeed belong to the essence of each thing. To better understand how this feature of essences shapes their nature, I examine four major types of causation that may possibly characterize the cause that belongs to a thing’s essence in Section 4.3. I argue
that, although a thing’s essential cause could potentially be immanent or transitive (depending on whether the thing is a mode of another mode), God, and in particular, God’s attributes considered as an immanent cause of the thing cannot be the essential cause. It is, in fact, a proprietas of each thing to be caused in this manner (Section 4.3.2).

In Section 4.3.3, I explain the manner in which each thing’s actual essence serves as its own conservative cause, and why this type of causation is also a proprietas of each thing. I argue in Section 4.3.4 that a thing’s essential cause is best characterized as procreative—i.e., the cause that is responsible for bringing the thing into existence—and I explain how this finding clarifies the relationship between each thing’s essence and its cause.

In Section 4.4, I respond to the most prominent alternative to my interpretation of a thing’s essential cause, and in the process of doing so, in accord with my findings thus far, develop and defend interpretations on the relationship between a thing’s essence in eternity and in duration, infinite modes, the laws of nature, and Spinoza’s views on empirical methods. The alternative that I refute is based on the combined work of scholars Edwin Curley, Michael Della Rocca, and Don Garrett, such that finite modes are partially caused by other finite modes and partially caused by infinite modes, some of which are laws of nature, and some of which are eternal formal essences. On this view, a thing’s essential cause is the laws of nature that condition its production. I offer various criticisms of this interpretation, and argue, in contrast, that a thing’s eternal essence is a finite mode contained in the immediate infinite mode(s), and that the infinite modes discussed in Spinoza’s works are, in general, not laws but rather wholes consisting of finite modes as their parts (Section 4.4.2). The laws of nature are not infinite modes, but
rather a subset of common *proprietates* that follow from the essences of things (Sections 4.4.3 and 4.4.4). Finally, I show that these conclusions allow us to better understand Spinoza’s elusive views on empirical methods (Section 4.4.5).

**Section 4.2: The Cause as Essential**

There are several reasons strongly indicating that having a particular cause belongs to the essence of a thing and not among its properties. The first reason is that, as we have seen (in Section 2.3), Spinoza consistently maintains that the definition of a thing must explicate its essence and not its properties (e.g., *TIE* §95). Spinoza sometimes says, in an even stronger tone, that “the true definition of each thing neither involves nor expresses *anything except* the nature of the thing defined” (*E1p8s2* | II/50/22–23; emphasis added). Thus, if having this specific cause were a property, rather than (part of) the essence of the thing, Spinoza would be violating a central requirement for definitions by including the thing’s cause in its definition. The fact, therefore, that Spinoza requires that the cause of a thing must be included in its definition is one clear indication that having this cause must belong to the essence, and not to the properties, of the thing.

The second reason is the apparent rationale that Spinoza offers for including the cause of the thing in the definition, namely, that doing so is what enables the deduction of the thing’s properties. He writes in Letter 60:

> [n]ext, in order that I may know which out of the many ideas of a thing will enable all the properties of the object to be deduced, I follow this one rule, that the idea or definition of the thing should express its efficient cause (IV/270/20–23).
As we have seen (in Section 2.3.1), the properties of a thing are said to follow necessarily from the thing’s essence. Including the cause in the definition is what enables the properties of a thing to be deduced, and the properties of the thing must follow from the essence, so having that specific cause had better belong to the essence of the thing. In other words, if it were a property of the thing to have the specific cause that it does, it would be deduced from the essence of the thing, rather than what enables the deduction of the thing’s properties.

The third reason lies in what we discovered about Spinoza’s causal axiom in the previous Chapter. In E1a4, Spinoza claims that “the cognition of the effect depends on and involves the cognition of the cause.” Based on his explanation of the term “involves” in E2p49dem, it follows that the effect is conceived through the cause in the sense that it cannot be conceived without its cause. In our discussion of E2d2 in Section 2.3.1, we found that conceiving a thing and conceiving its essence are one and the same.\footnote{Michael Della Rocca offers a similar argument based on the combination of E2d2 and E2p49dem in Representation, pp. 84–85.} Consequently, since the thing itself cannot be conceived without its cause, the essence of each thing cannot be conceived without the cause of the thing. Having a specific cause, then, cannot be a property of the thing, since the thing’s essence can be conceived without its properties, while the properties cannot be conceived without the essence. On the contrary, having a specific cause belongs to the essence of each thing.

A similar finding emerges somewhat more explicitly in the specific case of substances in E1pp4–5. In E1p4dem, Spinoza argues that if two substances are numerically distinct, they must be different in some respect, and the possible differences
between them reduce to the two types of features substances can have, i.e., they must either have different attributes or different modes. Spinoza argues in E1p5dem, however, that because a substance is “prior in nature” to its modes, the modes should “put to one side” when considering the identity conditions of the relevant substances. In other words, because modes are posterior in nature to substance, they cannot make a substance what it is. As the reader may recall, however, we were first introduced to the prior-in-nature relation in Section 2.3.1 through Heereboord, who argued that a subject is prior in nature to its properties, because the subject is the cause of its properties. Granted, Spinoza maintains that a substance is prior to its modes on the basis that they are “in and conceived through” their substance (E1p1dem), but as we have already seen, the cause is conceptually prior to the effect. Each of these reasons strongly suggests that, in general, if x must be conceived through y, then y pertains to the identity conditions of x. Having a specific cause, then, should be regarded as belonging to the essence of each thing, and not as a consequence or proprietas of its essence.

Section 4.3: Narrowing the Field of Causes

Section 4.3.1: Introduction

Even so, this conclusion raises an important question: what kind of cause, in particular, is it that belongs to the essence of a thing? Although God is the efficient

208 For in-depth discussion of Spinoza’s demonstration of E1p5, see Garrett’s “Ethics, IP5” and Della Rocca’s “Spinoza’s Substance Monism.”

209 Please note that when I say that the cause of a thing belongs to its essence, I mean this only as an abbreviation of the claim that the feature of having that thing as its adequate cause belongs to the essence of the thing. While a thing’s cause, x, may be destroyed (depending of what kind of cause it is), the thing
cause of all modes (E1p16c1), he may nevertheless cause different modes in different ways, and he may also be the cause of any given mode in a variety of ways. I believe that, in the Ethics, Spinoza introduces four different types of efficient causation that will be useful in narrowing down the type of cause that belongs to the essence of a thing. These types of causation are: immanent, transitive, procreative, and conservative/preservative. I will argue in this section that the cause belonging to the essence of any given finite mode is best described as its procreative cause.

Section 4.3.2: Immanent and Transitive Causation

Spinoza introduces the distinction between immanent and transitive causation in E1p18, where he argues that “God is the immanent [immanens], not the transitive [transiens], cause of all things.” From the demonstration of this proposition, it is clear that Spinoza takes a case of immanent causation to be one in which, firstly, x is the cause of y, and secondly, y is in x. In recent years, Yitzhak Melamed has presented a battery of arguments showing decisively that the manner in which modes are in a substance corresponds to a relationship of inherence, as qualities inhere in the substance of which they are predicated as a subject. Spinoza’s use of the term “immanent cause” and the

nevertheless continues to have the feature of having x for its cause, e.g. even though I might outlive my parents, I will continue to have the feature that they are the efficient cause of my existence.

210 See, for example, E1p18, E1pp21–23, and E1p28.

211 There are other types of efficient causation, such as those related to proximate and remote causation discussed in Section 2.3.1, but I believe that these types are less relevant to our present purposes.

212 See Melamed’s Spinoza’s Metaphysics: Substance and Thought, Ch. 1. Similar arguments have been developed in Carriero’s “Mode and Substance” and Jarrett’s “Substance and Mode.”
manner in which he contrasts it with a transitive cause (causa transiens) is consistent with the meaning it was assigned by the likes of Heereboord and Burgersdijck. According to these two, an immanent cause is an efficient cause that “produces its effect in itself” while a transitive cause is an efficient cause that “produces its effect outside of itself.”

Heereboord provides the example of the manner in which the intellect forms its concepts, an example which Spinoza borrows, as a case of immane causation (229). In accord with the notion that immanent causation involves a relationship of inherence, Heereboord remarks, furthermore, that

[t]he acts of an immanent cause, if the immanent cause is considered as an efficient cause, are called actions. If the same immanent cause is considered as a subject being acted upon, they are called qualities. Thus, an intellection and a volition are both actions and qualities: insofar as they are produced by the intellect and will, they are actions, [and] insofar as they are attributed to the intellect and will [in iisdem subjectantur], they are qualities (229).

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213 “producit effectum in se ipsa” (Heereboord, 229) (Burgersdijck, 66).

214 “producit effectum extra se” (Heereboord, 229) (Burgersdijck, 66).

215 “You say this because you know only of the transitive and not of the immanent cause, which does not in any way produce something outside of itself. For example, the intellect is the cause of its concepts” (KV, Ch. 1, 1st Dialogue | I/30/25–26).

216 My translation of, “unde actus causae immanentis, si causa immanens consideratur ut causa efficiens, dicuntur actiones; si causa immanens eadem consideratur, ut subjectum patiens, dicuntur qualitates: sic intellectio & volitio sunt & actiones & qualitates: in quantum producuntur ab intellectu ac voluntate, sunt actions; in quantum in iisdem subjectantur, sunt qualitates.”
On the other hand, according to Heereboord, the transitive cause and effect must be really distinct [realiter distincta], principally because it is an active cause [causa activa], which acts by way of motion, and citing Aristotle, “[w]hatever is moved is moved by another”217 (230).

In this particular sense, then, there are no transitive causes and effects in Spinoza’s system, since there is but one substance and the modes of that substance, which by most descriptions are only modally distinct.218 As is often the case, however, there is an analogous causal relationship between the modes insofar as he treats them as distinct things. Thus, while God is the immanent cause of all things per E1p18, he may yet be a “transitive” cause of finite modes in the sense of E1p28, where Spinoza argues that

[e]very singular thing, or anything that is finite and has a determinate existence, can neither exist nor be determined to produce an effect unless it is determined to exist and produce an effect by another cause, which is also finite and has a determinate existence; and again, this cause can neither exist nor be determined to produced an effect unless it is determined to exist and produce an effect by another, which is also finite and has a determinate existence, and so on, to infinity.

So, God causes finite modes to exist and determines them to produce an effect not insofar as he is infinite, but “insofar as he is modified by a modification which is finite and has a

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217 “Quicquid enim movetur, ab alio movetur.” Heereboord cites lectures 7 and 8 of the Physics.

218 Descartes: “[a] modal distinction can be taken in two ways: firstly, as a distinction between a mode, properly so called, and the substance of which it is a mode; and secondly, as a distinction between two modes of the same substance” (Principles of Philosophy, I §61 | AT 29).
determinate existence” (E1p28dem). Insofar as the links of this infinite causal chain are regarded as distinct singular things, their relationship is analogous to transitive causation. It is not obvious, however, that the causal relationships described in E1p28 are strictly transitive in nature. Presumably, it also applies to the affections of the human body and mind (modes of modes), which inhere in and are caused by (sometimes partially, sometimes adequately) the human body or mind. This proposition might also therefore include immanent causal relations between finite modes. I will argue below that a thing’s procreative cause is its essential cause, and such a cause may possibly be immanent or transitive.

I believe, however, that we can rule out God’s immanent causation (insofar as he is infinite—the kind of immanent causation that appears to be described in E1p18) as the essential cause. To see why, we first need to show that God is the immanent cause of his modes insofar as his attributes are the immanent cause of his modes. In the following, I will take it for granted that modes inhere in substance, and in particular, in God. There are several reasons to believe, then, that God’s modes inhere in his attributes. The first is that Spinoza frequently identifies God himself with his attributes. He writes in E1p4dem, for example, that:

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219 It is often pointed out that the actions of modes can reasonably be attributed to their underlying subjects, e.g., if the snubness of Socrates’s nose causes me to recoil in horror, Socrates causes me to recoil in horror.

220 Heereboord maintains, however, that generation and corruption can only happen through transitive causation: “[t]he action [that occurs] in generation and corruption can have no other place than transitive [causation]” (229, my translation of: “In generatione & corruption alia action locum habere nequit, quam transiens”).
there is nothing outside the intellect though which a number of things can be
distinguished from one another except substances, or what is the same [sive quod
idem est] (by D4), their attributes, and their affections (emphasis added).

In E1d6, he defines God as a substance consisting [constatem] of infinite attributes. Even
more explicitly, Spinoza argues in E1p20 that God’s existence and his essence (which he
identifies with God’s attributes in E1d4\textsuperscript{221} and E1p20dem) are “one and the same” [unum
et idem].

The second reason to accept the claim that modes inhere in God’s attributes is that
Spinoza presents the conceptual and causal relationships between God and his modes as
relationships obtaining between God’s attributes and His modes. Perhaps most crucially,
E1p16, Spinoza argues that the modes follow from God’s nature, which he again
identifies with the attributes (E1p16dem), and he immediately infers that God himself is
the efficient cause of those modes (E1p16dem). Spinoza also argues that each thing must
be conceived through some attribute (E1p10s), and infers from the fact that each attribute
is conceived through itself (E1p10) that God can only be considered the cause of each
mode insofar as he is considered under the attribute to which that mode belongs (E2p6
and E2p6dem). God’s modes are therefore conceived through and caused by his
attributes.

The third, and most decisive, reason to believe that modes inhere in God’s attributes is that Spinoza says so rather explicitly. Spinoza writes in E1p25c that

\textsuperscript{221} Regarding the objection that Spinoza only identifies the attributes with what the intellect perceives of a
substance as constituting its essence in E1d4, I refer the reader to Haserot’s “Spinoza’s Definition of
Attribute,” and Gueroult, Dieu, Appendix 3.
“[p]articular things are nothing but affections of God’s attributes, or modes, by which God’s attributes are expressed in a certain and determinate way” (emphasis added). He also shifts readily in E1p29s between describing modes as inhering in attributes and inhering in God: “by Natura naturata I understand … all the modes of God’s attributes insofar as they are considered as things which are in God, and can neither be nor be conceived without God” (emphasis added). The question of whether God, as an immanent cause, is the cause essential to a thing and which must be included in its definition can therefore be framed in terms of whether the thing bears this relation to its attribute as its immanent cause.

As we have just seen, the modes of a substance are in and conceived through the attributes of the substance. We know that this finding entails that the modes depend on and involve their attributes. Indeed, in E2p45dem, Spinoza reasons that because (by P6) [the modes] have God for a cause insofar as he is considered under the attribute of which the things are modes, their ideas must involve the concept of their attribute (by IA4), i.e. (by ID6), must involve an eternal and infinite essence of God.

So, the modes cannot be conceived without their attributes. This may seem like a sufficient reason to conclude that having its particular attribute as an immanent cause belongs to the essence of any given mode. As we saw earlier, however, while an effect involves and must be conceived through its cause, determining whether the feature of having that particular cause belongs to the thing’s essence requires further investigation. So, while a mode must be conceived through its attribute, it remains to be decided
whether the feature of belonging to that attribute and having that attribute as its immanent cause belongs to the essence of that mode.

To see why a mode’s attribute as its immanent cause cannot belong to its essence, we should first note an interesting facet of the identity conditions of modes. As we saw in Sections 3.6–3.7, when a mode, B, has A as its cause, and it belongs to the essence of B to have A as its cause, B cannot be conceived through some other cause C. The argument used to show that a thing necessarily has a particular cause in virtue of its essence does not work, however, if we think of A and C as attributes and immanent causes. Suppose that B is some finite mode and that A and C are extension and thought, respectively. Now, Spinoza claims in E2p7s that “a mode of extension and the idea of that mode are one and the same thing, but expressed in two ways” (emphasis added). It follows, then, that one and the same thing, B, can now be conceived through Thought and now through Extension. In virtue of the conceptual barrier between the attributes (E1p10 and E1p10s), we can say that, insofar as B is conceived through the attribute of Thought, it can only be conceived through Thought—that is, if we conceive of B as an idea, it cannot also be conceived through the attribute of Extension. Nevertheless, it remains true that each mode can be conceived under any one of God’s attributes, and the attribute under which a mode is conceived as its immanent cause therefore does not pertain to its identity conditions.

222 Notice that this fact implies that the argument of this paragraph cannot be refuted by the objection that B’s essential cause consists in all the attributes combined. Although each finite mode can be conceived under any attribute, it can only be conceived under one attribute at a time. Additionally, this objection would imply that human beings cannot have an adequate idea of any finite thing, since humans are only capable of conceiving things under the two attributes of Thought and Extension (see Ep. 66).
Now, suppose instead that A, B, and C are finite modes, and that A causes B to exist and determines it to produce an effect in the manner described in E1p28. Regardless of whether we conceive these three modes under Thought, Extension, or any other attribute, because the order and connection of ideas is the same as the order and connection of things (E2p7), it will always be true that B must be conceived through A and that it cannot be conceived through C. There are no conditions and no attribute under which B need not be conceived through A.

It is also evident that an attribute, as an immanent cause, could not be the kind of cause required by the definition of a thing, because of the purpose that the cause serves in such a definition. As we saw in Section 4.2, Spinoza argues in Letter 60 that including a thing’s efficient cause in its definition helps ensure that all the properties can be deduced from the definition, and his examples suggest that the derivation itself is one going from the cause to the effect. Spinoza argues in E1p28, however, that the cause of a finite mode can be neither the absolute nature of an attribute (an attribute considered in itself, apart from any modifications), nor an infinite mode, but only another finite mode. Naming an attribute as the immanent cause of the definiendum, then, would seem to prohibit, rather than enable, the kind of causal derivation that Spinoza is seeking.

I believe that we can conclude that, not only does it not belong to the essence of a thing to have any particular attribute as its immanent cause, but that furthermore, having such an immanent cause is a proprietas of that thing, insofar as it is considered under that attribute. This result follows from Spinoza’s argument for the conclusion that we have adequate knowledge of God’s essence. Spinoza argues in E1p46dem that, because every mode, insofar as it is considered under some attribute, necessarily involves that attribute,
the idea of every mode under that attribute will involve the idea of that attribute. In other words, the idea of the attribute is “common to all, and is equally in the part and in the whole” (E1p46dem). And because all such ideas are adequate (E2p38) this idea of the attribute is adequate. It is for this reason that Spinoza concludes in E2p47 that “[t]he human Mind has an adequate knowledge of God’s eternal and infinite essence.” The ideas of God’s attributes are thus *common notions*.\(^\text{223}\) This interpretation of Spinoza’s arguments is confirmed by the fact that Spinoza claims in the *Theological-Political Treatise* that “the knowledge of God must be drawn from *hauriri debet* the common notions which, through themselves, are certain and known” (Ch. 4, §19 | III/61).

I demonstrated in Section 1.4.2 of Chapter 1 that the common notions are ideas of properties (*proprietates*) that follow from the essence of each thing under a given attribute, and that it is for this reason that such ideas are adequate. But what common property does the idea of the attribute of extension, a common notion, represent? I believe that it is the property of having the attribute of extension as an immanent cause. When Spinoza introduces the notion of “what is common to all things” he refers the reader to L2 of the Physical Digression (following E2p13s). There Spinoza writes: “[a]ll bodies agree in certain things. Dem.: For all bodies agree in that they involve the concept of one and the same attribute (by D1) . . .” To follow his line of thinking further, E2d1 states that bodies are modes that “express God’s essence insofar as he is an extended thing,” and refers the reader to E1p25c. In E1p25c, Spinoza maintains (on the basis of E1p15 and E1d5) that particular things are affections by which God’s attributes are “expressed in a certain and determinate way.” Finally, in E1p15, Spinoza maintains that “[w]hatever is, is

\(^{223}\) For further explanation of the common notions, see Section 1.4.2.
in God, and nothing can be or be conceived without God” (emphasis added). In other words, as Spinoza infers in from E1p15 in E1p18, God is the immanent cause of all things—the content of this common property of involving an attribute may be understood in terms of being an immanent effect of that attribute. Thus, it is reasonable to conclude that having an attribute as an immanent cause is a property of each mode insofar as it is considered under that attribute; being an immanent effect of and involving an attribute of God is a consequence of its essence.224

Section 4.3.3: Procreative and Conservative Causation

We can better understand the kind of cause we are looking for by investigating another distinction in God’s causality that Spinoza hints at in E1p24c. Here, he infers that, since the essence of things produced by God does not involve existence, “God is not only the cause of things’ beginning to exist [ut res incipient existere], but also of their persevering in existing [ut in existendo preserverent], or (to use a Scholastic term) God is

224 This interpretation of God’s immanent causality helps explain why Spinoza thinks that the more we understand singular things, the more we understand God (E5p24). Spinoza’s enigmatic demonstration of E5p24 claims simply that, “[t]his is evident from IP25C.” What this interpretation suggests is that to understand a mode as an expression of God’s attributes (E1p25c) is to understand that mode as an immanent effect of God’s attributes. However, if it is a proprietas of the essence of that mode that it is an immanent effect of God’s attributes, then we come to have an adequate understanding of (at least this particular case of) God’s immanent causality by understanding that causality through the essence of that mode, since the properties of a thing must be understood through its essence (see Section 2.3.1). In this manner, our understanding of the essences of finite modes contributes to our understanding of God.
the cause of the being of things [essendi rerum].” Spinoza expounds further on this principle in his exposition of Descartes:

A10: No less cause is required for preserving a thing than for first producing it.

For from the fact that we are thinking now, it does not necessarily follow that we shall be thinking afterwards. For the concept which we have of our thought does not involve, or contain the necessary existence of thought ...

Though our thought has begun to exist, its nature and essence does not on that account involve necessary existence any more than before it existed. So it needs the same power to persevere in existing as it needed to begin existing. And what we say here about thought, must also be said about anything whose essence does not involve necessary existence. (DPP1a10 | I/157–158)

Thus, things that do not exist by the necessity of their nature need a cause both in order to begin existing, and in order to sustain their existence. Heereboord describes this distinction in the following terms:

the effect [causatum] of the procreative cause [causae procreantis] is being [esse], insofar as it is opposed to non-being [non-esse]; the effect [causatum] of the conservative [conservantis] cause is continued-being [esse contiunatum], insofar as it is opposed to beginning-being [esse incipienti]: procreating gives beginning-being, conserving gives continued-being. Thus, as much distinction there is between the beginning of a thing and its continuation, so much distinction is there between the procreative and conservative cause. The procreating cause thus
results in the existence \([\text{existentiam}]\) of the thing, [and] the conserving cause results in the duration \([\text{durationem}]\) of the existing thing.\(^{225}\)

With this distinction in mind, it seems evident that, in E1p28, the cause that Spinoza has in mind is the procreative cause. Firstly, Spinoza indicates in this proposition that the causes under discussion are those that determine a thing to exist and produce an effect.\(^{226}\)

\(^{225}\) *causatum causae procreantis est esse, quatenus opponitur non-esse; causatum causae conservantis est esse continuatum, quatenus opponitur esse incipienti: procreans dat esse incipiens, conservans dat esse continuatum: quantum ergo discriminis est inter initium rei, \& eius continuationem, tantum discriminis est inter causam procreantem \& conservantem. Procreans ergo causa efficit rei existentiam, conservans rei existentis durationem.*

\(^{226}\) It is interesting that Spinoza indicates that the procreative cause is what determines a singular thing not only to exist, but to produce an effect in a particular way in E1p28. By handling the question of the manner in which a thing is determined to produce an effect separately, in E1p26 and E1p27, Spinoza seems to indicate that although it is ultimately the same cause which produces the thing’s existence and determines it to act, these items are conceptually separate, and one requires a demonstration to show that they are the same. I believe that what Spinoza most likely has in mind here is the fact that philosophers in the tradition of Burgersdijck and Heereboord distinguish the subsidiary cause (*causa minus principalis*) into the proegumenic cause (*causa proegumena*), sometimes referred to as the inchoate cause (*causa inchoans*), which internally disposes or incites the principal cause (*causa principalis*) to act, and the procarctic cause (*causa procarctica*), sometimes referred to as the incipient cause (*causa incipiens*), which externally impels the principal cause to act (see Heereboord, 242; Burgersdijck, 70). Spinoza appears to be referring to this sort of distinction in the *KV*, where he writes, “God is the principal cause [*voornaame oorzaak*] of the effects he has created immediately, such as motion in matter, etc., where there can be no place for the subsidiary cause [*minvoornaame oorzaak*], which is confined to particular things (as when God makes the sea dry by a strong wind, and similarly in all things in Nature). The subsidiary initiating cause [*minvoornaame-beginnende oorzaak*] is not applicable to God, because there is nothing outside him that could constrain him. The predisposing cause [*voorgaande oorzaak*], on the other hand, his perfection itself,
Secondly, he is discussing an infinite causal chain of singular things, things that have a finite and determinate existence. If, therefore, he had the conservative cause in mind, then, it would seem to imply that my continued existence is sustained by causes indefinitely far in the past, things which can no longer be said to actually exist themselves. Furthermore, Spinoza claims in the demonstration that a singular thing’s existence “could not have been produced \( \textit{producit non potuit} \) by the absolute nature of an attribute of God,” suggesting that the production in question occurred at a specific moment in time, rather than being a process sustained over any significant interval of time. So, God is the procreative cause of a singular thing insofar as he is modified by a finite mode which brings it into existence.

It would be natural to assume that God is the conservative cause of all things in the same manner in which he is the immanent cause of all things. After all, those things which are in God can neither be nor be conceived without him, and the relationship between a substance and its qualities is often cast as one of continuing ontological support. The clearest evidence in favor this interpretation is the fact that, in E1p24c, Spinoza infers from the fact that “[t]he essence of things produced by God does not involve existence” that “God is not only the cause of things’ beginning to exist, but also through which he is both the cause of himself, and consequently of all other things” (Part 1, Ch. 3 | I/35–36). Insofar as the causes determining finite modes to act in a particular way are external to them, they might be described as procarctic or incipient causes. It appears, then, that in E1p28, Spinoza intends to establish that the procreative cause and the procarctic/incipient cause are one and the same.
of their persevering in existing.” Even so, this proposition alone tells us rather little about
the particular manner in which the preservation of things is achieved.\(^{227}\)

I maintain that, according to Spinoza, God is the conservative cause of a singular
thing insofar as he is modified by a mode constituting the actual essence (\textit{essentia
actualis}) of the thing. In his so-called “\textit{conatus doctrine},” which forms the basis of his
psychology and social philosophy, Spinoza claims that: “[t]he striving by which each
thing strives to persevere in its being is nothing but the actual essence of the thing”\(^{228}\)
(E3p7).\(^{229}\) Spinoza thus seems to claim that, once a procreative cause has brought a
singular thing into existence, the thing’s own essence, as something existing in duration
\([\textit{duratio}]\) (E3p8dem), acts as its conservative cause.

One might object to this interpretation on the grounds that, in E1p24c, Spinoza
writes that

whether the things [NS: produced] exist or not—so long as we attend to their
essence, we will find that it involves neither existence nor duration. So their
essence can be the cause neither of their existence nor of their duration, but only

God, to whose nature alone it pertains to exist[, can be the cause].

At first, this claim appear to be at odds with Spinoza’s \textit{conatus} doctrine, since Spinoza
infers from E3p7 that, although a thing’s striving to persevere in its being does not
involve any particular finite time, it does involve an “indefinite time” \(\textit{tempus}\)

\(^{227}\) As we just saw above, for example, even though God causes finite things to come into existence, he only
does so insofar as he is modified by a finite mode, and not insofar as he is infinite.

\(^{228}\) \textit{Conatus, quo unaquaeque res in suo esse preservare conatur; nihil est praeter ipsius rei actualem
essentiam.}

\(^{229}\) For in-depth discussion and defense of this claim, see Garrett’s “Spinoza’s \textit{Conatus Argument}.”
*indefinitum*] (E3p8), and it therefore strives to persevere for an “indefinite duration” [*duratio indefinita*] (E3p9). If the essence of a thing cannot cause or involve duration, in what way could it be its own conservative cause?

I suggest that we can resolve this difficulty if we consider the source of a thing’s duration. Considered in itself, the essence of any finite thing can be conceived as not existing in duration, and so does not involve duration—and it is also true that it cannot be the *source* of its own duration. The actual essence of each thing (its essence as existing in duration) is its conservative cause in the sense that it *preserves* the duration that the thing has been granted *by its procreative cause*. It is not the cause of the thing’s duration so much as a protective “vessel” for it. Thus, no thing is the author of its own duration, but rather inherits it from its procreative cause, and holds on to it for as long as (i.e., indefinitely) it is not overpowered by external causes. Thus Spinoza claims that “[the thing] will always continue to exist *by the same power by which it now exists*, unless it is destroyed by an external cause” (E3p8dem; emphasis added). The existence and duration of each thing has its ultimate source in God, and as I suggested above, God is its conservative cause insofar as God is modified by the actual essence of the thing:

> [t]he power by which singular things (and consequently [any] man) preserve their being is the power itself of God, *or* Nature (by IP24C), not insofar as he is infinite, but insofar as he can be explained through the man’s actual essence (by IIIP7). The man’s power, therefore, insofar as it is explained through his actual essence, is part of God *or* Nature’s power, i.e. (by IP34), of its essence. (E4p4dem)
It remains to be considered whether the conservative cause is the essential cause that we seek. We can see why it would be inappropriate to include a thing’s actual essence in its definition as its conservative cause by considering how it would go if we tried.

Before even getting started, it seems evident that this method of definition introduces an unnecessary redundancy. According to Spinoza’s use of the term in E3p7, it appears that the actual essence of a thing is nothing more than the essence of the thing insofar as it actually exists (in duration, for finite modes). To require that a definition state the essence of the thing, and to require furthermore, that it includes the actual essence as the thing’s conservative cause, requires that the essence be stated twice over. On the other hand, if the cause in question is the procreative cause discussed in E1p28, the redundancy disappears. Even though it belongs to the essence of the thing to have the procreative cause as its cause, it is only part of its essence, and the injunction to include the cause in the definition is an elaboration on the requirement that the definition state the essence of the thing, an elaboration telling the reader that having this cause belongs to the essence of the thing and that it is required for a causal derivation of its properties.

Furthermore, I think it can be shown that having the conservative cause, like the immanent cause discussed above, belongs to the properties and not the essence of each thing. Since the conservative cause was introduced to explain the sustained existence of a thing from one moment to the next, and since Spinoza maintains that the conservative cause only sustains us so long our power is not overwhelmed by the powers of external causes contrary to our existence, I suggest that Spinoza’s claim that my striving to persevere in my being is my actual essence in E3p7 can be restated in the following manner: my essence is such that, if I exist at time \(T_1\) and nothing more powerful than me
opposes my existence at time $T_2$, then I will exist at $T_2$. Does this feature of my essence belong to my essence or my proprietates?

The first clue is perhaps that Spinoza presents this claim as a statement about my essence, whereas a definition stating my essence is generally an idea attributing a number of features to me. More importantly, however, as I hope my restatement of the claim makes clear, this is a claim that ought to be deduced from our essences, rather than included in them. To say that my essence is such that P is to say that it follows from my essence that P. Indeed, Spinoza deduces the claim that the actual essence of each thing is its conservative cause from the general truth that “the definition of any thing affirms … or posits the thing’s essence” (E3p4dem). I take it that at least part of what this means is that, if we adequately understand a thing’s essence, we will consequently understand why it is its own conservative cause, or why it will continue to exist so long as it is not destroyed by an external cause.

Spinoza offers a further indication that my conservation or my striving to persevere in my existence is a consequence of my essence in E3p7dem:

[from the given essence [ex data ... essentia] of each thing some things necessarily follow [sequuntur] (by IP36), and things are able [to produce] only what follows [sequitur] necessarily from their determinate nature [natura] (by IP29). So the power of each thing, or the stringing by which it … does anything, or strives to do anything – i.e. (by P6), the power, or striving, by which it strives to persevere in its being, is nothing but the given, or actual, essence of the thing itself. (emphasis added)
The thrust of this argument is that the reason why a thing’s striving, or conservative cause, is its actual essence is that, in virtue of their essence, all things act (E1p36), all of each thing’s activity follows from its essence (E1p29), and each thing’s activity also follows from its power or striving to act (E3p6). Spinoza assumes in this argument, however, that my activity could not follow from my actual essence and my striving as two diverse sources working in concert, but rather that they must be one and the same source. It is thus a consequence, or a proprietas, of my essence that my actual essence and striving are the same; it does not belong immediately to my essence, but it instead follows from other facts about the relationship between my essence and activity.

Section 4.3.4: The Procreative Cause as Essential

Having thus shown that immanent, transitive, and conservative causation fall short as characterizations of the kind of cause belonging to the essence of a thing and which must be included in the thing’s definition, we are now in a position to discuss the

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230 How might Spinoza justify this assumption? I expect that he would rely on his claim in E3p4 that “the definition of any thing affirms, and does not deny, the thing’s essence, or it posits the thing’s essence, and does not take it away.” As we saw in Sections 1.5.1–1.5.2, Spinoza argues in E2p49 that all ideas involve an inherent tendency to affirm the existence of their objects. Since definitions are ideas of the essences of things (Section 1.2.3), these ideas will also have such a tendency to affirm the existence of those essences (their actual essences). Since an object and the idea representing it are one and the same thing conceived under two distinct attributes (E2p7s), there must be a corresponding tendency toward existence in the essence of the thing under every other attribute. Spinoza could then argue that his goal in E3pp4–6 is to demonstrate that this tendency toward existence should be characterized as a kind of striving, and that the actual essence of a thing and its striving should therefore not be considered as two distinct sources of activity.
thing’s procreative cause. As we have seen, Spinoza argues in E1p28 that the procreative cause of any finite mode is yet another finite mode. There are several reasons to believe that this sort of cause is what Spinoza had in mind that the definition of a thing should include its cause.

The first reason is that this conclusion is suggested by the examples that Spinoza employs to clarify what it means to include the cause in the definition of a thing. When Spinoza uses the definition of a circle to illustrate the principle that the definition must include the cause in §96 of the TIE and Letter 60, the cause to be included or expressed is the cause responsible for the generation or construction of the circle, i.e. a line of which one end is fixed and the other moveable. Similarly, in §72 of the TIE, when Spinoza considers the mental process necessary to form the true idea of a sphere, he indicates that we should consider a cause by which such a sphere “originates” (oriri).

Secondly, it should be noted that in the definitions of the affects in Book III of the Ethics, when Spinoza includes a cause in these definitions, the cause is procreative in kind. Many of these affects, such as Love (Amor; E3deffaff6) and Hate (Odium; E3deffaff7), are defined as a certain kind of affection “accompanied by the idea of a … cause” (concomitante idea causae) of that affection. Many other affects, such as Hope (Spes; E3deffaff12), Fear (Metus; E3deffaff13), and Confidence (Securitas; E3deffaff13), are defined as a certain kind of affection “born of” or “originating from” (orta ex) certain other ideas. It seems clear that the kind of cause included in these definitions is procreative in nature.

Thirdly, in Spinoza’s early views, when he arguably considered God as uncaused rather than self-caused (on this subject, see Section 2.5.1 of Chapter 2), he indicated that
the reason why the definition of God does not require a cause is that such an object “require[s] nothing else except its own being for its explanation” (*nullo alio praeter suum esse egeat ad sui explicationem*) (*TIE* §97 | II/35/30). Immediately following this passage, Spinoza indicates, furthermore, that such a definition should leave no question as to whether the thing defined exists. As I interpret these claims, then, Spinoza is saying that the reason why one need not include a cause in the definition of God is that his own being or essence explains his existence (although he does not yet think of this explanation as mirroring causal relations). It appears, therefore, that a definition explains a thing by explaining its existence through that which is most appropriately considered responsible for its existence, that is, either its procreative cause or its essence.231, 232

Fourthly, there are several points at which Spinoza appears to indicate that a thing’s essence is in some manner derived from its procreative cause. This claim appears

231 Naturally, this formulation must be refined to allow for the definition of non-existent beings. We could do this either by saying that a definition explains the existence of a thing insofar as it specifies the causes by which a thing must be produced, although we may be ignorant of whether such causes are determined to produce it (this formulation is inspired by E4d4), or by saying that the definition of a thing explains a thing’s existence, which is either necessary existence or possible existence, by specifying the causes by which the thing must be produced (this formulation is inspired by DPP1a6 and DPP1L1).

232 The infinite modes, which neither have a procreative cause (since they have existed from eternity) nor exist through the necessity of their essence, do not fit easily into this division. However, we can specify that cause which is most appropriately considered responsible for their existence. In the case of the immediate infinite modes, that cause will be the absolute nature of an attribute (E1p21), and in the case of the mediate infinite modes, that cause will be the infinite mode from which it follows (E1p22 & E1p23). We might say, then, that where a procreative cause is lacking, and the thing does not exist by the force of its own essence, the conservative cause is the most appropriate cause to be included in the thing’s definition.
to be made most explicitly in the Preface to Part Four of the *Ethics*. In this passage, Spinoza is in the process of arguing against the Aristotelian conception of final causes and the notion that things can be imperfect by lacking something that belongs to their essence. For example, from an Aristotelian perspective, one might believe that the essence, or form, of a human being is that of a rational animal, and furthermore, that this form is also a final cause of all human beings insofar as they strive to realize this form. Things might be deemed perfect or imperfect to the extent that they succeed or fail in this endeavor. According to this conception of human nature and final causation, then, a human being suffering from a severe mental disability would be “imperfect” because of her inability to realize the rationality belonging to the human form. Spinoza presents this interpretation of Aristotelian final causation in the following terms:

> [human beings] are accustomed to form universal ideas of natural things as much as they do of artificial ones. They regard these universal ideas as models of things, and believe that nature (which they believe does nothing except for the sake of some end) looks to them, and sets them before itself as models. So when they see something in nature which does not agree with the model they have conceived of this kind of thing, they believe that Nature itself has failed or sinned, and left the thing imperfect. (E4pref | II/206/12–19)

Aside from criticizing these universal ideas as having been erroneously generated in the human imagination (E2p40s2), however, Spinoza also argues that it is, in principle, impossible for anything to lack something that genuinely belongs to its nature or essence. He writes that we should not consider things imperfect,
because something is lacking in them which is theirs, or because Nature has sinned. For *nothing belongs to the nature of anything except what follows from the necessity of the nature of the efficient cause*. And whatever follows from the necessity of the nature of the efficient cause happens necessarily. (E4pref | II/208/2–7; emphasis added)

So, a thing’s nature, or essence, follows from the necessity of the nature, or essence, of the efficient cause, and because the effect follows necessarily from the efficient cause (Spinoza might have referred to E1a3 here), each thing necessarily has everything that belongs to its essence, i.e., it can lack nothing that belongs to its nature. Returning to our example above, then, if a human being with a severe mental disability can be said to lack rationality, she is by no means imperfect in the sense of lacking something that belongs to her essence, and it cannot be said that she only imperfectly realizes her essence. On the contrary, her essence has been determined by the essence of the cause responsible for her existence, and consequently, if she exists, she necessarily realizes this essence in its entirety.

The example employed by Spinoza in his critique of final causes offers further evidence that he has the procreative cause in mind as the cause responsible for a thing’s nature (at least when it comes to finite modes):

[f]or example, when we say that habitation was the final cause of this or that house, surely we understand nothing but that a man, because he imagined the conveniences of domestic life, had an appetite [*appetitum*] to build a house. So habitation, insofar as it is considered as a final cause, is nothing more than this singular appetite. It is really an efficient cause, which is considered as a first
cause, because men are commonly ignorant of their appetites. (E4pref | II/207/6–12)

We cannot explain the nature of any house by comparing to our own muddled and prejudiced notions of what a house ought to look like. Instead, to understand its nature, we must conceive it, as all things must be conceived, through the cause responsible for its existence—its first, procreative cause—in this case, the system of desires the builder hoped to satisfy in its construction. The essence of the house thus follows from the essence of that system of desires.  

Although the discussion of this principle occurs only rarely in Spinoza’s works, I believe that he makes a similar claim in E1p11s. I have argued elsewhere that Spinoza

233 Although this causal story may seem exceedingly simple, the builder’s system of desires is no doubt shaped by various factors, such as the builder’s experience and ability, and the particular circumstances in which she finds herself. Spinoza appears to make an acknowledgement in a similar spirit when he argues in E4p57 that “[e]ach affect of each individual differs from the affect of another as much as the essence of the one from the other.”

234 One might also challenge the notion that a system of desires has an essence. I don’t think this suggestion would be particularly far-fetched, for Spinoza. He holds in E2d7 that “[b]y singular things, I understand things that are finite and have a determinate existence. And if a number of Individuals so concur in one action together that they all have one effect, I consider them, to that extent, as one singular thing.” Spinoza’s “individuals” are collections of bodies that together maintain a fixed pattern (ratio) of motion and rest (E2p13sphysdigd). That pattern is taken to constitute the essence of that individual (E2p24dem). Spinoza does not indicate how robust or long-lasting such a pattern must be, but it is not unreasonable to suppose that if the pattern persists long enough to construct a house, it might reasonably be regarded as an individual with an essence.
identifies a thing’s perfection and reality with its essence. If I am correct in this claim, then it will be evident that the following statement taken from E1p11s makes a claim similar to the one just seen in E4pref:

> for things that *come to be* from external causes—whether they consist of many parts or few—owe all the perfection or reality they have to the power of the external cause (II/54/21–23; emphasis added).

If a thing’s reality and perfection is identified with its essence, then this remark in E1p11s entails that those things which require a procreative cause *owe their essence* to the power of that cause, much as it is claimed in E4pref that what belongs to the nature of a thing is determined by what follows from the necessity of the nature of the efficient cause.

Although it is difficult to be entirely certain of the precise content of these unusual claims, I believe that they can be fairly interpreted as saying, at a minimum, that if A is the procreative cause of B, then the essence of B is determined by the essence of A. We have already established (in Section 4.2) that it belongs to the essence of B to have the specific cause that it does, and the remaining task is to establish more precisely what that cause is, whether it is immanent, transitive, conservative, procreative, etc. The fact that an object’s essence is determined by the essence of its procreative cause thus offers at least circumstantial evidence that it belongs to the essence of the object to be the effect of that procreative cause.

Furthermore, Spinoza’s claim in E1p28 that a thing’s procreative cause is not only responsible for the thing’s existence, but that it also determines the thing to produce an effect, offers additional evidence that having that particular procreative cause belongs to

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235 Brandau, “Degrees of Essence and Perfection in Spinoza.”
the essence of the thing. As we saw in the above discussion of conservative causation in Section 4.3.3, Spinoza argues in E3p7dem that it follows from E1p29—which relies on E1p28—that a thing can only produce what follows from its nature or essence. This conclusion agrees with what we just established on the basis of E4pref and E1p11s, namely, that a thing’s essence determines the nature of the effect that follows from it. We might also note that Spinoza claims in E3d2 that we are active insofar as we produce our effects adequately, that is, insofar as our effects follow from our nature (without the interference or aid of other causes). This finding allows us to conclude, I think, that a thing’s essence both determines the nature of the effect that it will have (i.e., it follows from a thing’s essence that it must produce such and such an effect), and it provides the causal force to produce that effect (i.e., the effect follows from the thing’s essence itself). When we combine these observations with the fact that a thing’s procreative cause is what determines a thing to produce an effect (E1p28), we are forced to conclude that it must belong to the thing’s essence to follow from that procreative cause.236 The

236 One might challenge this reading on the grounds that Spinoza apparently uses different terminology in E1p28 and E3p7dem, that is, Spinoza claims in E1p28 that a thing is “determined” (determinatur) by its procreative cause “to operate” (ad operandum) in a particular way, whereas in E3p7dem, Spinoza is discussing what “follows” (sequitur) from a thing’s nature. The use of the term “produce” in both these passages, which suggests that Spinoza is using the same conception of a cause-effect relationship in both passages, is merely be an artifact of Curley’s translation. We can set this objection aside, however, because when Spinoza claims in E3p7dem that “things are able [to produce] nothing but what follows necessarily from their determinate nature (nec res aliud possunt, quam id, quod ex determinata earum natura necessario sequitur),” he argues that this is a consequence of E1p29, in which he claims that “all things have been determined from the necessity of the divine nature to exist and produce an effect in a certain way (omnia ex necessitate divinae naturae determinata sunt ad certo modo existendum, et operandum).”
(adequate) causal activity of each finite mode is determined by its essence in virtue of the fact that this activity has been determined by the thing’s procreative cause.

This conclusion, furthermore, is in accord with what Spinoza claims in E5a2: “[t]he power of an effect is defined by the power of its cause insofar as its essence is explained or defined by the essence of its cause. This axiom is evident from I1P7” (emphasis added). Here, Spinoza claims that the essence of the cause explains or defines the essence of the effect, and as a result, the power of the effect, or the effect’s capacity for action, is determined by the power of the cause. He also claims, moreover, that this axiom is evident from E3p7, which suggests that Spinoza may have even had a line of reasoning in mind similar to the one just presented above. Given the manner in which Spinoza claims that a thing’s causal activity is determined both by its essence and by its procreative cause, I think the most plausible interpretation is that a thing’s essence governs its causal activity insofar as it belongs to its essence that the thing is produced and determined to act in a particular way by its procreative cause.

Therefore, the fact that only that which follows from a thing’s determinate nature can follow from the thing is a consequence of the fact that they have been determined to operate in a certain way, and, as Spinoza argues in E1p29dem, they have been so determined to operate by the same cause which brought them into existence. So, even when we adopt this more literal and awkward translation of Spinoza’s terminology, we find that Spinoza still argues that a thing’s causal activity is determined by a thing’s essence in virtue of that causal activity being determined by the thing’s procreative cause. And, as I argue, the most plausible way of making sense of this claim is to say that a thing’s causal activity is determined by its essence insofar as it belongs to that thing’s essence to have that particular procreative cause, which induces it to behave in a particular way.
Finally, we might note that this interpretation helps make sense of Spinoza’s claim in E1p26 that “[a] thing which has been determined by God to produce an effect has necessarily been determined this way by God; and one which has not been determined by God cannot determine itself to produce an effect” (emphasis added). If we were to suppose that a thing’s essence were entirely self-contained, involving no reference to the essence of any other thing, such as its procreative cause, and that the essence of each thing determines the thing’s causal activity (as Spinoza often suggests), then it would seem appropriate to claim that each thing determines itself to produce an effect. Surely, insofar as my essence determines me to produce an effect, I determine myself to produce an effect.\textsuperscript{237} In fact, when we think of essences in this way, the notion

\textsuperscript{237} Spinoza argues in E1p26dem that it follows from the fact that God is the cause of the essences of things (E1p25) that he, and not those things themselves, is what determines them to produce an effect. While my interpretation of the relationship between a thing’s essence and the essence of its procreative cause does not entail that this is incorrect, we may still note that this argument is not entirely convincing in itself. Even if something other than me is the cause of my essence, it does not seem to follow immediately that I, therefore, am not what determines me to act. If, for example, God produces my essence, and in turn, my essence leads me to act in a certain way, it seems appropriate to say that I determined myself to act, because my action was a consequence of my essence. This is in accord with E3d2, which says that we are passive, or determined by other things, only insofar as something acts on us and we are therefore only the partial cause of our effects. When it comes to the cause of my essence, however, it would be inappropriate to say that this cause, as something other than me, acts on me or determines me to act a certain way, because prior to the creation of my essence, if I may be permitted to speak in temporal terms, there is no me to be acted on or determined by something else. I submit, therefore, that Spinoza’s argument in E1p26dem does not make sense unless we understand a thing’s essence in the way I have described, namely, such that it belongs to the essence of each finite mode to be caused to exist and determined to act by its procreative cause. Only in this way can Spinoza simultaneously maintain that a thing acts insofar as its effects are
that I determine myself to produce an effect seems to be a consequence of E3p7; my activity, my striving to persevere in my being, is my actual essence itself. The apparent contradiction between the idea that my essence is the source of my activity and the idea that no thing can determine itself to produce an effect (*ad operandum*) is lifted when we realize that my essence is the source of my activity insofar as it belongs to the essence of each thing to be caused to exist and determined to act by its procreative cause. I believe, therefore, that we have ample evidence for the conclusion that it belongs to the essence of each finite mode to have the procreative cause that it has.

Section 4.4: Infinite Modes, Laws of Nature, and Essences

Section 4.4.1: Curley, Della Rocca, and Garrett on the Essential Cause

In Chapter Five of *Representation and the Mind-Body Problem in Spinoza*, Michael Della Rocca comes to the conclusion (which I defend in Section 4.2) that it belongs to the essence of each thing to have the cause that it does.\(^{238}\) However, while I divide the causes of interest into the immanent, transitive, conservative, and procreative, Della Rocca divides them into a thing’s finite and infinite causes.\(^{239}\) Following Edwin Curley’s influential interpretation of God’s causality, he maintains that each finite mode is only *partially* caused by another finite mode in the manner described in E1p28. A complete description of a finite mode’s adequate cause requires the inclusion of certain infinite modes, interpreted as nomological facts corresponding to laws of nature, which adequately caused by its essence (E3d2) and that each thing is determined to operate in a certain way by its procreative cause (E1p28).

\(^{238}\) Della Rocca, *Representation*, pp. 88–89.

\(^{239}\) Della Rocca, *Representation*, p. 89.
specify the conditions under which the finite mode in question can arise as the effect of another finite mode.\textsuperscript{240} In response to the question of which of these two causes is such that it belongs to the essence of a given finite mode to have it as a cause, he answers that it is not the finite cause described in E1p28, as I claim, but rather the infinite mode(s) corresponding to the laws of nature that govern the behavior of finite modes.\textsuperscript{241} According to Della Rocca, a thing’s finite cause is denied the elevated status of pertaining to the essence of the effect except insofar as the infinite modes, as nomological facts, specify the \textit{kind} of finite cause (though not the \textit{particular} finite cause) a given mode can have.\textsuperscript{242}

In defense of his interpretation, Della Rocca relies on two pieces of textual evidence which, in his view, suggest that Spinoza held that the infinite modes (nomological facts corresponding to the laws of nature) are the essential causes of finite modes. The first piece of textual evidence comes from the \textit{Treatise on the Emendation of the Intellect}:

\begin{quote}
[t]he essences of singular, changeable things are not to be drawn from their series, or order of existing, since it offers us nothing but extrinsic denominations, relations, or at most, circumstances, all of which are far from the inmost essence of things. That essence is only to be sought from the fixed and eternal things, and at the same time, from the laws inscribed in those things, as in their true codes, according to which all singular things come to be and are ordered. Indeed, these
\end{quote}


\textsuperscript{241} Della Rocca, \textit{Representation}, pp. 90–91.

\textsuperscript{242} Della Rocca, \textit{Representation}, pp. 91–92.
singular changeable things depend so intimately, and (so to speak) essentially, on the fixed things that they can neither be nor be conceived without them. So, although these fixed and eternal things are singular, nevertheless, because of their presence everywhere, and most extensive power, they will be to us like universals, or genera, of the definitions of singular, changeable things, and the proximate causes of all things. (TIE §101 | II/36/30–II/37/9)

According to Della Rocca, Spinoza’s claim in this passage that the essences of things are not to be drawn from their order of existing, but only from the fixed and eternal things, is an indication that having a particular finite cause does not pertain to the essence of any finite mode.243 Like Curley,244 Della Rocca maintains that these “fixed and eternal things” are the infinite modes, nomological facts corresponding to laws of nature.245 The fact that Spinoza apparently refers to these fixed and eternal things as the proximate causes of all things also seems to lend weight to Della Rocca’s interpretation. The second piece of textual evidence that Della Rocca cites is from the Preface to Book Three of the Ethics:

the laws and rules of nature, according to which all things happen, and change from one form to another, are always and everywhere the same. So the way of understanding the nature of anything, of whatever kind, must also be the same, viz. through the universal laws and rules of nature. (II/138/14–18)

243 Della Rocca, Representation, p.90.

244 Curley, Spinoza’s Metaphysics, pp. 66–68.

245 Della Rocca, Representation, p. 90.
In this passage, Spinoza claims that the nature of a thing must be understood through the laws of nature, and according to the interpretation shared by Curley and Della Rocca, these laws correspond to the infinite modes, the infinite causes of finite things.

To summarize the interpretation presented thus far, let us call the following set of interpretive claims “CDR”:

1. Some infinite modes are nomological facts, and in particular, laws of nature.
2. Each finite mode is caused to exist and produce an effect partially by another finite mode in duration and partially by a nomological infinite mode or modes.
3. It belongs to the essence of each finite mode to be caused to exist by the nomological infinite mode or modes that cause it.

In his interpretation of Spinoza’s views on formal essences in “Spinoza on the Essence of the Human Body and the Part of the Mind That Is Eternal,” Don Garrett appears to concur with and expand upon this interpretation. He agrees that at least some infinite modes are laws of nature, but also argues that the formal essences of finite modes are themselves infinite modes. He maintains that

the formal essence of a human body is a real infinite mode: the omnipresent (i.e., pervasive and permanent) modification of the attribute of extension that consists in its general capacity to accommodate and sustain—through the general laws of extension expressible as the laws of physics—the actual existence of a singular

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thing possessing a specific structure or nature whenever and wherever the series of actual finite causes mandates it.\textsuperscript{248}

In this sense, not only is each finite mode partially caused by the laws of nature, but the essence of each finite mode is itself caused some particular laws of nature or other formal essences.\textsuperscript{249} So, we might expand CDR into CDRG to include:

4. The formal essence of each finite mode is an infinite mode contained in God’s attributes.

5. The formal essence of each finite mode is caused by other infinite modes, some of which may be laws of nature and some of which may be other formal essences.\textsuperscript{250}

It is not without reason that Curley’s interpretation of God’s causality through the infinite modes as nomological facts is influential. It offers an unambiguous description of the relationship between finite and infinite modes, and the key role assigned to natural law in the behavior of finite modes might, in the minds of some interpreters, help draw Spinoza out of the murky swamps of scholasticism and into a more sensible, more

\textsuperscript{248} Garrett, “Spinoza on the Essence of the Human Body,” p. 301. Similarly, Garrett writes in “Spinoza’s Necessitarianism” that the formal essence of a unicorn is the “pervasive and permanent feature that Extension’s \textit{general} laws are such as to permit the unicorn mechanism to exist whenever and wherever the series of finite modes and causes should dictate” (footnote 21).

\textsuperscript{249} I presume that, unlike the finite modes existing in duration, the essences of finite modes are adequately caused by other infinite modes, without the involvement of any finite modes.

\textsuperscript{250} Garrett indicates in footnote 16 of “Spinoza on the Essence of the Human Body” that more specific formal essences might be caused by more generic formal essences, and has also suggested in private correspondence that formal essences may be caused by laws.
contemporary, perspective. Given the texts from the *TIE* and E3pref just presented above, we can see that it is also not without reason that Della Rocca adopts this interpretation and concludes that a thing’s infinite causes, the infinite modes, are the ones picked out by the thing’s essence. Finally, given the apparently non-durational status of formal essences, Garrett’s suggestion that they are infinite modes also seems plausible. Nevertheless, as I shall argue below, this view has serious problems, and I will present an alternative interpretation of the nature of formal essences natural laws in Spinoza’s philosophy which is more consistent with the text and with the discoveries concerning his views on essences presented thus far.

**Section 4.4.2: Formal Essences and Infinite Modes**

The first problem with CDRG is its implications for adequate and inadequate causation. Curley introduces his interpretation with the following statement:

[w]hat I propose is that we understand Spinoza as maintaining that finite things depend on God both insofar as he is modified by finite modifications and insofar as he is modified by infinite modifications. To use a distinction that Spinoza introduces later (EIIID1), neither the infinite modes nor the finite modes are by themselves adequate causes of finite modes. Taken separately, they are only partial causes of finite modes; the existence and actions of a particular finite cannot be understood either by reference to other finite modes alone or by

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251 Curley presents his interpretation by first developing a “Model Metaphysic,” roughly inspired by the thought of Russell, Wittgenstein, and Popper, which he then argues is applicable to Spinoza’s thinking (*Spinoza’s Metaphysics*, pp. 50–55).
reference to infinite modes alone, but only by reference to both infinite and finite modes.²⁵²

As Curley himself makes clear, then, according to his interpretation, no finite mode is ever an adequate cause of any other finite mode.²⁵³ But Spinoza makes it equally clear that the human mind is a finite mode (E2p11dem) and that it is an adequate cause of at least some things, including the common notions (E2p38dem)²⁵⁴ and the third kind of knowledge (E5p31dem). It might be possible for infinite modes to be adequately caused by other infinite modes, but given that finite modes in duration require the cooperation of a finite mode as its proximate transitive cause and an infinite mode that nomologically governs the action of the proximate transitive cause, it appears that finite modes cannot have an adequate cause in the sense of E3d1 and E3d2.²⁵⁵ As I read these definitions, an adequate cause must be a single thing with a nature or essence. Otherwise, the effect has

²⁵² Curley, *Spinoza’s Metaphysics*, p. 66

²⁵³ To say that a finite mode is only “by itself” an inadequate of another finite mode does nothing to soften the blow of Curley’s interpretation. By definition (E3d1) an adequate cause is one that by itself is the total cause of the effect.

²⁵⁴ For explanation of why the human mind is the adequate cause of common notions, see Section 1.4.2 of Chapter 1.

²⁵⁵ E3d1: “I call that cause adequate whose effect can be clearly and distinctly perceived through it. But I call it partial, or inadequate, if its effect cannot be understood through it alone.” E3d2: “I say that we act when something happens, in us or outside us, of which we are the adequate cause, i.e. (by d1), when something in us or outside us follows from our nature, which can be clearly and distinctly understood through it alone. On the other hand, I say that we are acted on when something happens in us, or something follows from our nature, of which we are only a partial cause” (emphasis added).
only a set of conjointly sufficient *partial* causes. But in what sense can a finite mode in
duration and an infinite law of nature be regarded as a single thing with an essence?

One might argue that Garrett’s interpretation of formal essences offers an
explanation of how adequate causation may nevertheless be possible. Firstly, we might
take advantage of E2d7, which allows that, to the extent that several things concur in the
production of a single effect, they may be themselves regarded as a single thing. As
Spinoza states this definition, however, it only applies to singular (finite) things which
combine to form another singular thing. Nevertheless, one might think that this
interpretation has the virtue of explaining Spinoza’s claim that *part* of the mind is eternal
(E5p23). As Garrett points out, Spinoza maintains that when a human being perishes, part
of the human mind remains (E5p38dem), and this part of the mind is eternal (E5p39s,
E5p40c).\(^{256}\) This part of the mind “conceives the Body’s essence under a species of
eternity” (E5p29); it is the idea of the body’s essence in the human mind.\(^{257}\) By Spinoza’s
Parallelism, it follows that the essence of the human body is itself part of the human
body.\(^{258}\) As we saw at the end of the previous Section, Garrett maintains that formal
essences are infinite modes. Infinite modes are therefore parts of the human body and
human mind. So, although it may seem strange to suggest that a finite mode and an
infinite mode may combine into a single thing in order to adequately cause another finite
mode, this assumption is *already built into* Garrett’s account of formal essences.

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Admittedly, this particular combination is not precisely the same as what was initially suggested in response to the objection that a finite mode and a law of nature is not plausibly considered an adequate cause of a finite mode. Garrett tends to distinguish between infinite modes that are laws of nature and infinite modes that are formal essences, and suggests that formal essences are caused by laws of nature. In this regard, I suspect that Garrett might argue that the same laws of nature that cause the thing’s formal essence (in eternity) combine with a finite proximate transitive cause to cause the actual existence of that thing in duration, which is itself a combination of certain finite modes and the thing’s infinite formal essence. The initial obstacle is primarily, I believe, the suggestion that a finite mode and an infinite mode can be together considered a single thing.

As bold and counterintuitive as this combined approach of CDRG is, I believe that it suffers from some serious problems. The first problem I will discuss concerns Garrett’s support for the conclusion that formal essences are infinite modes. Although I agree that formal essences must be modes, he does not provide adequate grounds for the conclusion that they are also infinite:

if the formal essences of singular things are modes of God, they can hardly be finite modes. Because they have their own being or existence contained in the attributes of God regardless of when or whether the corresponding singular things themselves exist, it is hard to see why or how they could ever come into or go out of existence, as finite modes do. Their states as infinite modes is strongly


260 In private correspondence.
confirmed in 5p23s by Spinoza’s description of the parallel “idea, which expresses [i.e., is of] the essence of the body” as “a mode of thinking ... which is necessarily eternal.” Outside the *Ethics*, too, Spinoza indicates that (formal) essences are eternal, immutable, and infinite, writing in *Short Treatise on God, Man, and His Well-Being* I.I.2 that “the essences of things are from all eternity, and will remain immutable to all eternity” (C, 61) and in *Metaphysical Thoughts* I.iii that the “existence” of things depends on the “series and order of causes” whereas the “essence” of things “depends [only] on the eternal laws of nature” (C, 307).\(^{261}\)

Notice, however, that all of the texts cited indicate, *at most*, that the essences of things are *eternal*. Garrett’s argument rests, then, on the undefended assumption that modes are either finite and durational, or alternatively, infinite and eternal.

I do not think, however, that Spinoza respects this strict dichotomy. For example, Spinoza allows that infinite modes may have duration. In E2p13sphysdigL7s, Spinoza describes an infinite individual, which he elsewhere names as an example of an infinite mode (Ep. 64), whose parts vary in infinite ways while the individual remains identical, or retains the same nature. As a thing that undergoes change, it must exist in duration (E1d8exp), and nevertheless, it is infinite. Furthermore, Spinoza’s definitions of finitude and eternity allow for the possibility of things that are eternal and finite. Spinoza describes eternity as a kind of existence “that cannot be explained by duration or time” (E1d8exp), and he explains finitude in terms of the ability to be limited by another thing (E1d2).

According to Garrett’s interpretation, a thing that is limited must be limited in terms of its duration; it can neither be eternal in the strictest sense (of E1d8) nor can it be eternal in the sense of having duration to and from eternity. But the example that Spinoza provides of finitude shows that things can be limited in other ways: “[for example, a body is called finite because we can always conceive another that is greater” (E1d2)—not because it begins to exist or ceases to exist in duration. So, we can easily conceive of a bodily essence which is eternal yet finite and limited insofar as we can conceive of the essence of a greater body. Presumably, it is also conceivable that an idea could be eternal, and yet finite insofar as we can conceive of a greater idea that contains a greater range of adequate ideas.

It is also conceivable that modes could be eternal and yet finite in terms of perfection or reality. Spinoza clearly distinguishes between the scale of perfection and reality by which things are compared as greater or lesser and the duration of things:

[f]inally by perfection in general, I shall, as I have said, understand reality, i.e. the essence of each thing insofar as it exists and produces an effect, having no regard

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262 In spite of E1d8, Spinoza sometimes appears to discuss “eternity” in the sense of having endless duration. For example, when introducing the propositions of Part V concerning the eternity of the mind, Spinoza writes “it is now time to pass to those things which pertain to the Mind’s duration without relation to the Body” (E5p20s). In E1p17s, Spinoza applies temporal concepts to eternity with the phrases “from eternity” and “to eternity”: “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” (II/62/17–20). Perhaps most notably, Spinoza argues that the infinite modes themselves are “eternal” by showing that they “cannot have a determinate duration,” i.e. by showing that there cannot be “some time [that they] did not exist or will not exist” (E1p21dem | II/65/35–II/66/5).
to its duration [emphasis added]. For no singular thing can be called more perfect for having persevered in existing for a longer time. Indeed, the duration of things cannot be determined from their essence, since the essence of things involves no certain and determinate time of existing. (E4pref | II/209/1–8)

There is no necessary connection between a thing’s limitation in duration and its limitation in perfection or reality. In fact, the attentive reader will have noticed that Spinoza here describes the essences of things as having differing extents of perfection and reality even though those essences involve no certain and determinate time of existing. Quite plausibly, then, we can say that the eternal essences of finite things are limited in their perfection and reality (are themselves finite) insofar as we can conceive of other eternal essences with greater perfection and reality.

It is also noteworthy that even finite modes existing in duration that do, in fact, cease to exist are not barred, by their nature, from existing indefinitely, or to eternity.

Spinoza argues that

if it were possible that a man could undergo no changes except those which can be understood through the man’s nature alone, it would follow (IIIP4 and P6) that he could not perish, but that necessarily he would always exist. (E4pdem | II/213/8–11)

Finite things cease to exist, not because, as finite, they necessarily have a determinate or finite duration (E3p8), but because they have finite power to resist the deleterious effects of external causes. If finite modes necessarily had a finite duration in virtue of being finite, E3p8 would be false. I therefore see nothing in Spinoza’s understanding of the
notions of eternity and finitude requiring the strict dichotomy Garrett imposes, or that eternal essences must be infinite rather than finite modes.

In addition to the absence of evidence that modes are exclusively finite and durational or infinite and eternal, Garrett’s interpretation of formal essences also implies that the human intellect is infinite, which has several problems. Firstly, it has no direct textual support. Although Spinoza claims that part of the mind is eternal, never does he once, in all of his known writings, claim that part of the human mind is infinite. It would be odd, indeed, if in all his discussion of the human intellect, he failed to mention that it is an infinite mode of God.

Secondly, contrary to claiming that the eternal part of the human mind, the intellect (E5p40c), is an infinite mode, he claims that it is itself part of an infinite mode, God’s eternal and infinite intellect (E5p40s, E1p21). Although the notion that infinite modes are themselves parts of other infinite modes is not obviously contradictory, it would nevertheless be a bold and surprising position that we would expect Spinoza to mention; we would need evidence that Spinoza thought of the human intellect in this way, and to my knowledge, none is forthcoming.

Thirdly, and relatedly, it is also worthy of note that in E5p40s, he describes the human intellect as an eternal mode of thinking, which, as situated in God’s intellect, is “determined [determinatur] by another eternal mode of thinking, and this again by another, and so on, to infinity.” On the other hand, in E1p21dem, where Spinoza first introduces the infinite modes, when he supposes (as a reductio hypothesis) that God’s

263 As Garrett correctly notes, the eternal part of the human mind is also designated as the intellect (“Spinoza on the Essence of the Human Body,” p. 293).
idea is finite, he writes that it “cannot be conceived to be finite unless it is determined [determinetur].” He bases this inference on E1d2, where he similarly indicates that a thing is finite in its own kind if it can be “limited [terminari potest]” by something else of the same nature. Spinoza’s claim that the eternal essence of the human mind is determined by other eternal modes of thinking, and the fact that he goes out of his way to deny that description of the infinite modes, suggests that he takes the essence of the human mind to be finite.

Fourthly, Spinoza maintains that, although the eternal part of the mind is more perfect than the rest (E5p40c), it is not necessarily the greatest part:

[From this it follows that] that Mind is most acted on, of which inadequate ideas constitute the greatest part, so that it is distinguished more by what it undergoes than by what it does. On the other hand, that Mind acts most, of which adequate ideas constitute the greatest part, so that though it may have as many inadequate ideas as the other, it is still distinguished more by those which are attributed to human virtue than by those which betray man’s lack of power. (E5p20s | II/293/28–34; emphasis added)

If we assume, along with this interpretation, that the eternal part of the mind is an infinite mode, we must infer that the rest is constituted by finite modes, lest we fall into the conclusion that actually existing human beings are infinite modes. But then, it would follow that, in those minds in which inadequate ideas constitute the greatest part, a collection of finite modes is somehow greater than an infinite mode.

Garrett might address this objection using the fact that he handles the relative proportion of the different parts of the mind in terms of the degree of an idea’s power of
thinking, the “power by which ideas produce other ideas.”$^{264}$ He argues that an idea’s power of thinking will vary depending on whether it is considered as it is in God’s infinite intellect or as it is in the mind of a human being. This approach initially seems sensible in light of what Spinoza says on the subject in E5p20s. He writes that
to understand better this power of the Mind over the affects the most important thing to note is that we call affects great when we compare the affect of one man with that of another, and we see that the same affect troubles the one more than the other, or when we compare the affects of one and the same man with each other, and find that he is affected, or moved, more by one affect than by another.
For (by IVP5) the force of each affect is defined by the power of the external cause compared with our own. But the power of the Mind is defined by knowledge alone, whereas lack of power, or passion is judged solely by the privation of knowledge, i.e., by that through which ideas are called inadequate.

From this it follows that that Mind is most acted on, of which inadequate ideas constitute the greatest part, so that it is distinguished more by what it undergoes than by what it does. On the other hand, that Mind acts most, of which adequate ideas constitute the greatest part, so that though it may have as many inadequate ideas as the other it is still distinguished more by those which are attributed to human virtue than by those which betray man’s lack of power.

(II/293/18–34)
That is, Garrett is correct to cast the relative greatness of the eternal part of the mind and the imagination (E5p21) in terms of their power. Nevertheless, significant puzzles

remain. Firstly, we still must face the fact that the human mind has an infinite part, when Spinoza would seem to indicate that the human mind is finite. In E2p11, Spinoza argues that the idea constituting the being of the human mind is “the idea of a singular thing that actually exists.” We know that Spinoza is referring to the essence of the human mind based on the fact that he begins the demonstration by citing E2p10c, in which he argues that the essence of man is constituted by modes of God’s attributes. On the basis of E2p8c, he argues that the idea could not be of something that does not exist, because then the human mind would not exist, but because E2p8c justifies this inference, we know he must mean that the human mind must be the idea of something that has duration (E2p11dem). He then argues that among the things that exist, it could be finite or infinite, but it could not be infinite, because, on the basis of E1pp21–22, it would then “always exist necessarily” (E1p11dem). So, Spinoza explicitly rules out the infinite modes as possible objects of the idea constituting the human mind, because it would imply that human beings always exist in duration.

Secondly, even though Garrett is correct that the relative greatness of the parts of the mind is cashed out in terms of the power of those ideas, there is still the problem of explaining how an infinite idea might be less powerful than finite ideas. Spinoza indicates in E5p20s quoted above, and in E5a2, that the power of an idea is defined by the power of its cause. Infinite modes follow either from the absolute nature of an attribute or from another infinite mode (E1p23), whereas finite modes follow only from other finite modes (E1p28). The different sources of finite and infinite modes suggest that infinite modes ought to be the more powerful of the two. Additionally, although the adequacy of an idea may vary depending on mind in which it is considered, and whether the mind also
contains the adequate cause of that idea, the true causes of an idea and the power of those causes are facts independent of which mind the idea is considered in respect to. There is no reason to expect that the power of an idea would vary depending on whether it is considered insofar as it is contained in the human mind or insofar as it is considered in God’s mind.

Furthermore, Spinoza’s defense of the indestructability of the intellectual love of God suggests that the essence of the human mind is finite. Firstly, Spinoza argues that the mind, insofar as it is eternal, is the adequate cause of the intellectual love of God (E5p31dem), and that the intellectual love of God arises from the third kind of knowledge (E5p33). He argues in E5p37 that there is nothing in nature that is contrary to, or that can take away, this intellectual love of God. He feels it necessary to remark in the scholium, however: “IVA1 concerns singular things insofar as they are related to a certain time and place. I believe no one doubts this” (E5p37s). E4a1 reads:

[t]here is no singular thing in nature than which there is not another more powerful and stronger. Whatever one is given, there is another more powerful by which the first can be destroyed.

The first thing to note is that, by saying in E5p37s that E4a1 concerns singular (i.e., finite, by E2d7) things insofar as they are related to a certain time and place (i.e., insofar as they have duration, by E5p29s), Spinoza strongly suggests that, on the other hand, singular things may also be considered under a species of eternity, or insofar as they are eternal. Secondly, by allaying concerns about E4a1 in E5p37s, he is forestalling the objection that E4a1 would imply the destructibility of the intellectual love of God.

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265 For in-depth discussion of this claim, see Della Rocca’s Representation, Ch. 3.
Because the essence of the human mind is the adequate cause of the intellectual love of God, that love could only be destroyed by destroying the essence of the human mind. However, in order for E4a1 to be relevant, one must assume that the essence of the human mind is a singular thing. Spinoza is therefore anticipating that his audience will assume that he believes that the essence of the human mind is a singular, finite thing. If Spinoza instead believed that the essence of the human mind is an infinite mode, he should have said that E4a1 applies only to singular, finite things, and so, given that the intellect is an infinite mode, it is of no concern. Instead, he tells his audience that E4a1 only applies to singular, finite things insofar as they have duration, suggesting that he does, in fact, believe that the essence of the human mind is a singular, finite thing.

Finally, if we examine Garrett’s claims more closely, it is unclear whether they are, in fact, compatible with the notion that part of the human mind is eternal. After concluding that formal essences are infinite modes, Garrett remarks that “[t]he formal essence of a singular thing is thus not identical to the singular thing itself—for the singular thing, having a ‘finite and determinate existence’ (by 2d7), is a finite mode, whereas its formal essence is an infinite mode.” 266 Indeed, hence the difficulties of thinking of an infinite thing as part of a finite thing! Because the formal essence and the thing are numerically distinct, on this view, it seems to make sense to think of the thing in duration as an instantiation of the formal essence. Garrett himself presents the relationship in just this way:

Ethics 2d2 states that “to the essence of any thing belongs that which, being given the thing is necessarily posited and which, being taken away, the thing is

necessarily taken away, or that without which the thing can neither be nor be conceived and which can neither be nor be conceived without the thing.” Because the *Ethics* specifically mentions two kinds of essences—*formal essences* and *actual essences*—there are two main interpretive alternatives with respect to 2d2. First, we may suppose that it defines only one of the two kinds of essences. Second we may suppose that there is some generality or ambiguity in the definition that allows both kinds of essences to be different species of essence in accordance with the definition. The second option seems preferable... For an essence can be given, and a thing can be “posited,” in more than one way. Thus, an *actual essence* is something such that, when it is given as existing, the thing itself actually exists (i.e., is posited as existing). A *formal essence*, in contrast is something such that (i) when it is given as existing, the thing itself is possible (i.e., is posited as possible), and (ii) when it is given as instantiated, the thing itself is posited as actual. Because a singular thing actually exists if and only if its actual essence does, we may also think of the actual essence of a singular thing as the *actualization* or instantiation of its existing formal essence, rendering the thing itself actual.267

But given that a thing’s formal essence is a really existing thing, supposing that the thing itself is its numerically distinct realization in duration seems incompatible with a part-whole relationship. We seem to have an unnecessary duplication of the thing’s essence. On the one hand, the actual essence necessarily realizes all the essential features of the

thing in duration, and on the other, the thing’s infinite, eternal essence, again delineating those essential features, is appended to it as an additional, numerically distinct “part.”

To unite these two disparate entities, we would expect them to work in some kind of causal concurrence (E2d7), but the appropriate division of labor is unclear. When I exist in duration, it would seem that all of my activity must be attributed to my actual essence, since I strive to persevere in my being in all that I do (E4p25) and it is that through which I do all that I do (E3p9). But if my formal essence does not contribute to my activity, why should I consider it a part of myself, or something through which I might live on when my body perishes? What function does it serve? Garrett argues that “[t]he formal essence of the human body ... grounds the actual existence of the finite human body, but necessitates that existence only in concert with the infinite series of actual finite modes.” Curley and Della Rocca’s interpretation illustrates the fact, however, that this function could be carried out, and perhaps more easily understood, through the laws of nature sans formal essences. The laws of nature, on this interpretation, spell out how each finite mode must follow from its cause—and yet Garrett adds to this picture that the laws of nature cause formal essences in addition, when those laws appear to already do the work attributed to the formal essences.

I suggest that a more natural interpretation of Spinoza’s formal essences is that they are finite eternal modes contained within the immediate infinite mode. They are

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268 This point is explained in Section 4.3.


270 The immediate infinite mode is the infinite mode that follows from the absolute nature of an attribute (the attribute considered without any modifications) (E1p21), in contrast with those infinite modes that
numerically identical with their realizations in duration insofar as they come to be temporarily affected with duration. This interpretation helps explain why Spinoza describes the human intellect as part of God’s infinite intellect,\(^{271}\) and why he tends to describe the conception of things in duration or eternity as two different ways of conceiving the same thing. Consider, first, Spinoza’s introduction of eternal essences in E2p8 and E2p8c:

E2p8: The ideas of singular things, \(or\) of modes, that do not exist must be comprehended in God’s infinite idea in the same way as the formal essences of the singular things, \(or\) modes are contained in God’s attributes.

Cor.: ... so long as singular things do not exist, \textit{except} insofar as they are comprehended in God’s attributes, their objective being, \textit{or ideas}, do not exist except insofar as God’s infinite idea exists. And when singular things are said to exist \textit{not only} insofar as they are comprehended in God’s attributes, \textit{but also} insofar as they are said to have duration, their ideas involve the existence through which they are said to have duration. (II/90/30–II/91/11; emphasis added)

It is clear from this passage, firstly, that the formal essences comprehended in God’s attributes are singular things. They are the “singular things ... comprehended in God’s attributes.” Secondly, those same singular things sometimes have duration: “when

\(^{271}\) E1p21 and E2pp2–3 suggest that God’s infinite intellect follows from the absolute nature of the attribute of thought, rather than following mediately from another infinite mode of thought.
singular things ... exist not only insofar as they are comprehended in God’s attributes, but also insofar as they ... have duration.” Consider also E5p29s:

[w]e conceive things as actual in two ways [dubus modis]: 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. (II/298/30–II/299/1; emphasis added)

This passage similarly suggests not that we conceive things in two different realms of infinite eternal essences and singular durational things, but that we conceive the same things in two different ways: now under eternity, now under duration. E5p23dem and E5p23s offer similar insights:

we do not attribute to the human Mind any duration that can be defined by time, except insofar as it expresses the actual existence of the body, which is explained by duration, and can be defined by time, i.e. (by IIP8C), we do not attribute duration to it except while the Body endures. (II/295/20–24; emphasis added)

[O]ur mind, therefore, can be said to endure, and its existence can be defined by a certain time, only insofar as it involves the actual existence of the body, and to that extent only does it have the power of determining the existence of things by time, and of conceiving them under duration. (II/296/10–13; emphasis added)

These passages do not suggest that the human mind consists of two numerically distinct parts, one eternal and infinite and the other finite and durational. Rather, they suggest that a single thing, the mind, is eternal, but it is attributed duration when and only when the body endures. E5p23dem indicates that, although we do not attribute duration to the mind while the body does not endure, we do attribute duration to that same mind (not some
numerically distinct entity) while the body does endure. Similarly, in the scholium, Spinoza indicates that we attribute duration to the mind only in a certain respect, or rather insofar as [quatenus] it involves the actual existence of the body—not that one idea conceives the body under duration and another, numerically distinct idea conceives the body’s essence under eternity.

The interpretation I propose does not suffer from the same difficulties described above. It does not imply that the human intellect is an infinite mode, or that Spinoza neglected to mention this most surprising claim. It does not imply that an infinite mode is part of another infinite mode (God’s infinite intellect); the finitude of the human intellect is compatible with being “determined” by other eternal ideas in God’s idea (E5p40s). It does not suffer from the difficulty of explaining how finite modes might be greater than or more powerful than an infinite mode. It comports with Spinoza’s claim in E2p11 that the essence of the human mind is an idea of a singular, finite thing that does not always exist in duration. It does not attribute to Spinoza the view that singular things have two numerically distinct essences whose relative function is unclear. And, as I have argued, it fits naturally with Spinoza’s various claims about how we conceive things under eternity and duration.

It does however appear that, insofar as this interpretation implies that a thing’s formal essence and actual existence are not numerically distinct, it also implies that the eternal “part” of the mind is not so much a true “part” as it is the essence of the mind. In response, it should be noted, firstly, that Spinoza’s introduction of the doctrine that part of the mind is eternal indicates that the term “part” is used somewhat loosely. When Spinoza first puts forth this notion, he writes that “[t]he human Mind cannot be destroyed
with the Body, but *something of it remains which is eternal*” (E5p23). This phrase, “*eius aliquid remanet,*” seems deliberately vague, allowing for less than wholly literal interpretations.272

Secondly, there are independent reasons explaining why the eternal and destructible parts of the human mind should not be thought of as numerically distinct parts. The eternal and destructible parts of the human mind are the intellect and imagination, respectively (E5p40c). The eternal part of the human mind, the intellect, is the idea of the essence of the human body insofar as it is eternal (E5pp22–23). The imagination consists of “ideas [that] present external bodies as present to us” (E2p17s | II/106/7). We have ideas of external bodies in virtue of the fact that we have ideas of our own bodies insofar as they are affected by external bodies (E2p13 and E2p16). That is, my idea of an external body, insofar as this idea is contained in God, is the idea of my body insofar as it is affected by that external body. The idea of my body thus represents external bodies indirectly and inadequately, insofar as it is contained in the human mind.

More specifically, my mind contains only the idea of my body, and the ideas that follow from that idea. When my body is affected by external bodies, the resulting affection that inheres in my body is partially caused by my body and partially caused by the external body. Since that affection is partially caused by my body, the idea of that affection is contained in my mind (by Spinoza’s Parallelism), but inadequately, since my body is not the adequate cause of that affection. Thus, Spinoza writes that “the Mind

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272 Similar considerations do not apply, I think, to the fact that the human intellect is part of the infinite intellect of God, since Spinoza says relatively more about the divisibility of infinite modes. See Melameds *Spinoza’s Metaphysics: Substance and Thought,* pp. 126–129.
imagines a body because the human Body is affected and disposed as it was affected when certain of its parts were struck by the external body itself” (E2p18dem), but those ideas of external bodies “are really ideas of the affections of the human Body which involve both its nature and that of external bodies” (E2p18s). This confusion does not occur in God’s mind, because his mind contains not only the idea of the actual essence of my body, but also the ideas of the actual essences of all external bodies affecting my body. He therefore understands the affections of my body adequately, through their adequate causes, because his mind contains the adequate causes of those affections. For that reason, he does not, like me, confusedly take the ideas of the affections of my body to represent external bodies. In his mind, the idea of my body and its affections represent only my body and its affections.

But these ideas, which adequately represent only my body in God’s mind, and which inadequately represent external bodies in my mind, are numerically identical.273 Thus Spinoza often writes that the ideas of our body and their affections are in God insofar as he constitutes the human mind.274 Moreover, God’s idea of my body is just God’s idea of the essence of my body (E1p11dem), which is the reason why the human intellect is part of God’s infinite intellect (E1p11c). E1p11 and E1p11c thus similarly imply that my intellect and God’s idea of my actual essence existing in duration are numerically identical. So, when the imagination “perishes,” the idea of the human body is not destroyed, rather, it simply represents the human body in a different state—no longer in duration, and no longer affected by external bodies. Similarly, when my body

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273 For detailed discussion of this claim, see Della Rocca’s Representation, Ch. 3.

274 In E2p13dem, for example.
“perishes,” its essence does not cease to exist—rather, it no longer has duration and is no longer affected by external bodies. Thus, as my interpretation advocates, the eternal and “destructible” “parts” of the human mind are not numerically distinct, and the formal and actual essences of each thing are numerically identical—now considered under eternity, now considered under duration. The imagination may be regarded as “part” of the mind insofar as it is constituted by temporary affections of the mind that the intellect can continue to exist without.

If it were, in fact, true, as Garrett claims, that the eternal formal essence of the human body and the actual essence of the human body in duration are two numerically distinct modes, then E1p11dem appears to imply, contrary to its corollary, that the human mind is not part of God’s infinite intellect. Spinoza writes that “[t]he essence of man is constituted by certain modes of God’s attributes,” and in particular, the human mind is constituted “by modes of thinking.” But the essence of the human mind, he claims is “not the idea of a thing which does not exist [in duration; my addition based on the following sentence]. For then (by P8C) the idea itself could not be said to exist.” Furthermore, the essence of the human mind is the idea “not of an infinite thing. For an infinite thing must always exist necessarily (by IP21 and 22).” Spinoza concludes that the idea “that constitutes the human Mind is the idea of a singular thing which actually exists” (emphasis added). But Spinoza immediately infers from this conclusion that “the human Mind is part of the infinite intellect of God” (E2p11c). So, Spinoza takes great pains to demonstrate that the essence of the human mind is a finite idea existing in duration, and infers from that conclusion that the human mind is part of the infinite intellect, which consists of eternal modes of thinking (E5p40s). If Garrett is correct, however, the actual
essence of the human mind existing in duration and the formal essence of the human mind existing in duration are two numerically distinct entities. So, while the eternal formal essence might be contained in the infinite intellect, the human mind under discussion in E2p11dem is decidedly not, and Spinoza’s conclusion that the human mind is part of the infinite intellect is all the more puzzling. On my interpretation, E1p11c’s claim that the human mind is part of God’s infinite intellect does follow immediately from E1p11, since the thing’s actual essence under discussion in E1p11 is one and the same thing as its formal essence, now considered under duration, and now considered under eternity.

If you will recall, this Section began by considering a problem posed by the notion that finite modes are caused partially by another finite mode and partially by the laws of nature. A second such issue with the notion that finite modes are partially caused by infinite modes qua nomological facts is that it is in conflict with E1p28. As we saw above, Curley claims that the “existence and actions” of finite modes are partially caused by infinite modes. In E1p28dem, Spinoza does not at all suggest that each finite thing is caused to exist and act partially by another finite thing and partially by an infinite thing. He explicitly rules out the infinite modes as a possible cause in this demonstration:

[w]hatever has been determined to exist and produce an effect has been so determined by God ... But it could not follow from God, or from an attribute of God, insofar as it is affected by a modification which is eternal and infinite (by P22). (II/69/10–22)

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E1p22 establishes that “[w]hatever 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.” In other words, anything that follows from an infinite mode is also an infinite mode. If Curley’s interpretation is correct, then E1p22 and E1p28 and their demonstrations are deeply misleading, if not outright false.276

A third problem for the view that the infinite modes are partial causes of finite modes, qua nomological facts, is that many of Spinoza’s claims about the infinite modes seem to be odds with this description. Curley tells us very little about his conception of what nomological facts are aside from the claim that they correspond to nomological propositions, also known as laws of nature.277 According to Curley, nomological propositions are such that they are characterized by their “strict universality,” so that the class of objects it concerns is not “defined by reference to some particular time and place”; that they are necessarily true; that they support counterfactual inferences; that they are about an infinite number of individual objects and they are not reducible to conjunctions or disjunctions of singular propositions; that taken together with a description of antecedent conditions they mediate the deduction of causal outcomes; and finally, that some nomological propositions are “basic” while others are deducible from the basic propositions.278 In Curley’s view, the basic nomological propositions

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276 Curley responds to this problem by arguing that E1p28 ought to be interpreted as complementary of the passage from TIE §101 quoted above, such that the difference between them is “merely one of emphasis,” in which E1p28 emphasizes a thing’s finite cause while TIE §101 emphasizes a thing’s infinite causes (Spinoza’s Metaphysics, 69). This response will be addressed in my discussion of TIE §101 below.

277 Curley, Spinoza’s Metaphysics, p. 54.

correspond to God’s attributes, such that God Himself is a set of nomological facts, while the derivative nomological propositions correspond to the infinite modes. Even with this description of nomological propositions in place, it remains very difficult to envision precisely what nomological facts are supposed to be.

Nevertheless, I think that one feature that is probably attributable to these nomological facts is that they are what we might ordinarily call “abstract.” In other words, nomological facts are not themselves concrete individuals or composed of concrete individuals—instead, they determine the behavior of concrete individuals. As I imagine Curley might say, the description he provides of nomological propositions should help make it clear that they are fundamentally different than the singular propositions used to describe facts concerning individuals, their properties, and relations.

In his descriptions of the infinite modes, however, Spinoza maintains that they are divisible, composed of other (finite) modes, and that at least some of them are individuals in their own right. In Letter 12, the so-called “Letter on the Infinite,” Spinoza distinguishes between the infinity of substance and the infinity of modes, indicating that this distinction explains “what kind of Infinite cannot be divided into parts, or cannot have any parts, and what kind of Infinite can, on the other hand, be divided into parts without contradiction” (Ep. 12 | IV/53/12–14). In the Ethics, Spinoza continues to maintain that substance is indivisible (E1pp12–13). Spinoza provides at least two examples of infinite modes that are composed of parts. One is the so-called infinite

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280 For a more precise discussion of the manner in which infinite modes are divisible, see Melamed, *Spinoza’s Metaphysics: Substance and Thought*, pp. 126-129.
individual or face of the universe. In E2p13sphysdigL7s, Spinoza claims that, if we take note of how various extended individuals together compose a larger individual, and “we proceed this way to infinity [in infinitum], we shall easily conceive that the whole of nature is one Individual [unum ... Individuum], whose parts [partes], i.e. all bodies, vary in infinite ways, without any change of the whole Individual” (II/103/12–14). When asked by G.H. Schuller in Letter 63 (1675) for examples of infinite modes, Spinoza refers him, for a mediate infinite mode (one which follows from another infinite mode) to Lemma 7, where he describes “the face of the whole universe, which, although varying in infinite ways, remains the same,” apparently identifying the face of the universe with the infinite individual (Ep. 64 | VI/278).

The other example of an infinite mode in the Ethics is presented in Ep. 64 as an example of an immediate infinite mode (one which follows from the absolute nature of an attribute) Spinoza names the “absolutely infinite intellect” (Ep. 64 | VI/278), which he refers to in E5p40s, saying,

[these are the things I have decided to show concerning the Mind, insofar as it is considered without relation to the Body’s existence. From them—and at the same time from IP21281 [the proposition in which Spinoza argues that only infinite modes can follow from the absolute nature of an attribute] and other thing—it is clear that our Mind, insofar as it understands, is an eternal mode of thinking, which is determined by another eternal mode of thinking, and this again by

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281 In the demonstration of E1p21, Spinoza uses the example of “God’s idea” as a mode that follows from the absolute nature of an attribute.
another, and so on, to infinity \textit{[in infinitum]}; so that together, they all constitute [constituant] God’s eternal and infinite intellect. (II/306/19–24)

So, God’s intellect, the immediate infinite mode under the attribute of Thought (E1p21, Ep. 64) consists of eternal parts (E5p40s). By Spinoza’s Parallelism, so must the immediate infinite modes under every attribute consist of eternal parts.\footnote{282 For an argument showing that there can be only one infinite mode per attribute per level of mediation, see Melamed, \textit{Spinoza’s Metaphysics: Substance and Thought}, pp. 116–119.} In particular, since God’s infinite intellect consists of the ideas of eternal essences (E5p40s), and the idea of a mode in Thought is “one and same thing” as its object in Extension (E2p7s), the immediate infinite mode of Extension, named motion and rest (Ep. 64), must be composed of the eternal essences of bodies. The interpretation that the immediate infinite mode of Extension consists of the eternal essences of bodies is supported by Spinoza’s choice to call it motion and rest, since as we have seen (Sections 1.4.2 and 4.3.4), the essences of bodies consist of a certain pattern (\textit{ratio}) of motion and rest. The only mediate infinite mode under the attribute of Extension that Spinoza describes, face of the universe (also known as the infinite individual) (Ep. 64 and E2p13spphysdigL7s), is composed of all bodies existing in duration. Again, by Parallelism, the corresponding mediate infinite mode under every attribute must be composed of finite modes existing in duration. Thus, under Thought, for example, there will be a corresponding infinite mode that is the composite idea of all bodies existing in duration.

To follow a somewhat shorter course of reasoning, consider some arbitrarily chosen finite mode, A. God is the efficient cause of the essence of A (E1p25). The essence of A is “comprehended” (\textit{comprehenditur}) in the attribute of extension (E2p8).
Whenever A has duration, the idea of A also has duration, and whenever A only exists insofar as the its essence is comprehended in its attribute, the idea of A is similarly comprehended in God’s infinite intellect (E2p8c). The idea of A as comprehended in God’s infinite intellect expresses the essence of A under a species of eternity [sub species aeternitatis] (E5p22), and is itself eternal (E5p23). As an eternal mode of thinking, the idea of A comprehended in God’s infinite intellect is “determined by another eternal mode of thinking, and this again by another, and so on, to infinity; so that together, they all constitute [constituant] God’s eternal and infinite intellect” (E5p40s). I believe that the language of E5p40s, particularly the use of the word “constitute” [constituere], suggests that God’s infinite intellect is a whole whose parts are the eternal ideas of the eternal essences of finite modes.

I believe that Spinoza’s descriptions of infinite modes as divisible and composed of parts are incompatible with Curley’s characterization of them as abstract nomological facts. It mischaracterizes not just the infinite modes themselves, but the relationship between infinite and finite modes. The finite modes are not subsumed under the infinite modes as laws, but rather they are contained within the infinite modes as parts. Granted, Spinoza never claims that his descriptions of the infinite modes are exhaustive, and he does not deny that there might be others of a considerably different nature, but he also makes no suggestion that the laws of nature are infinite modes. The evidence therefore seems to weigh against Curley’s interpretation.

Section 4.4.3: Laws of Nature
A fifth problem with Curley’s interpretation of infinite modes as nomological facts is that it is also incompatible with Spinoza’s characterizations of the laws of nature. To explain why, I will begin by drawing the reader’s attention to an important claim made by Curley regarding the laws of nature, namely, that they may plausibly be identified with Spinoza’s “common notions.”

Although the evidence cited to support this claim is insufficient, I believe that more robust support can be garnered from the *Theological-Political Treatise*. First of all, Spinoza claims in the *TTP* that the laws of nature are nothing but God’s “eternal decrees”:

> by God’s guidance, I understand the fixed and immutable order of nature, or the connection of natural things. For we have said above, and we have already shown elsewhere, that the universal laws of nature [leges naturae], according to which all things happen and are determined, are nothing but the eternal decrees of God [Dei aeterna decreta], which always involve eternal truth and necessity.

Therefore, whether we say that all things happen according to the laws of nature,

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284 To defend the view that the laws of nature are common notions, Curley relies on E2pp38–39 and E2p47 to show that “in knowing the common notions, man knows the nature of extension” (*Spinoza’s Metaphysics*, pp. 57–58). This latter claim I will not dispute. However, this claim that, by knowing the common notions, we know the nature of extension, fails to support the conclusion that common notions are laws of nature in at least two ways. Firstly, Curley seems to assume that knowing the nature of extension amounts to knowing the fundamental laws of extended nature. He defends this assumption on the basis that Spinoza identifies God’s essence, the attributes, with God’s power (*Spinoza’s Metaphysics*, p. 55). But Curley provides no further reason for thinking that Spinoza would actually identify God’s power with the fundamental laws of nature. Secondly, even if we understand the fundamental laws of nature by means of the common notions, it by no means follows that the common notions themselves are laws of nature.
or that they are ordered according to the decree and guidance of God, we say the
same thing (TTP, Ch. 3, §§7–8 | III/46–47; emphasis added).

Secondly, in the TTP, Spinoza also suggests a strong connection between the common
notions and God’s eternal decrees:

[f]or the things we know by the natural light depend only on the knowledge of
God and of his eternal decrees … [T]his natural knowledge is common to all men
[omnibus hominibus communis] (depending, as it does, on foundations common to
all) (TTP, Ch. 1, §2 | III/15; emphasis added).

And although the mind of God and his eternal judgments are inscribed in our
minds also, and consequently, we too perceive the mind of God (if I may speak
with Scripture), nevertheless, because natural knowledge is common to all, men
do not esteem it as highly as I have just done (TTP, Ch. 1, §40 | III/27).

Since the Prophets perceived God's revelations with the aid of the imagination,
there is no doubt but what they were able to perceive many things beyond the
limits of the intellect. For many more ideas can be composed from words and
images than from just the principles and notions on which our whole natural
knowledge is constructed [iis principiis, & notionibus, quibus tota nostra
naturalis cognitio superstruitur] (TTP, Ch. 1, §45 | III/28; emphasis added).

Now, in these passages, Spinoza does not straight-forwardly assert that our knowledge of
God’s eternal decrees is identical with the common notions, but clearly, they are at least
very closely related. Let us suppose with Curley, for the moment, that the laws of nature, our adequate ideas of God’s eternal decrees, are common notions.\textsuperscript{285}

As Curley acknowledges, the common notions are ideas (or propositions) representing the common properties of all things under a given attribute (in particular, the attribute of extension).\textsuperscript{286} I demonstrated in Section 1.4.2 of this dissertation, however, that these properties are \textit{proprietates} in the technical sense, which follow necessarily from the essence of each thing under a given attribute without belonging to those essences. It follows, then, that the laws of nature, or God’s eternal decrees, are properties of the essence of each thing under a given attribute. The laws of nature are therefore not “abstract” nomological facts governing the behavior of finite modes from high above, as it were, but they are instead properties belonging to each thing in virtue of its essence.

This interpretation of the laws of nature is confirmed by several passages from the \textit{TTP}. In fact, it is suggested by Spinoza’s very definition of “law”:

\begin{quote}
[t]he word law \textit{[legis]}, taken absolutely, means that according to which each individual, or all or some members of the same species, act in one and the same determinate manner. This depends either on the necessity of nature or on a decision of men. A law which depends on the necessity of nature is one which \textit{follows necessarily from the very nature or definition of a thing \textit{[ex ipsa rei natura sive definitione necessario sequitur]}} (\textit{TTP}, Ch. 4, §1 | III/57; emphasis added).
\end{quote}

\textsuperscript{285} Here, it is useful to recall that Curley distinguishes between nomological facts and the laws of nature, and he identifies the latter with the propositions or ideas representing the nomological facts.

\textsuperscript{286} Curley, \textit{Spinoza’s Metaphysics}, p. 57.
As I showed in Section 2.3.1, a *proprietas* is a property that follows necessarily from the nature, essence, or definition of a thing (Spinoza often uses such terms interchangeably), which is precisely how he describes natural laws in this passage. This interpretation of Spinoza’s views on natural laws, according to which natural laws are properties that follow from the essences of things, is also strongly confirmed by the following passage from Chapter 4 of the *TTP*. Recall that one of Spinoza’s most commonly used geometrical examples of the relationship between a thing’s essence and *proprietas* is the manner in which it follows from the essence of a triangle that its three angles are equal to two right angles. Spinoza uses this very example to clarify what he understands by a divine decree, which, as we saw, is the same as a law of nature:

> [f]or example, when we attend only to the fact that the nature of a triangle is contained in the divine nature from eternity, as an eternal truth, then we say that God has the idea of the triangle, or understand the nature of the triangle. But when we attend afterwards to the fact that the nature of the triangle is contained in the divine nature in this way, solely from the necessity of the divine nature, and not from the necessity of the essence of the triangle, indeed, that the necessity of

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287 Sometimes, expressing himself more casually, Spinoza identifies laws of nature not with (at least some of) a thing’s properties, but with its very nature. For example, in Letter 32, he writes, “[b]y coherence of parts, I mean simply this, that the laws or nature [*leges, sive natura*] of one part adapts itself to the laws or nature [*legibus, sive naturae*] of another part in such a way that there is the least possible opposition between them” (Ep. 32 | IV/170). Spinoza may sometimes be inclined to express himself this way on account of the fact that he so frequently refers to the laws of a thing’s nature (which suggests more clearly that the laws are not identical with the thing’s nature itself). For example, in the same Letter, he discusses “the laws of the nature of the blood [*leges naturae sanguinis*]” (Ep. 32 | IV/172; emphasis added).
the essence and properties \textit{[necessitas essentiae et proprietatum]} of the triangle, insofar as it is conceived as an eternal truth, depends only on the necessity of the divine nature and intellect, and not on the nature of the triangle, then the very thing we called God’s intellect we call God’s will or decree \textit{[voluntatem sive decretum]}.

So, in relation to God we affirm one and the same thing when we say that \textit{from eternity God willed and decreed that the three angles of a triangle are equal to two right angles \textit{[Deum ab aeterno decrevisse, & voluisse tres angulos trianguli aequales esse duobus rectis]}}, or [when we say] that God understood this very thing. From this it follows that God’s affirmations and negations always involve eternal necessity \textit{or truth} \textit{(TTP, Ch. 4, §§24–25 | III/62–63; emphasis added)}.

Furthermore, Spinoza maintains that those laws of thinking characterizing the behavior of the human mind, such as laws of mental association, “necessarily follow from human nature” \textit{(TTP, Ch. 4, §2 | III/57)}. And those laws which direct human beings to their highest good, which we necessarily pursue, are “deduced … from universal human nature \textit{[ex universali humanâ naturâ deduximus]” \textit{(TTP, Ch.4, §18 | III/61)}. Thus, Spinoza frequently explains the necessity of the laws of nature in terms of the necessity of the \textit{essence-proprietates} relation.

I think that this reading of Spinoza’s laws is appealing not just from an interpretive perspective, but also a philosophical one. If we suppose that the laws of nature and the individuals they govern are radically different types of beings—or are the laws of nature “beings”?—it is difficult to understand how they interact, or by what mechanism the laws do their governing. On my interpretation, they are not so very
different. The laws of nature are, in a very literal sense, immanent in the individuals that act in accordance with them—the individuals are themselves the immanent, emanative causes of those laws. When we wish to explain common patterns of behavior among a set of entities, we often appeal to common features of those entities to provide such an explanation. And, as Keckermann’s conception of perfect propria acknowledges, those features are often dispositional in nature, a kind of behavioral regularity or disposition to behave in such-and-such a way that a thing has in virtue of its nature (see Section 2.3.1). As we have seen repeatedly, Spinoza maintains that the actions and behavior of things is a consequence of and should be understood through the essences of those things. Just as it would be difficult to understand how Spinoza’s infinite and finite modes could interact (conceived according to CDRG), it is similarly difficult to understand how a separate and independent realm of natural laws might interact with concrete individuals.

Passages such as the forgoing help explain why Spinoza frequently refers to laws of nature as eternal truths, such as when he claims that “no one is made blessed unless he has in himself the mind of Christ (see Romans 8:9), by which he perceives God’s laws as eternal truths” (TTP, Ch. 4, §34 | III/65); that “his decrees and volitions are eternal truths, and always involve necessity” (TTP, Ch. 4, §37 | III/65); or that “this law [that no one fails to pursue anything which he judges to be good, unless he hopes for a greater good, or fears a greater harm] is so firmly inscribed in human nature [naturae humanae inscripta], that it ought to be numbered among the eternal truths, which no one can fail to know” (TTP, Ch. 16, §15 | III/192; emphasis added). Spinoza often refers to the essences of things as eternal truths (see, for example, E1d8exp and E1p8s2), and, as we saw in Section 1.4.2, he writes in the same way concerning common notions.
On the other hand, while Spinoza indicates that the infinite modes are eternal, or have existed from eternity (E1p21), he never, to my knowledge, refers to them as eternal truths. According to §§24–25 of Chapter 4 of the *TTP* just quoted above, the distinction between an eternal truth and an eternal decree, or law of nature, consists solely in the fact that when we understand an essence and the properties following from it as contained in God’s essence, we understand essence and its properties as eternal truths. But when we see that, in addition, the necessity of that essence, and the necessity with which those properties follow from that essence, do not truly belong to them alone, and that they are instead expressions of God’s own eternal necessity, we understand them as God’s eternal decrees, or laws of nature. The necessity of the laws of nature is God’s own necessity expressed in the eternal essences and properties of things.

To summarize what we have established thus far concerning Spinoza’s views on the laws of nature: he identifies the laws of nature with God’s eternal decrees, which he closely associates with the common notions; he claims that natural laws follow necessarily from the essences of things; and he explains the nature of God’s eternal decrees by designating them as eternal truths understood as consequences or expressions of God’s own necessity, so that, for example, it is an eternal truth that the three angles of a triangle are necessarily equal to two right angles (which is a property [*proprietatem*] following necessarily from the essence of the triangle), but when we understand that this truth depends on the necessity of God’s essence, and not on the necessity of the essence of the triangle, as something independent of God’s essence, we understand this truth as an eternal decree or volition of God. Since it was demonstrated in Section 1.4.2 that Spinoza’s common notions are (necessarily adequate) ideas of the common properties
[propietates] of things which follow necessarily from the essence of each thing under a given attribute, I think it is very reasonable to conclude that the laws of nature, God’s eternal decrees, are (at least a sub-class of) these common properties that are “equally in the part and in the whole” (E2p28), and that our adequate ideas of the laws of nature are indeed (at least a sub-class of) common notions.²⁸⁸

With these conclusions in place, we can identify a sixth problem with the interpretation that the laws of nature are the essential cause of each finite mode, as advocated by Della Rocca. Because the laws of nature are common properties and “equally in the part and in the whole,” it follows that the laws of nature cannot pertain to the essence of any singular thing. Spinoza argues in E2p37 that “[w]hat is common to all things … and is equally in the part and in the whole, does not constitute constituit the essence of any singular thing.” The only supporting assumption cited in Spinoza’s argument for this proposition is E2d2, which states that

I say that to the essence of any thing pertains [pertinere]²⁸⁹ that which, being given, the thing is necessarily [NS: also] posited and which, being taken away, the thing is necessarily [NS: also] necessarily taken away; or that without which the

²⁸⁸ One may object that it might be possible that only laws that are very specific to particular individuals follow from the essences of things, while the more general laws of nature are infinite modes. However, Spinoza never describes the laws of nature in such terms in his mature writings, and the generality of the common notions speaks against this interpretation.

²⁸⁹ I have chosen to translate Spinoza’s term “pertinere” in this definition by “pertains,” rather than Curley’s “belongs,” which I believe reflects the original Latin less accurately and obscures the use of a potentially important technical term.
thing can neither be nor be conceived, and which can neither be nor be conceived without the thing.

Spinoza reasons from this definition that if something equally in the part and in the whole—let us say for present purposes, a law of nature, pertained to the essence of some singular thing—then that law could neither be nor be conceived without that singular thing, but this is contrary to the hypothesis that the law is equally in the part and in the whole (E2p37dem). Spinoza’s demonstration of E2p37 thus relies on the fact that anything shared among multiple entities cannot constitute the identity conditions of a single individual, since it is supposed that these entities are distinct from one another. But the conclusion of E2p37 also makes sense in light of the fact that these common properties are *proprietaetes* which follow necessarily from the essences of things *without belonging* to those essences themselves. The laws of nature cannot pertain to the essence of any singular thing, because they would equally pertain to the essences of *all* singular things if they did, given their universality (under their attribute), making them unsuitable as a set of identity conditions, *and* because those laws are properties, distinct from the essences of singular things. Therefore, in the endeavor to determine which cause pertains to a singular thing’s essence, the laws of nature must be considered ineligible.

To this last criticism, Della Rocca could potentially respond that the cause belonging to a thing’s essence does not provide an exhaustive set of identity conditions, and in this sense does not “pertain to the thing’s essence” (E2d2), but that it does

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290 I remind the reader here that the phrase “the cause pertaining to a singular thing’s essence” is intended as shorthand for the phrase “the cause the having of which as a cause pertains to the singular thing’s essence.”
constitute part of the thing’s essence, as a proper subset of the thing’s identity conditions. This response, however, would not square with Della Rocca’s actual approach, since he concludes that “the essence of x consists in being the effect of a certain cause.” That is, being the effect of a certain cause is not merely part of the thing’s essence, but in some sense, it provides the whole content of the thing’s essence.

We have already seen evidence that this conclusion can be correctly attributed to Spinoza. I argued in Section 4.3.4 that it follows from passages in E4pref and E1p11s that a thing’s essence is derived from the essence of its procreative cause, at least in the sense that, if A is the procreative cause of B, then the essence of A determines the essence of B. Given the essence of A, together with the fact that A is the procreative cause of B, we are, in principle, provided adequate information to determine what the essence of B must be. Della Rocca maintains, on the other hand, that the cause essential to a thing is not its procreative cause, but rather the laws of nature by which the procreative cause acts. This response to the problem posed to Della Rocca’s interpretation by E2p37 is therefore available neither in light of what Della Rocca maintains nor in light of what can plausibly be attributed to Spinoza.

Section 4.4.4: Laws of Nature as Causes and Effects

There are, however, other potential objections to the interpretation of essences, infinite modes, and laws of nature that I have advanced in this section. One objection alleges that, on my interpretation, the laws of nature are not, in fact, causes of finite things at all. Given that the laws of nature are properties common to the essences of finite

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291 Della Rocca, Representation, p. 89; emphasis added.
things under a given attribute, it would be more appropriate to say that the laws of nature are actually *caused by* the finite things they supposedly govern.

I believe that the appropriate response to this objection begins by pointing out that the textual evidence supporting the conclusion that Spinoza held the view that singular things follow from laws of nature in the sense of being *caused by* those laws tends to be ambiguous. What Spinoza seems to claim most frequently is that all things happen *according to* [*secundum*] the laws of nature, which does not by itself entail that the laws are a causal agent in this process. Some examples are presented below:

> [t]he word *law*, taken absolutely, means that according to which [*secundum quod*] each individual, or all of some members of the same species, act in one and the same determinate manner (*TTP* Ch. 4, §1 | III/57).

For nothing, considered in its own nature, will be called perfect or imperfect, especially after we have recognized that everything that happens happens according to [*secundum*] the eternal order, and according to [*secundum*] certain laws of Nature (*TIE* §12 | II/8/15–18).

Although I seem to infer this from experience, and someone may say that this is nothing, because a demonstration is lacking, he may have one, if he wishes; since there can be nothing in nature that is contrary to its laws, but since all things happen according to [*secundum*] certain laws of nature, so that they produce their certain effects, by certain laws, in an unbreakable connection, it follows from this
that when the soul conceives a thing truly, it proceeds to form the same effects objectively (TIE §61 fn. a | II/23).

But my reason is this: nothing happens in nature which can be attributed to any defect in it, for nature is always the same, and its virtue and power of acting are everywhere one and the same, i.e., the laws and rules of nature, according to which [sedundum quas] all things happen, and change from one form to another, are always and everywhere the same. So the way of understanding the nature of anything, of whatever kind, must also be the same, viz. through the universal laws and rules of nature (E3pref | II/138/12–18).

He who rightly knows that all things follow from the necessity of the divine nature, and happen according to [secundum] the eternal laws and rules of nature, will surely find nothing worthy of Hate, Mockery or Disdain, nor anyone whom he will pity (E4p50s).

By the right of Nature, then, I understand the laws or rules of Nature in accordance with which [secundum quas] all things come to be; that is, the very power of Nature (PT Ch. 2 §4 | Vb/15).

There are, however, some passages which more strongly hint at the causal activity of the laws of nature by claiming that finite things are determined by [determinantur] the laws of nature, such as the following:

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292 Notice that this passage apparently attributes the causal agency to another singular thing which produces its effect according to certain laws of nature.
[F]or we have said above, and we have already shown elsewhere, that the universal laws of nature, according to which \textit{secundum quas} all things happen and are determined \textit{determinantur}, are nothing but the eternal decrees of God \citep{TTP Ch. 3, §8 | III/46}.

Everything is determined \textit{determinari} by the universal laws of nature to exist and produce effects in a certain and determinate way \citep{TTP Ch. 4, §3 | III/58}.

This is not surprising, for Nature's bounds are set not by the laws of human reason whose aim is only man's true interest and preservation, but by infinite other laws which have regard to the eternal order of the whole of Nature, of which man is but a tiny part. It is from the necessity of this order alone that all individual things are determined \textit{determinantur} to exist and to act in a definite way. \citep{PT Ch. 2, §8 | Vb/22}

Although these passages may seem to support Curley’s interpretation of partial causation by laws of nature, we have already noted several problems with this view. Alternatively, we can read these passages in a manner compatible with E1p28, a manner suggested already by §8, Chapter 4 of the \textit{TTP} and §61 of the \textit{TIE}, namely, that each singular thing is determined to exist and act \textit{according to} the laws of nature \textit{by} another singular thing, its procreative cause.\textsuperscript{293}

Secondly, even though the textual evidence supporting the notion that the laws of nature can be properly considered causes of finite things is tenuous at best, my

\textsuperscript{293} \textit{TIE} §101 presents the most plausible case in which Spinoza might be referring to the laws of nature as causes. I respond to this issue in my discussion of \textit{TIE} §101 below.
interpretation of Spinoza’s views on the laws of nature can actually provide a more adequate account of how these laws might be considered the causes of finite things than Curley’s. As we have seen, on Curley’s interpretation, the infinite modes are a set of derivative nomological facts that govern the behavior of finite modes, and although Curley can say that the laws of nature, qua nomological propositions, describe them, the ultimate nature of these nomological facts remains mysterious. What kind of being is a nomological fact, if it can even be called a being at all? Even more importantly, how, or by what mechanism, do these nomological facts enforce the rules they impose on the behavior of finite particulars? How do the infinite modes govern finite modes given Spinoza’s prohibition against causal relations between them in E1p28dem?

In contrast, my interpretation of the laws of nature explains them in terms already native to Spinoza’s ontology. The laws of nature are common properties [proprietates communes] of finite modes, following from their essences under a given attribute. We might hypothesize that some of these properties could be understood as dispositions, or causal powers, of finite modes. For example, a concrete driveway, in virtue of its essence, namely, the particular pattern [ratio] of motion and rest that it exhibits (E2p13sphysdigL1), has the property that when a ball strikes it, “[the ball] is reflected, so that it continues to move, and the angle of the line of the reflected motion with the surface of [the concrete driveway] which [the ball] struck against will be equal to the angle which the line of the incident motion makes with the same surface” (E2p13sphysdigA2”). On this interpretation of natural laws, if natural laws are taken to be causes, they are only causes insofar as they are properties of finite modes, which act as causes, and not through the intervention of separate and unexplained nomological facts.
The mechanism by which natural laws act as causes, if they do, is just the mechanism by which one finite mode causes another. To put things a little more precisely, although finite modes are causes of the laws of nature, insofar as their essences cause their common properties, it is still possible to think of the laws of nature as causes of finite modes, insofar as the common properties of a finite mode’s cause play a role in its generation.

Relatedly, it should also be noted that my interpretation is also provides a more cogent explanation of why Spinoza can say on the one hand that “[e]ach singular thing … can neither exist nor be determined to produce an effect unless it is determined to exist and produce an effect by another cause, which is also finite and has a determinate existence” (E1p28), and on the other hand that "everything is determined by the universal laws of nature to exist and produce effects in a certain and determinate way" (TTP Ch. 4, §3 | III/58). As Curley points out, E1p28 states that each finite mode is determined to exist and act only by its finite cause, and TIE §101, as he understands it, appears to claim that finite things are determined to exist and act only by the “fixed and eternal things,” the infinite modes qua nomological facts. In spite of the apparent exclusivity of these claims, Curley proposes that we understand these passages as “complementary, rather than contradictory,” such that “the difference between [them] is merely one of emphasis.”

The trouble with this suggestion is that it is unmotivated by the text. In E1p28dem, Spinoza not only claims that each finite thing is determined to exist and act

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by another finite thing, but as we have already seen, he also explicitly rules out the infinite modes as a possible cause. Similarly, if Curley is correct in his assumption that the “fixed and eternal things” in *TIE* §101 refer to the infinite modes, and in his assumption that the fixed and eternal things are being described as causes of finite things, then the “series of singular, changeable things” are being ruled out as a possible cause.

If Curley’s interpretation is correct, then we must assume that Spinoza was being rather misleading when he wrote these passages. Because of the ambiguities involved in *TIE* §101, I will set it aside for the moment and consider the passage quoted from *TTP* Ch. 4, §3 above, which seems to come closer to stating Curley’s views than *TIE* §101 itself. On Curley’s interpretation, E1p28 and *TTP* Ch. 4, §3 refer to two distinct partial causes, which together are the adequate cause, of a given finite thing. This reading, of course, is incompatible with the fact that Spinoza rules out causes other than another finite thing in E1p28dem. On my interpretation, however, saying that a finite thing is determined to exist and produce an effect by another finite thing, and saying that the same finite thing is determined to exist and produce an effect by the laws of nature, are just two different ways of describing the causality of one and the same entity. The laws of nature determine a finite thing to exist and produce an effect insofar as those laws are properties of that thing’s finite cause as described in E1p28. Although it would be misleading to say that a finite thing is determined to exist and act solely by the laws of nature, I do not believe Spinoza ever made such a claim (as Curley’s interpretation of *TIE* §101 seems to require), and even if he did, it would still be less misleading than Curley’s

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296 *TIE* §101 never claims that finite things are “determined to exist and produce an effect” by the fixed and eternal things, for example.
interpretation implies, since the laws of nature are at least properties of the thing’s adequate cause, and not an entirely separate partial cause.

**Section 4.4.5: Essences and Empirical Methods in the TIE and TTP**

The next objection I will address points out that there are some passages in which Spinoza claims, or appears to claim, that we should understand the essences of finite things through the laws of nature. Since Spinoza is adamant that a thing’s properties should be understood through its essence, my interpretation of natural laws thus appears to contravene one of Spinoza’s most important explanatory norms. The primary text explicitly claiming that a thing’s essence should be understood through the laws of nature is drawn from E3pref:297

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297 There may, of course, be others. One of which I am aware is CM I, Ch. 3, in which Spinoza writes that “[f]inally, it should be noted that necessity, as it is in created things by the power of their cause, is said either in respect to their essence or in respect to their existence. For these two are distinguished in created things. The former depends on the laws of nature, the latter on the series and order of causes” (I/241/23–27). Although this passage appears to support Garrett’s interpretation of formal essences, it has the disadvantage of coming from the Cogitata Metaphysica, an early work in which Spinoza sometimes presented his own views and sometimes presented the views of Descartes, without clearly distinguishing between the two. To my knowledge, Spinoza does not draw upon this passage as he sometimes does of the TIE in his later works. I believe that, to be considered authoritative, this passage would need to be confirmed by other, later, and more solid passages. If Spinoza had wished to do so, the most likely place would have probably been E4dd3–4, but this text contains no hint of the notion that essences depend on the laws of nature. I believe that the arguments presented in this section undermine the notion that the later texts discussed confirm this passage from the CM.
the laws and rules of nature, according to which all things happen, and change from one form to another, are always and everywhere the same. So the way of understanding the nature of anything, of whatever kind, must also be the same, viz. through the universal laws and rules of nature. (II/138/14–18)

The other texts are the now familiar TIE §101, which contains the statement that the essences of things are to be “sought from [petenda a]” the fixed and eternal things, and TTP Ch. 7, §7, which reads:

[f]or just as the method of interpreting nature consists above all in putting together a history of nature [historia naturae], from which, as certain data, we infer the definitions of natural things, so also to interpret Scripture it is necessary to prepare a straight-forward history of Scripture and to infer the mind of the authors of Scripture from it, by legitimate reasonings, as from certain data and principles (III/98).

In each of the passages, the question of how we should arrive at knowledge of the essences and definitions of things is in question. It is far from clear whether they advocate the same method. E3pref suggests that our knowledge of the essences of things is derived from the laws of nature, TIE §101 indicates that it should be sought from the “fixed and eternal things,” and TTP Ch. 7, §7 argues that we must infer our definitions from a “history of nature.” The attentive reader will have noticed that the passages from the TTP and TIE even seem to contradict one another insofar as the former claims

298 Notably absent in these discussions is any mention of the third kind of knowledge, or intuitive knowledge, which “proceeds from an adequate idea of the formal essence of certain attributes of God to an adequate knowledge of the [NS: formal] essence of things” (E2p40s | II/122/18–19).
that we infer the definitions of things from a constructed history of nature and the latter claims that “[t]he essences of singular, changeable things are not to be drawn from their series, or order of existing” (*TIE* §101 | II/36/30–32). In spite of these difficulties, I believe that the solution ultimately points toward my interpretation of the natural laws as the common properties of the essences of things.

To see why, let us begin with the apparent conflict just mentioned between *TIE* §101 and *TTP* Ch.7, §7. In *TIE* §100, Spinoza claims that we cannot hope to understand the series of singular, changeable things,

> [f]or it would be impossible for human weakness to grasp the series of singular, changeable things, not only because there are innumerable many of them, but also because of the infinite circumstances in one and the same thing, any of which can be the cause of its existence or nonexistence (II/36/23–27).

As I understand this passage, Spinoza is claiming that one of the primary challenges to understanding the series of singular, changeable things is that, even though we might be confident in our grasp of the order of succession, in which one thing comes before or after another, it is nevertheless very difficult to discern the actual causes of any given

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299 One might hope to dispel this apparent contradiction by interpreting Spinoza’s *historia naturae* in the *TTP* in a more general sense as an account of the laws of nature, rather than a reconstruction of a thing’s generation through its finite causes. This interpretation, however, would seem to spoil the analogy that Spinoza wishes to draw between the interpretation of nature and the interpretation of Scripture, since Spinoza is clearly interested in the particular historical circumstances in which Judeo-Christian Scriptures were composed, such as the “language in which the books of Scripture were written, and which their Authors were accustomed to speak” (*TTP* Ch. 7 §15 | III/99).
thing. Later on, in the *TTP*, Spinoza would make a very similar claim, and offer further elaboration:

we ought to define and explain things through their proximate causes. That universal consideration concerning fate and the connection of causes cannot help us to form and order our thoughts concerning particular things. Moreover, we are completely ignorant of the very order and connection of things, i.e. how things are really ordered and connected. So *for practical purposes* [*ad usum vitæ*] it is better, indeed necessary, to consider things *as possible* [*ut possibiles*]. These remarks will suffice concerning law considered absolutely. (*TTP* Ch.4, §4 | III/58; emphasis added)

As before, in the *TIE*, Spinoza draws the reader’s attention to the ideal explanatory norm, according which things are explained through their actual causes, points out the practical difficulty of achieving this standard with regard to the things we ordinarily observe in nature, and presents a solution. In the *TIE*, the solution presented is to understand things through the “fixed and eternal things,” while, in the *TTP*, the solution is to consider particular things as “possible.” At first, these two solutions sound rather different, but I believe that they are, in fact, more similar than they first appear.

The key to this puzzle is to understand what Spinoza means by “considering a thing as possible.” Although he does not explain what he means by this expression in the *TTP*, Spinoza provides an explicit definition of it in Book IV of the *Ethics*: “I call … singular things possible [*possibiles*], insofar as, while we attend to the causes from which they must be produced, we do not know whether those causes are determined to produce them” (E4d4). Because, as I have shown (Sections 4.2 and 4.3.4), it belongs to the
essence of a thing to have the cause that it does, I believe that we consider a thing as possible whenever we consider the essence of the thing and our conception of that essence is adequate, including the cause necessary to produce it, even though we are ignorant of whether any such cause actually obtains. With this information in hand, it is reasonable to conclude that the method Spinoza is advocating in TTP Ch. 4, §4 is that, whenever we are confronted in nature by some entity X which we hope to understand and of whose essence we are ignorant, we consider various essences as candidates for the essence of X. When then consider those essences as possible; that is, we investigate our adequate ideas of those essences and consider the cause from which each would have to be produced. If things go well (this method is, after all, a practical compromise necessitated by our limited faculties), we will be able to eliminate many of the candidate essences, because we will find that the causes necessary to produce them are not present in the antecedent circumstances. Through a process of refinement by repetition, we could reasonably hope to eventually arrive at the essence of X.

This additional clarity regarding Spinoza’s solution to our ignorance of the series of singular, changeable things offered by this passage from the TTP presents us with at least some evidence that the fixed and eternal things in TIE §101 are, in fact, the essences of singular things themselves. That is, Spinoza’s claim in TIE §101, that the essences of singular, changeable things are to be “sought from [petenda a]” the fixed and eternal things, can be understood as obliquely referring to something resembling this process of sifting through various eternal essences to find the right one. Following this passage, in TIE §§102-103, Spinoza points out the need for an as-yet undeveloped empirical method
based on the fixed and eternal things, and his nascent conception of this method is at least consistent with the one just described:

[n]evertheless, this is not the place to treat [the singular, changeable things], nor is it necessary until after we have acquired sufficient knowledge of the eternal things and their infallible laws, and the nature of our senses has become known to us. Before we equip ourselves for knowledge of the singular things, there will be time to treat those aids, all of which serve to help us known how to use our senses and to make, according to certain laws, and in order, the experiments that will suffice to determine the thing we are seeking, so that at last we may infer from them according to what laws of eternal things it was made, and its inmost nature may become known to us. (TIE §§102-103 | II/37/18–27)

Like the method inferred from TTP Ch. 4, §4, the goal of this method is to discover the essence, or the “inmost nature” [natura intima], of some empirical object. Similarly, it requires antecedent knowledge of essences (to be considered as candidate essences of the empirical object), the fixed and eternal things, in order to be carried out. Perhaps most importantly, it endeavors to discover the essence of the empirical object by determining how it was generated, or according to what laws (on my interpretation, common properties) of eternal things (on my interpretation, of eternal essences) the object was made. When we realize that this method is based on the fixed and eternal things and that it aims at the knowledge of empirical particulars, the following statement becomes even more revealing:

[t]he best conclusion will have to be drawn from some particular affirmative essence, or, from a true and legitimate definition. For from universal axioms
alone the intellect cannot descend to singulars, since axioms extend to infinity, and do not determine the intellect to the contemplation of one singular thing rather than another. (TIE §93 | II/32/18–23; emphasis added).

If our investigation of singular things began with the universal laws of nature, or nomological facts, it would be inadequate to discover the nature of singulars. Instead, we must begin with some particular essence, used perhaps as a kind of hypothesis, and see what follows. The notion that we should begin by adopting some particular essence as a hypothesis seems to be confirmed by what Spinoza says in TIE §104:

[t]o do this [i.e. to arrive at knowledge of eternal things, and to form their definitions], we must recall what we said above: when the mind attends to a thought—to weigh it and deduce from it, in good order, the things legitimately to be deduced from it—if it is false, the mind will uncover the falsity; but if it is true, the mind will continue successfully, without any interruption, to deduce true things from it. (II/37/30–35)

This is not to say that the method adumbrated in TIE §§102–103 is a perfect match for the method inferred from TTP Ch. 4, §4—that would entail that Spinoza’s views on this matter underwent no evolution between his early and later periods. Nevertheless, it is not difficult to see the similarities between the former and the latter.

Accordingly, on my interpretation, when Spinoza claims that the laws of nature are “inscribed [inscriptis]” in the fixed and eternal things, he is referring to the fact that the laws of nature follow, as properties, from the essences of things (TIE §101 | II/37/2). In fact, at one point in the TTP, Spinoza gives precisely this description of laws being inscribed in essences:
[f]or the universal law of human nature is that no one fails to pursue anything which he judges to be good, unless he hopes for a greater good or fears a greater harm; nor does he submit to any evil, except to avoid a greater one, or because he hopes for a greater good … And this law is so firmly inscribed in human nature [naturae humanae inscripta], that it ought to be numbered among the eternal truths, which no one can fail to follow (TTP Ch. 16, §§15–16 | III/191–192; emphasis added).

On this interpretation, it also comes as no surprise that Spinoza should claim that the singular, changeable things depend “essentially [essentialiter]” on the fixed and eternal things, and that they “can neither be nor be conceived without them” (TIE §101 | II/37/4–5).

Further evidence that eternal essences are a better fit for the fixed and eternal things than Curley’s infinite modes qua nomological facts is the fact that Spinoza insists that the fixed and eternal things are “singular [singuliaria]” (TIE §101 | II/37/6). The contrast that Spinoza draws between the singular, changeable things and the fixed, eternal things is not one of finite things and infinite things, but rather one between changeable things and eternal things, both of which are singular. Later, in the Ethics, Spinoza would offer an explicit definition of a singular thing: “[b]y singular things [res singulares] I understand things that are finite and have a determinate existence” (E2d7). Of course, Spinoza could have been using “singularis” in a different sense in the TIE, but this definition provides at least prima facie evidence that the fixed, eternal things are finite.
When this observation is combined with the fact that Spinoza never describes the fixed and eternal things as infinite, the case is stronger still.\(^{300}\)

In addition, Spinoza later claims in *TIE* §103 that we must seek out *definitions* of the fixed and eternal things (II/37/29). If the fixed and eternal things were nomological facts, as Curley maintains, this injunction would be entirely inappropriate. As we have seen, nomological facts are described by nomological propositions, and nomological propositions, for Spinoza, should take the form of axioms or laws. In Sections 1.2.3, 1.3.2, and 1.4 of this dissertation, it was shown that, for Spinoza, definitions are ideas representing essences, while axioms “extend more widely” to include other eternal truths, most likely including, for example, God’s “eternal decrees,” i.e., the laws of nature (Ep. 9 | IV/43/33).\(^{301}\) Therefore, when Spinoza calls for definitions of the fixed and eternal things, the eternal essences of finite things are a much better candidate for the role of the fixed and eternal things than Curley’s nomological facts.

Perhaps the most definitive evidence of the affinity between the methods found at the conclusion of the *TIE* and in *TTP* Ch. 4, §4, and that the fixed and eternal things of the *TIE* are the essences of things, is to be found in *TIE* §§107–110. In this passage, we find something that is exceedingly rare, if not entirely unique, in Spinoza’s extant works: he is actively engaged in the pursuit of a definition which he has yet to discover. In fact, the *TIE* concludes before the search is complete, having only described the method he will use and set up its initial stage. Spinoza begins by emphasizing the importance of

\(^{300}\) For reasons to believe that the essences of finite modes are themselves finite, see Section 4.4.2 above.

\(^{301}\) Recall that Spinoza claims that “the universal laws of nature, according to which all things happen and are determined, are nothing but the eternal decrees of God, which always involve eternal truth and necessity” (*TTP* Ch. 3, §8 | III/46).
finding the definition of the intellect, although, “so far we have had no rules for
discovering definitions” (TIE §107 | II/38/19). The solution he proposes is the following:
“because [the intellect’s] properties [proprietates] … cannot be perceived clearly and
distinctly unless their nature is known, if we attend to the properties of the intellect that
we understand clearly and distinctly, its definition will become known through itself”
(TIE §107 | II/38/24–27). After enumerating the properties of the intellect, Spinoza tells
the reader that the remaining task is “to establish something common from which these
properties necessarily follow, or such that when it is given, they are necessarily given,
and when it is taken away, they are taken away” (TIE §110 | II/40/10–12). In other words,
the method for discovering the definition of a singular thing in the TIE is to enumerate
the thing’s properties and find the essence (a fixed and eternal thing) from which those
properties follow. This method, as already suggested by previous passages, would most
likely involve sifting through various candidate essences, adopted as hypotheses, to see
what follows from each and whether the properties deduced from each essence
 correspond with the properties observed.

Let us review the methods found in TTP Ch. 4, §4 and TIE §101ff. for
comparison. In the TTP, we begin with an object found in nature whose essence we wish
to determine. We collect various candidates for the essence of the object and consider
them as “possible,” i.e. we examine our adequate ideas each essence and consider the
cause from which each would have to be produced. We then check each “possibility”
against the known antecedent circumstances, as empirical data, by looking for the
presence of the cause required by each essence. By a process of elimination, a successful
investigation allows us to infer the essence of the given object. In the TIE, we again begin
with an object found in nature whose essence we wish to determine. We then collect the known properties of the object to serve as our empirical data. We collect various candidates for the essence of the object, and investigate them to determine what properties necessarily follow from each. We then check each candidate against the empirical data by looking to see whether the properties deduced agree with the properties observed. Again, by a process of elimination, a successful investigation will allow us to infer the essence of the given object.

The two methods are so similar that we can sum up the differences between them as follows: the TTP suggests that we discover essences by way of the causes of things, while the TIE suggests that we discover essences by way of their effects. There are, however, considerations which could explain why Spinoza might prefer the latter over the former. Spinoza claims in the TTP that “knowledge of an effect through its cause is nothing but knowing some property of the cause” (TTP Ch.4, §11 | III/60), and in the TIE that “knowledge of the effect is nothing but acquiring a more perfect knowledge of its cause” (TIE §92 | II/34/13–14). Recall that it was shown in Section 4.2 that the inclusion of a thing’s cause in its definition is what enables the deduction of the thing’s properties. What passages as these seem to suggest is that, although one possible method of determining a thing’s essence is through examining its properties, this method is ultimately derivative, depending, as it does, on the role played by the thing’s cause in its essence. I believe that when Spinoza claimed that, “the method of interpreting nature consists above all in putting together a history of nature [historia naturae], from which, as certain data, we infer the definitions of natural things,” he may well have had the
method of *TTP* Ch. 4, §4 and its priority over other methods in mind (*TTP* Ch. 7, §7 | III/98).

That is not to say, however, that Spinoza dispensed with the method of *TIE* §101ff. My account of this method allows us to make sense of those passages with which this objection began. Recall that a statement made in E3pref seemed to pose an acute difficulty for my interpretation of Spinoza’s views on the laws of nature:

> the laws and rules of nature, according to which all things happen, and change from one form to another, are always and everywhere the same. So the way of understanding the nature of anything, of whatever kind, must also be the same, viz. through the universal laws and rules of nature (II/138/14–18).

On my interpretation, this passage seems to entail that we should understand the essences of things through their properties. A somewhat similar claim appears in *TTP* Ch. 7, §27:

> [i]n examining natural things, we strive, before all else, to investigate things which are most universal and common to the whole of nature—viz. motion and rest, and their laws and rules, which nature always observes and through which it continuously acts—and from these we proceed gradually to other less universal things (III/102).

I can now say that, on my interpretation, Spinoza is most likely advocating in these passages something very similar to the method put forth in *TIE* §101ff. That is, we can understand the essence of a thing through the laws of nature insofar as we know that those laws are properties that follow from the essences of things, and whatever essence we might attribute to any natural thing must *suffice to deduce* those properties. The advantage this method affords is that we *already know* that we have adequate ideas of
those properties in the form of common notions (see Section 1.4.2). Recall that in TIE §107, when Spinoza suggested that we begin our search for the definition of the intellect by a consideration of its properties, he said that we should start with those properties which “we understand clearly and distinctly” (II/38/27). Normally, this suggestion would be rather puzzling, because it seems doubtful that could, in fact, understand the properties clearly and distinctly when the essence of the object is unknown. In this regard, however, the common properties constituting the universal laws of nature are the exception! Because these common properties are equally in the part and the whole, we can clearly and distinctly understand the universal laws of nature as present in, say, a concrete driveway, even though we are ignorant of the driveway’s essence. Since we can be assured of the adequacy of our ideas of the laws of nature qua common properties, they provide a natural starting point for the method of TIE §107ff. Although this method uses the properties of a thing as a starting point, it does not derive the essence of a thing from its properties. Instead, we might say, it uses a thing’s properties as a heuristic device for eliminating erroneous candidates for the essence of the thing.

Section 4.6: Conclusion

Section 4.6.1: Conclusion to Chapter 4

In the previous Chapter, I argued that Spinoza is committed to the idea that each thing necessarily has some specific cause and could have no other. Furthermore, this fact holds true in virtue of the nature of essences. However, because of Spinoza’s views on

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302 TIE §95: “the properties of things are not understood so long as their essences are not known” (II/35/6–7).
essences, this feature of necessarily having a specific cause could either be a feature of the thing’s essence itself, or a proprietas (a consequence) of its essence. In addition, because of Spinoza’s complex views on the kinds of causation and the relationship between cause and effect, the precise nature of the cause in question was uncertain. In this Chapter, these questions and others have been resolved.

In Section 4.2, I showed that, for Spinoza, having some specific cause belongs to its essence and it is not merely a consequence of its essence. Having that cause is part of what makes a thing what it is, and it belongs to the core of its identity. Section 4.3 is devoted to determining the nature of that cause more precisely. Based on the types of causation discussed in Spinoza’s *Ethics*, I concluded that they types of causation of interest are immanent, transitive, procreative, and conservative. Although a thing’s essential cause can be, in principle, either immanent (which causes the effect to exist within itself) or transitive (which causes the effect to exist separately), I showed in Section 4.3.2 that it cannot be God’s immanent causation insofar as he is infinite, i.e., the manner in which finite modes are in and conceived through God’s attributes. Instead, having an attribute as an immanent cause belongs to the proprietares of each thing, and our ideas of God’s attributes are thus common notions, which were first introduced and explained in Section 1.4.2 of Chapter 1. I also clarified the manner in which a thing’s actual essence is its conservative cause, which preserves its existence on an ongoing basis, and why this feature of each thing is a proprietas of its essence (in Section 4.3.3). Finally, I showed in Section 4.3.4 that a thing’s procreative cause, which brings it into existence and is therefore most responsive for its existence, is its essential cause. This
stance helps clarify Spinoza’s claims that the essences of things are derived from their causes, and that their activity is determined by its essence and its cause.

In Section 4.4, I responded to the most prominent alternative to my interpretation of a thing’s essential cause as embodied in the combined views of Edwin Curley, Michael Della Rocca, and Don Garrett. In the process of formulating substantial counterarguments to their position, I also develop and defend my own stance on the status of the formal essences of finite modes, their relationship to the laws of nature, infinite modes, and actual essences, and how essences figure into Spinoza’s conceptions of empirical methods. Curley maintains that finite modes are caused to exist partially by another finite mode and partially by certain infinite modes, construed as the laws of nature. Della Rocca suggests that these infinite modes are a thing’s essential cause. Garrett elaborates upon this interpretation with the claim that a thing’s eternal formal essence is also an infinite mode.

I argued in Section 4.4.1 that Garrett’s conception of formal essences as infinite modes and Curley conception of infinite modes as laws of nature are both untenable. I instead defended the view that formal essences are eternal finite modes contained in the immediate infinite mode of Thought, and that the infinite modes, at least those we know of, are comprised of finite modes. I argue, furthermore, that a thing’s formal and actual essences are numerically identical, now conceived under eternity, now conceived under duration. I argued in Section 4.4.2 that the laws are nature are instead (a certain subset of) the common properties of things that follow from the essences of things under a given attribute as first introduced and explained in Section 1.4.2 of Chapter 1. In Section 1.4.3, I further defended and explained the advantages of this interpretation of natural laws.
Section 4.6.2: Conclusion to the Dissertation

In this dissertation, I have endeavored to present an interpretation of Spinoza’s views on the essences of finite things that is unified in its vision, detailed in its exposition, supported by the text, and that offers broad explanatory power. I began by showing that Spinoza identifies definitions with a certain class of ideas. Real definitions are ideas of essences, while stipulative definitions do not purport to represent anything outside of the human mind. Spinoza offers a unique and insightful defense of a speaker’s right to introduce stipulative definitions in arguments. Traditionally, that right has been based on a conception language in which the association of a particular word with an idea is arbitrary, but Spinoza realizes that this justification assumes a more fundamental semantic competence. Spinoza therefore defends the unassailability of stipulative definitions on the basis of the epistemic certainty of mental content and the exclusivity of mental content. I showed that these views reveal that his otherwise obscure criticisms of Borelli on definitions are, in fact, well-motivated and insightful. I also showed that those criticisms foreshadow his mature views on axioms and common notions. While (real) definitions are ideas of essences, axioms are (a subset of) common notions, ideas of the

against the claim that natural laws should be considered causes of finite modes. Finally, in Section 4.4.3, I defended my interpretation of natural laws and essences against the view that the essences of things are conceived through natural laws, and I showed how my interpretation is supported by and helps explain Spinoza’s conceptions of empirical methods in the TIE and TTP.
common properties of things that are necessarily conceived adequately, because they follow adequately from the essence of each thing under a given attribute.

I argued that, although Spinoza’s understanding of the representational nature of ideas evolves over time, his early views on real and stipulative definitions can be updated in a compatible manner. On this interpretation, strictly stipulative definitions are non-representational in virtue of the fact that they fail to adequately conceive the alleged definiendum through an adequate cause, and they thus fail to determinately represent any particular object or state of affairs. Intermediate, or adequate, stipulative definitions conceive their definienda through their adequate causes, and so successfully represent the essence of the definiendum as comprehended in God’s attributes. Strictly real definitions (of finite things) are adequate stipulative definitions that, in addition, attribute duration to the definiendum, and so represent it as actually existing.

I also explained Spinoza’s criteria for satisfactory definitions and what they show us about the nature of essences. The deceptively simple requirement that a definition be intellectually affirmative revealed that the intrinsic nature of beings, what they are, is ontologically and conceptually prior to what they are not and to their relationships of negation or exclusion of other beings, thus showing that Hegel’s influential interpretation of Spinoza is mistaken. It follows, similarly, that although there are many different ways of particularizing entities, or distinguishing them from others, definitions must do so by explaining what the definiendum is, rather than what it is not.

I also presented an in-depth explanation of Spinoza’s central distinction between a thing’s essence and its *proprietates*, the properties that follow necessarily from that essence, through an investigation of its historical roots and Spinoza’s most likely sources
for the distinction (which have been previously neglected). In the process of doing so, I clarified the manner in which properties follow from the essence of a thing (most likely though emanative causation), the “prior-in-nature” relation that periodically appears in Spinoza’s writings, and the terminology of Spinoza’s definition of what “pertains to the essence of a thing” (E2d2). Moreover, I developed a comprehensive overview of Spinoza’s actual use of the essence-properties distinction in the *Ethics*. This overview revealed that there are previously unappreciated difficulties associated with the *proprietares* of God and how they might be conceived as modes of God. Spinoza’s use of the distinction with regard to human beings and their affects showed, however, that the essence-properties distinction exercised a pervasive influence throughout his philosophical methodology and potentially inspired the geometrical style of the *Ethics* itself. Particular examples of the distinction at work in Spinoza’s accounts of love and the immitation of the affects further clarified that the asymmetric manner in which properties follow from essences must be causal or explanatory in nature, and not merely logical.

My examination of Spinoza’s requirement that definitions include the cause of their definienda and his influences revealed at least two interesting findings. Firstly, although Spinoza held and wrote about this doctrine over the course of many years, there is little evidence to suggest that his views on this requirement itself changed substantially over time. Secondly, the underlying reasons for this requirement among Spinoza’s contemporaries, Hobbes and Borelli, were largely methodological and epistemological in nature, and less metaphysical. Hobbes suggests that the causal nature of definitions may be used as a means of identifying the figures of bodies found in nature, while Borelli suggests that definitions may serve the purpose of demonstrating the possibility of
finding such figures in nature. As a result, both either allowed or advocated the use of various genetic definitions including various different causes for any single thing.

In contrast, I showed that, for Spinoza, each thing has one and only one possible adequate cause—i.e., he is committed to the Principle of Unique Causes (PUC). This Principle as so far flown under the radar of Spinoza scholarship. Although various scholars have implicitly assumed that this Principle is at work in Spinoza’s philosophy, I have offered here the first demonstration of it. Interestingly, the PUC proved to be independent of two doctrines that one would expect to be closely related to it: Spinoza’s Parallelism (E2p7 and E2p7s) and his Principle of Sufficient Reason (E1p11dem). It was also shown that, for similar reasons, Don Garrett’s demonstration of Spinoza’s Necessitarianism from his Parallelism is unsuccessful, although he is correct that it does follow from E1p16, the PUC does follow from Spinoza’s Necessitarianism, but this proof was also not sufficiently informative. Through a closer examination of the meaning of “involves” (“involvere”) in Spinoza’s causal axiom (E1a4), I showed that the conceivability of the effect requires that it be conceived through a unique adequate cause. To better understand what this finding implies for the nature of essences, I developed a basic analysis of Spinoza’s modal semantics on the basis of which I reconstructed the latter demonstration, and showed that the essence of each thing is such that it has one and only one possible adequate cause.

I showed in the final Chapter that this feature belongs to the essence of each thing, rather than being a consequence or proprietas of its essence. To better understand the meaning of this finding, I examined the various types of causation that could possibly characterize this cause: immanent, transitive, procreative, and conservative. I showed that
it is a proprietas of each thing to be immanently caused by God and that our ideas of God’s attributes are common notions. I explained the manner in which each thing’s actual essence is its own conservative cause, resolved the apparent contradiction between E1p24c and Spinoza’s conatus doctrine, and showed that this manner of conservative causation is also a proprietas of each thing’s essence. On the other hand, it belongs to the essence of each thing to have the procreative cause that it does, and furthermore, each thing’s essence is derived from its procreative cause. A thing’s essence governs its causal activity insofar as it belongs to its essence that the thing is produced and determined to act in a particular way by its procreative cause.

In defense of this interpretation, I refuted the alternative offered by the combined views on Edwin Curley, Michael Della Rocca, and Don Garrett on essences, infinite modes, and the laws of nature. In contrast with Garrett’s position that a thing’s essence should be divided into its eternal formal essence, characterized as an infinite mode, and its durational actual essence, I argued that the essence of each finite thing is a single finite mode, which may be conceived, on the one hand, under eternity and contained in the immediate infinite mode, or on the other hand, under duration and affected by other finite modes. The suggestion that finite modes are partially caused by infinite modes is not supported by Spinoza’s texts, nor is the suggestion that such an infinite cause belongs to the essence of any finite mode. I showed that Curley’s characterization of the infinite modes as laws of nature is at odds with Spinoza’s descriptions of them as beings composed of finite modes, whether it be God’s infinite intellect, or the infinite individual consisting of the totality of finite bodies in duration. I also showed that Spinoza’s laws of nature are better characterized as (a subset of the) common properties of things that we
conceive adequately because they follow from the essence of each thing under a given attribute. Finally, using this interpretation, I was able to make sense of Spinoza’s difficult and seemingly contradictory views on empirical methods in the *TIE* and the *TTP*.

Although I hope and believe that some small degree of progress has hereby been made in our understanding of Spinoza’s fascinating views on essences, it is undoubtedly dwarfed by the questions that remain. Whether Spinoza’s essences are universal or particular, the manner in which he employs his definition of what pertains to the essence of a thing (E2d2), the details of how essences are contained in the infinite modes, how these findings relate to the nature of God’s essence, and how Spinoza’s views might be brought into dialogue with contemporary conceptions of essence are just a few examples of questions that call out for further investigation. The endeavor to answer these questions and others like them will surely keep us striving for an indefinite duration.
Bibliography

Works of Spinoza


Other Works


Laerke, Mogens. “Leibniz on Spinoza’s *Tractatus De Intellectus Emendatione*.” In *The Young Spinoza*, pp.106–120.


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**The Leonard and Helen R. Stulman Jewish Studies Program Prize Teaching Fellowship.** Johns Hopkins University. Awarded Spring 2011 to teach the proposed course, “Spinoza and Medieval Jewish Philosophy.”

**Summer Scholars Program,** Baldwin Wallace University. Project title: "*Phronesis* and *Sophia* in Aristotle, Heidegger and Spinoza." Summer 2006.

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